



ROHDE & SCHWARZ

SERVICE DOCUMENTS

Fixed Frequencies

819.6060.02

(

(

(

(

| | | |
|------------|--|-------------|
| 5 | Service Manual "Fixed Frequencies" Unit | 5.1 |
| 5.1 | Function Description | 5.1 |
| 5.1.1 | 10-MHz OCXO | 5.1 |
| 5.1.2 | 40-MHz Crystal Oscillator with Buffer Stages and Control | 5.1 |
| 5.1.2.1 | 40-MHz Crystal Oscillator | 5.1 |
| 5.1.2.2 | 40-MHz Amplifier | 5.1 |
| 5.1.2.3 | 40-MHz Amplifier PLL with Reference Switchover | 5.2 |
| 5.1.3 | 130-MHz Crystal Oscillator with PLL | 5.2 |
| 5.1.3.1 | 130-MHz Crystal Oscillator | 5.2 |
| 5.1.3.2 | 130-MHz Oscillator PLL | 5.2 |
| 5.1.4 | 130/520-MHz LO Signal | 5.3 |
| 5.1.5 | Processing the 300 MHz Reference Signal | 5.3 |
| 5.1.5.1 | 130/260-MHz Doubler with LO Amplifier | 5.3 |
| 5.1.5.2 | 300-MHz Amplifier with Filter | 5.3 |
| 5.1.5.3 | 40-MHz Amplifier with FM/CW Selector | 5.3 |
| 5.2 | Checks and Adjustments | 5.4 |
| 5.2.1 | Checking the Alarm | 5.4 |
| 5.2.2 | Testing the 10-MHz OCXO | 5.4 |
| 5.2.3 | Testing and Trimming the 40-MHz Crystal Oscillator with PLL | 5.4 |
| 5.2.3.1 | Adjusting the Crystal Oscillator | 5.4 |
| 5.2.3.2 | Testing the Output Amplifiers | 5.4 |
| 5.2.3.3 | Testing the PLL | 5.5 |
| 5.2.4 | Testing and Adjustment of 130-MHz Crystal Oscillator | 5.5 |
| 5.2.4.1 | Adjusting the Crystal Oscillator | 5.5 |
| 5.2.4.2 | Testing of PLL | 5.5 |
| 5.2.5 | Checking and Adjusting the 130/520-MHz LO Signal | 5.5 |
| 5.2.6 | Checking and Adjusting the 300-MHz Reference Signal | 5.6 |
| 5.2.6.1 | Testing and Adjusting the 130/260-MHz Doubler and LO Amplifier | 5.6 |
| 5.2.6.2 | Testing and Adjusting the 300-MHz Amplifier | 5.6 |
| 5.2.6.3 | Checking of FM/CW Selection | 5.6 |
| 5.3 | Troubleshooting | 5.9 |
| 5.3.1 | Failure of PLLs (Err 40, 41) | 5.9 |
| 5.3.2 | Failure of the 40-MHz Signals at X72, 82, 92 (Err 40, 41) | 5.9 |
| 5.3.3 | Failure of 130/520-MHz Signal at X93 and 300-MHz Signal at X94 (Err 40, 41, 46, 48) | 5.9 |
| 5.3.4 | Signals at Test Points and DC Operating Points | 5.9 |
| 5.4 | Interfaces | 5.11 |
| 5.5 | Positions of Plug-in Jumpers | 5.12 |
| 5.6 | Required Equipment | 5.12 |
| | Circuit diagrams | |
| | Component lists | |
| | Component layout diagrams | |

(

(

(

(

5 Service Manual "Fixed Frequencies"

5.1 Function Description

(See circuit diagrams 819.6060 S and 819.0010 S, sheet 1)

The "fixed frequencies" subassembly generates the reference frequency for all SMGU/SMHU sub-assemblies. The subassembly consists of an oven-controlled, highly-stable 10-MHz crystal oscillator, which generates the reference frequency for the instrument. The 40 and 130-MHz crystal oscillators are each synchronized to this frequency by means of a PLL. The 130-MHz and the 520-MHz frequencies (4 x 130 MHz) are used in the output section as the LO for the mixing range. The 300-MHz signal for the summing loops is generated by doubling the 130-MHz signal mixing it with the 40-MHz crystal signal for CW or the 40-MHz FM oscillator for FM.

5.1.1 10-MHz OCXO

The module G10 contains a 10-MHz oven-controlled crystal oscillator. This gives a good temperature stability and good long-term characteristics.

The power supplies to the oven and the oscillator circuit are separate, the oven being permanently supplied by the +12 V standby voltage. This means that the oven does not have to heat up when the instrument is switched on (duration approx. 5 min.). The bridge voltage of the thermostat can be tapped at G10.4 for monitoring purposes and can be polled by the diagnostics function (test point SF 133) via the voltage follower N30-A. The processor also controls the "Oven cold" display using this voltage. The supply voltage for the crystal oscillator is generated by the voltage stabilizer V10. This is derived via V11 if an external reference is used.

There is a 10-MHz signal at terminal G10.1.

The frequency is adjusted using an externally-accessible trimmer.

5.1.2 40-MHz Crystal Oscillator with Buffer Stages and Control

5.1.2.1 40-MHz Crystal Oscillator

The 40-MHz crystal oscillator uses a common-base transistor circuit (V305). This gives the highest possible crystal and the lowest possible oscillator phase noise. The amplitude of the oscillations is stabilized by the biased Schottky diode V306. The four tuning diodes V300 to 303 in a push-pull circuit are used to tune the crystal frequency. The supply voltage to the crystal oscillator is also filtered via the emitter follower V310. A buffer stage in the common-base circuit (V315) decouples the oscillator from the following stages and increases the output power to 13 dBm.

5.1.2.2 40-MHz Amplifier

The output signal of the oscillator buffer stage is applied via a power divider (L320) to four amplifiers based on a FET in gate configuration. Diagnostics detectors (SF 138 to 140) are present on the three output stages (V330, 340, 350) for level monitoring. The fourth stage with V360 controls an ACMOS gate (D401) which generates the level for the following frequency divider.

5.1.2.3 40-MHz Amplifier PLL with Reference Switchover

A PLL locks the 40-MHz crystal oscillator onto the output frequency of the OCXO or - with the setting "Ref. ext." to the applied reference frequency. The 40-MHz signal is divided down to 5 MHz in divider D400 and compared in phase detector D50 with the frequency of the OCXO divided by two (D20, 21-A).

The output signal of D50 tracks the oscillator frequency via the differential amplifier N50-A with the following PI controller. The output voltage of the PI controller is monitored by the alarm detector N90-C/D (Err 40) and can also be interrogated by a diagnostics test point (SF 134).

The bandwidth of the PLL can be changed using plug-in jumper X55 and thus matched to the requirements in the "Ref. ext." mode:

- X55A-B 1 Level bandwidth 100 Hz, e.g. use of a very low-noise external reference to improve the SMGU/SMHU spectrum; inherent noise of PLL approx -130 dBc/Hz at FAF = 30 Hz, referred to 10 MHz.
- X55A-B 2 Level bandwidth 10 Hz, standard setting, optimum adaptation to internal OCXO
- X55A-B 3 Level bandwidth 1 Hz, for suppression of hum sidebands and noise from the external reference outside the control bandwidth

After passing through a lowpass filter, the output signal of the OCXO in the "Ref. int." mode is available as a reference frequency at X91 and can be switched between 5 and 10 MHz using D20, 21-A (SF 13, 14). The input signal at X91 in the "Ref. ext." mode is amplified by V43 to HCMOS levels and applied to the phase detector D50 via the frequency divider D21-B with a selector for 5 or 10 MHz.

5.1.3 130-MHz Crystal Oscillator with PLL

5.1.3.1 130-MHz Crystal Oscillator

The circuit of the 130-MHz crystal oscillator corresponds to that of the 40-MHz oscillator (5.1.2.1) except that the tuning circuit only has one varicap diode and the co-compensation of the crystal is adjustable with L111.

A buffer stage with compensated feedback which amplifies the output power to 17 dBm feeds a power divider containing L130. The following stages are connected to the decoupled outputs of the divider.

5.1.3.2 130-MHz Oscillator PLL

The 130-MHz crystal oscillator is synchronized by a PLL to the 40-MHz crystal oscillator, and this in turn is locked to the 10-MHz OCXO or the external reference. Optimum phase noise for the 130-MHz signal is achieved by the cascaded control and corresponding adaptation of the bandwidths.

The signal from the 40-MHz crystal oscillator divided by four in D400, 401 is differentiated by the LC network L410, C410. The pulse stage V410 triggered by the positive edge generates a 3-ns needle pulse which the following sampling mixer uses to sample the 130-MHz signal.

The output signal tracks the 130-MHz oscillator via voltage follower N430-B and control amplifier N430-A. The output voltage of the PI controller is again monitored via an alarm comparator N40-A/B and can also be interrogated by the diagnostics function (SF 135).

A two-stage isolating amplifier (V440, 445) with common gate FETs circuit decouples the sampling mixer from the 130-MHz crystal oscillator.

5.1.4 130/520-MHz LO Signal

The 130/520-MHz signal, which is used in the output section as the LO signal for the two mixer ranges, is generated directly or by quadrupling the 130-MHz crystal oscillator.

In the direct case, the signal is applied via two diode switches (V195, 234) - with an intermediate attenuator for matching the level - to the output amplifier N240 which boosts the power to 5 dBm. The output power can be monitored using a diagnostics detector (SF 136).

The output frequency of 520 MHz is generated by a quadrupler consisting of a balancing transformer (L191, 192) with a full-wave rectifier (V200, 201). The filter L203 and the coupled bandpass filter L221, 222 suppress the resulting subharmonics ($1/2f$, $3/2f$), and the intermediate amplifier N204 compensates the loss in level in the multiplier.

The operational amplifiers N250-A/B control the diode switches of the 130 and 520-MHz branches.

5.1.5 Processing the 300-MHz Reference Signal

The 300-MHz signal is generated by mixing 260 MHz and 40 MHz, where the 260 MHz signal is obtained by doubling the frequency of the 130-MHz crystal oscillator. A two-stage IF amplifier with filter provides an output power of 5 dBm.

5.1.5.1 130/260-MHz Doubler with LO Amplifier

The frequency doubler also consists of a balance-to-unbalance transformer (L142, 143) with a full-wave rectifier. The following bandpass filter (L145, 146) suppresses the resulting subharmonics. The power amplifier with V146 controls the high-level mixer D150 with a Low power of 17 dBm.

5.1.5.2 300-MHz Amplifier with Filter

The IF amplifier has two stages with a bandpass filter between the stages and a bandpass at the output. These filters suppress the spurious signals generated during mixing.

The first stage has a common gate circuit FET (V160) which terminates the IF port of mixer D150 in 50 Ω .

Input matching is adjusted by setting the drain current.

There is a coupled bandpass filter between the first and second stage which has a common-base transistor circuit (V170). This gives good decoupling between the two bandpass filters.

A diagnostics detector at the output (SF 137) is for monitoring the output power.

5.1.5.3 40-MHz Amplifier with FM/CW Selector

The FM/CW selector has two T-networks (V370-372, V375-377) for high crosstalk attenuation between the two filters.

The following amplifier is adjustable so that variations in gain in the 300-MHz IF amplifier can be eliminated.

A lowpass with a subsequent highpass/lowpass branching filter improves the harmonic ratio and terminates the RF port.

5.2 Checks and Adjustments

5.2.1 Checking the Alarm

Connect two power supply units (0 to 25 V) to X50 B-C and X43 B-C (C = ground). Set both voltages to + 10 V, the display "Err 40, 41" must not light up. Then set the voltage at X50 to + 0.5 V and + 20.5 V, the display "Err 40" must light up in each case. Repeat the same test at X43 (Err 41).

5.2.2 Testing the 10-MHz OCXO

Disconnect the SMGU/SMHU from the AC power supply for at least 15 minutes (AC power switch on rear panel) so that the crystal oven cools down. Switch on the AC supply and measure the bridge voltage using the diagnostics function.

- ▶ Diagnostics voltage (SF 133): + 3.6 to + 4.5 V

The display "OVEN COLD" should come on. This display should go off after a warm-up time of 2 to 5 minutes.

- ▶ Diagnostics voltage (SF 133): + 5.5 to + 6.5 V

Connect oscilloscope to P1 using 10:1 probe, setting on instrument: REF.EXT.

- ▶ Signal at P1: + 5 V

Switch SMGU/SMHU to "REF.INT".

- ▶ Signal at P1: 10 MHz, HCMOS levels.

Connect spectrum analyzer to X91.

Setting on SMGU/SMHU:

REF.INT., SF 14 (reference frequency 10 MHz).

- ▶ Signal at X91: 10 MHz, + 5 to + 9 dBm, k2 k3 < 20 dBc.

Setting on SMGU/SMHU:

SF 13 (reference frequency 5 MHz).

- ▶ Signal at X91: 5 MHz, + 5 to + 9 dBm.

5.2.3 Testing and Trimming the 40-MHz Crystal Oscillator with PLL

5.2.3.1 Adjusting the Crystal Oscillator

Connect power supply unit (0 to 20 V) to jumper X50 B-C (C = ground), set voltage to 10 V. Connect voltmeter to P7 and spectrum analyzer to jumper X32 using the adapter cable from the service kit. Adjust L305 for minimum display on voltmeter.

- * Voltage at P7: + 10.7 to + 11.2 V.

Adjust L312 for max. level at X32.

Vary the voltage on the power supply unit from 1 to 20 V and observe the signal on the spectrum analyzer (span 0 to 100 MHz). The oscillation must be continuous over the tuning range and there must be no sidebands or noise peaks.

- * Signal at X32: 40 MHz, -11.5 to -8.5 dBm.

5.2.3.2 Testing the Output Amplifiers

Connect spectrum analyzer to X72, 82, 92 in succession. Adjust voltage on power supply unit to 10 V.

- * Signal at X72, 82, 92: 40 MHz, + 3 to + 7 dBm.

Then check the diagnostics detector.

- * Diagnostics voltage (SF 138, 139, 140): + 0.3 to + 1.2 V.

5.2.3.3 Testing the PLL

Disconnect power supply unit from X50, use jumper X50 to connect A-B and jumper X55 A-B to 2.

Instrument setting: REF.INT., SF 14 (reference frequency 10 MHz).

Checking the control voltage of the 40-MHz oscillator.

- * Diagnostics voltage (SF 134): +7 to +13 V.

Connect signal generator set to 5 MHz, 0 dBm for REF. INT./EXT. The frequency accuracy of the generator must be better than 10-6.

Instrument setting: SF 13 (reference frequency 5 MHz).

- * Diagnostics voltage (SF 134): +7 to +13 V.

Instrument setting: SF 14 (reference frequency 10 MHz).

Adjust signal generator frequency to 9.999850 MHz and then to 10.000150 MHz.

- * Diagnostics voltage (SF 134): +2 to +18 V.

5.2.4 Testing and Adjustment of 130-MHz Crystal Oscillator

5.2.4.1 Adjusting the Crystal Oscillator

Connect power supply unit (0 to 20 V) to X43 B-C (C = ground). Adjust voltage to 10 V. Connect spectrum analyzer to X41 using adapter cable and connect voltmeter to P6. Adjust voltage on voltmeter to minimum using L117, then vary the tuning voltage from 1 to 20 V and adjust L111 so as to keep the voltage as constant as possible at P6.

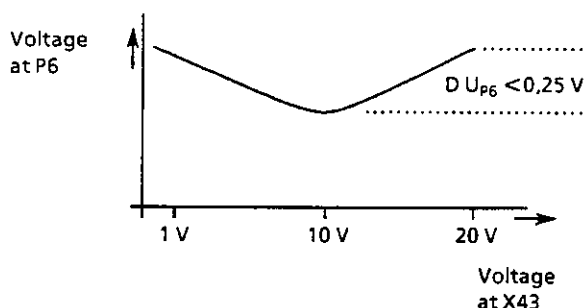


Fig. 5-1 Voltage at P6

- * Voltage at P6: +9.9 to +10.7 V.

Adjust L125 for maximum signal at X41. Then vary the tuning voltage from 1 to 20 V and observe the signal on the spectrum analyzer (span 0 to 500 MHz). The oscillator must oscillate properly over the whole tuning range and there must be no noise peaks or sidebands.

- * Signal at X41: 130 MHz, -8 to -5 dBm.

5.2.4.2 Testing of PLL

Connect oscilloscope to P10. Vary the power supply voltage from 1 to 20 V, a sinewave signal must be displayed on the oscilloscope.

- * Signal at P10: 0 to 5 kHz, 1.0 to 1.5 Vpp.

Connect jumper X43 to A-B, connect signal generator with 10 MHz ($\Delta f < 10^{-6}$), 0 dBm to REF.INT./EXT. Setting on SMGU/SMHU: REF.EXT., SF 14 (reference frequency 10 MHz).

Check the control voltage for the 130-MHz oscillator.

- * Diagnostics voltage (SF 135): +7 to +13 V.

Set the signal generator frequency to 9.999850 MHz and then to 10.000150 MHz.

- * Diagnostics voltage (SF 135): +2 to +18 V.

Disconnect signal generator from X91, switch over to REF.INT.

5.2.5 Checking and Adjusting the 130/520-MHz LO Signal

The lower screening cover must be screwed down. Connect spectrum analyzer to X93, setting: REF. INT., SF 22 RF = 10 MHz (normal mixer range).

- * Signal at X93: 130 MHz, +3 to +7 dBm.

Testing diagnostics detector.

- * Diagnostics voltage (SF 136): +0.3 to +0.7 V.

Setting: SF 21 (mixer range with large span). Adjust L203 for maximum level at 520 MHz. Then alternately set L221 and L222 for maximum.

- * Signal at X93: 520 MHz, +3 to +7 dBm, spurious sidebands at 260 and 780 MHz ≤ -60 dBc.

Setting: SF 22, RF = 1 GHz. No output signal must be displayed on the spectrum analyzer.

5.2.6 Checking and Adjusting the 300-MHz Reference Signal

5.2.6.1 Testing and Adjusting the 130/260-MHz Doubler and LO Amplifier

Connect spectrum analyzer to X15 using adapter cable. Adjust for maximum level at 260 MHz using L145, 146 alternately.

* Signal at X15: 260 MHz, -8 to -4 dBm.

5.2.6.2 Testing and Adjusting the 300-MHz Amplifier

The bottom screening cover must be screwed down when you adjust the bandpass filter. Connect network analyzer to X94, see Fig. 5-2 for settings. Adjust the bandpass filter L172, 180 by measuring the reflection coefficient at X94, see Fig. 5-2 for values. Then connect the network analyzer to X16 B-C (channel A) and X94 (channel B) using the adapter cable, see Fig. 5-3 for settings. Adjust the input reflection coefficient S11 at X16 B-C to -16 to -20 dB at 100 MHz using R160, see Fig. 5-3 for measured values.

The bandpass filter L162, 163 is adjusted by measuring the forward transmission coefficient S21 from X16 B-C to X94. See Fig. 5-4 for measured values. The settings of L172, 180 should not be changed in the process.

Disconnect network analyzer and insert jumper X16 to A-B. Connect spectrum analyzer to X94. Setting on instrument: REF. INT., FM OFF.

Adjust the level at X94 to +5 to +6 dBm using R390. Check the diagnostics detector.

* Diagnostics voltage (SF 137): +0.3 to 0.7 V.

The top and bottom screening covers must be screwed down for the following measurements. Check the spurious signals at the following frequencies:

| f / MHz | P / dBm |
|---------|-------------|
| 220 | ≤ -74 |
| 260 | ≤ -74 |
| 310 | ≤ -104 |
| 320 | ≤ -100 |
| 340 | ≤ -104 |

5.2.6.3 Checking of FM/CW Selection

Spectrum analyzer remains connected to X94. Connect signal generator with 41 MHz, 5 dBm to X83.

Setting on instrument: REF. INT., FM OFF.

Level at X94 at 301 MHz ≤ -85 dBm.

Setting on instrument: REF. INT., FM. EXT. AC.

Level at X94 at 301 MHz: +4 to +6 dBm,

Level at X94 at 300 MHz: ≤ -85 dBm.

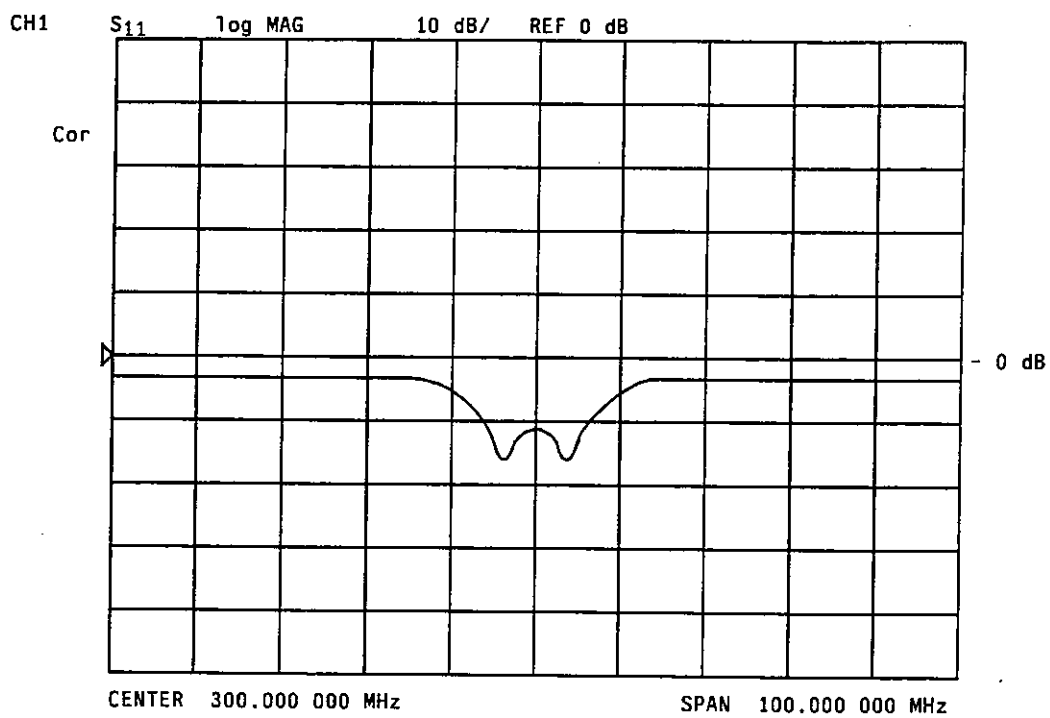


Fig. 5-2 S₁₁ at X94, adjustment of L172, 180

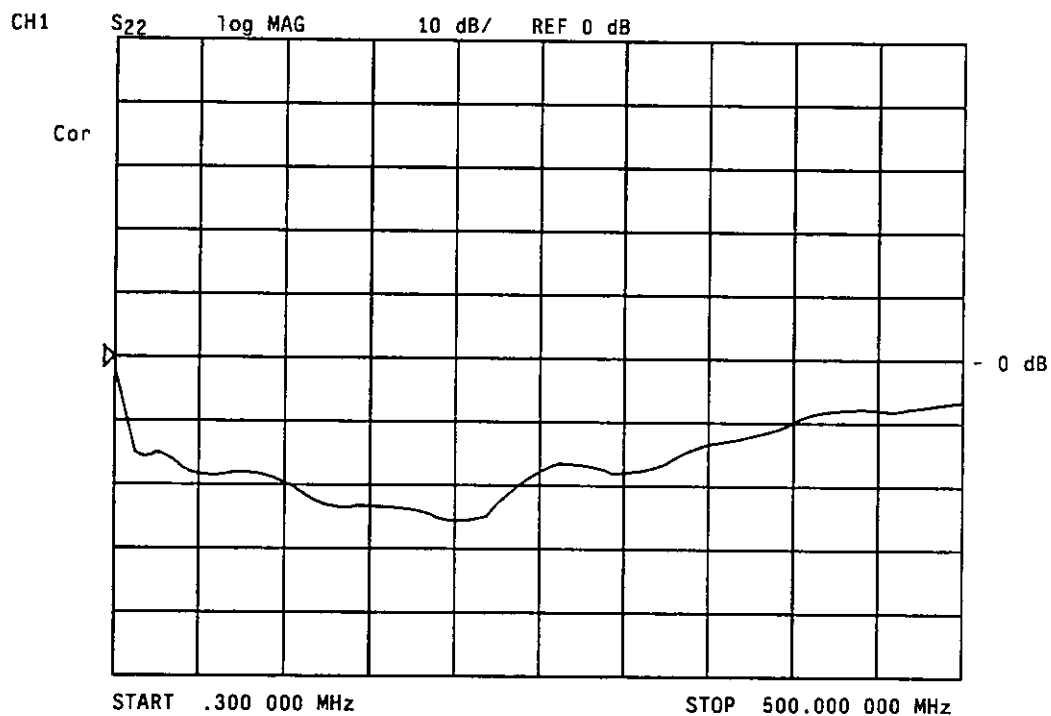


Fig. 5-3 S₁₁ at jumper X16 B-C, adjustment of R160

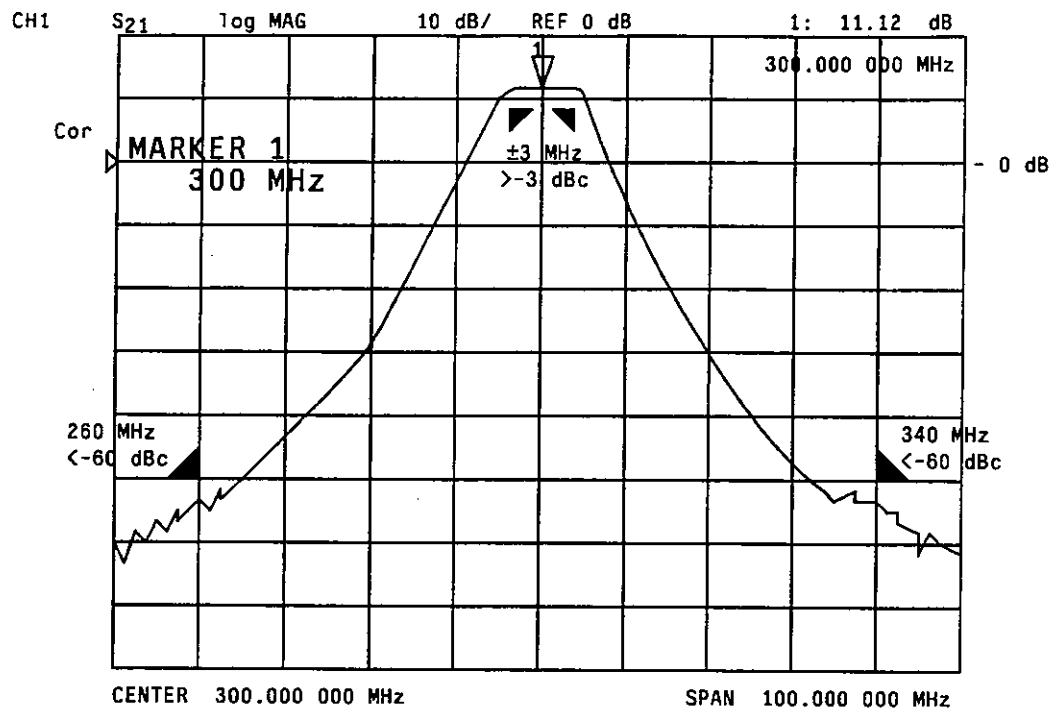


Fig. 5-4 S21 from X16 B-C to X94, adjustment of L162, 163
Gain 9 to 13 dB
Measured attenuation referred to gain at 300 MHz

5.3 Troubleshooting

With only one of the error messages "Err 40, 41", the cause of the fault is in the PLL of the 40 or 130-MHz crystal oscillator in the 10-MHz reference frequency. If the error messages "Err 42" (FRN synthesis) and "Err 43" (step synthesis/FM) both occur, the 40-MHz crystal oscillator or the buffer stage has failed. In a similar manner, the fault is in the 130-MHz crystal oscillator or the buffer stage if the error messages "Err 46" (summing loop) and "Err 48" (output stage with mixer range switched over) occur simultaneously.

5.3.1 Failure of PLLs (Err 40, 41)

- With REFEXT on, check the frequency (5/10 MHz \pm 5 ppm) and level (0.1 to 2 V) of the external reference frequency.
- Use the diagnostics function to check which PLL has failed
(40 MHz: Err 40, SF 134;
130 MHz: Err 41, SF 135).
- If both PLLs have failed, the cause is in the reference frequency (P1, P3 with internal reference, P5, P3 with external reference) or in the 40-MHz divider 1:4/8 (test points P8, P2, P9).
- If only the PLL of the 40-MHz crystal oscillator has failed, check the 40-MHz divider 1:4/8 D400, 401 at test point P8, the phase detector D50 at test points P2, P3 and the PI controller N50 at the plug-in jumpers X50, X55 and test point P4.
- If the PLL of the 130-MHz crystal oscillator has failed, check the test point P9, the IF voltage at P10 (apply external tuning voltage to X43 B-C), the PI controller N430 at jumper X43 and test point P11 and the 130-MHz isolating amplifier at X41 and X40.

5.3.2 Failure of the 40-MHz Signals at X72, 82, 92 (Err 40, 41)

- Use the diagnostics function (SF 138 to 140) to check which output signal has failed.
- If there are no signals at all and if the PLL has failed, the cause is in the 40-MHz crystal oscillator with V305, 310, 315 (test points P7 and X32).

5.3.3 Failure of 130/520-MHz Signal at X93 and 300-MHz Signal at X94 (Err 40, 41, 46, 48)

- Use the diagnostics function to check which output signal has failed (SF 136, 137).
- If both output signals are missing, the cause is in the 130-MHz crystal oscillator with V111, 125 (test points P6 and X14).
- If the 130/520-MHz signal is missing, check the drive signal for the 130/520-MHz selector containing N250 and the amplifiers N204, 240 (N204 only when the 520-MHz signal fails).
- If the 300-MHz signal is missing, check whether it is missing when FM and CW are selected. If it is only missing in one of these modes, check the 40-MHz FM signal at X83, the FM/CW selector and drive (N250). If it is missing in both modes, check the n 260-MHz amplifier (V146, test points X14, X15), the 40-MHz amplifier (V380, test point X3) and the 300-MHz amplifier (V160, 170).

5.3.4 Signals at Test Points and DC Operating Points

10-MHz OCXO

| | |
|--------|---|
| G10.3: | + 11.5 to 12.5 V with REF.INT. and 0 to + 0.5 with REF.EXT. |
| N30.1: | + 5.5 to + 6.5 V with oven heated-up, + 4 V with cold oven. |
| P1: | 10-MHz HCMOS levels with REF.INT., + 5 V with REF.EXT. |

40-MHz crystal oscillator

| | |
|---------------|--|
| V305 emitter: | + 3.8 V |
| V310 emitter: | + 13.8 V |
| V315 emitter: | + 1.6 V |
| P7: | + 10.7 to + 11.2 V with oscillator working, + 11.5 V with oscillator not working |

40-MHz amplifier

| |
|--|
| X32: 40 MHz, -9 to -11 dBm into 50 Ω |
| V330, 340, 350, 360 source: + 1.0 to + 2.5 V |

40-MHz PLL and reference selector

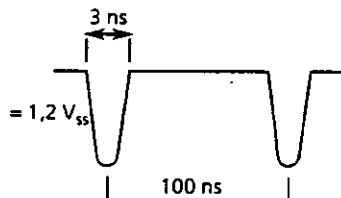
D401.8: 40 MHz, 3 to 4 V_{pp}
P8: 40 MHz, HCMOS levels
P9: 10 MHz, HCMOS levels
P2, 3: 5 MHz, HCMOS levels
N50.1: = 0 V
P5: + 1 to + 3 V DC without input signal at X91, 5/10 MHz, HCMOS levels with input signal
N90.4: + 1 V
N90.7: + 20 V

130-MHz crystal oscillator

V111 emitter: + 3.5 V
V125 emitter: + 2.4 V
P6: + 9.9 to + 10.7 V with oscillator working, + 10.9 V with oscillator not working
X40: 130 MHz, -9 to -6 dBm into 50 Ω

130-MHz PLL

X40: 130 MHz, -12 to -8 dBm into 50 Ω
X41:



Measurement using oscilloscope with 50 Ω- input impedance and bandwidth ≥ 250 MHz

P10: = 0 V with synchronous PLL, 0.5 to 0.7 V_{pp} with asynchronous PLL
P9: 10 MHz, HCMOS levels

130/520-MHz LO Signal

N250.1: + + 13 V/-14 V with 130 MHz on/off
N250.7: + 13 V/-14 V with 520 MHz on/off
N204.3: + 5.5 V DC
N240.3: + 5.5 V DC

260-MHz LO amplifier

V146 collector: + 6,5 V
X15: 260 MHz, -8 to -5 dBm into 50 Ω

300-MHz amplifier

V160 source: 0 to + 1,5 V
V161 emitter: + 3.4 V

FM/CW selector with 40-MHz amplifier

N250.8: -14/+ 13 V with FM/CW
N250.14: + 13 V/-14 V with FM/CW
V380 collector: + 9.7 V
X38: 40 MHz, -18 to -15 dBm into 50 Ω

5.4 Interfaces

| Signal | | D | T | Range | Connection Point | Remarks |
|----------|---|---|---|-----------------------------------|---|------------------------|
| Name | Designation | | | | | |
| + 24 V | Power supply + 24 V | I | P | 23,4 ... 24,5 V 10 ... 30 mA | X9A24 | Power supply |
| + 15 V | Power supply + 15 V | I | P | 14,8 ... 15,3 V 350 ... 450 mA | X9A26 | |
| + 5 V | Power supply + 5 V | I | P | 4,9 ... 5,1 V 40 ... 70 mA | X9A28 | |
| -15 V | Power supply -15 V | I | P | -15,2 ... -14,8 V 30 ... 50 mA | X9A30 | |
| + 12 STB | Power supply + 12 V Standby | I | P | + 11 ... + 13 V 20 ... 150 mA | X9A32 | |
| GND | Ground | B | P | | X9A10 X9A12 X9A14 X9A16 X9A23 X9A25 X9A27 X9A29 X9A31 | |
| BA0 | Subassembly address | I | D | HC-MOS | X9A21 | Subassembly addressing |
| BA1 | Subassembly address | I | D | HC-MOS | X9A20 | |
| BA2 | Subassembly address | I | D | HC-MOS | X9A19 | |
| G0 | Strobe 0 | I | D | HC-MOS | X9A22 | |
| TF.CLK | CLOCK | I | D | HC-MOS | X9A11 | Data transmission |
| TR.DAT | Data | I | D | | X9A13 | |
| TST | Diagnostics | O | O | -5 ... + 5 V | X9A17 | Selftest |
| ALA | Alarm | O | L | Open collector | X9A18 | |
| REF | 5 / 10-MHz reference | B | O | Output level + 5 ... + 9 dBm | X91 | RF interface 50 Ω |
| INOUT | Input/Output | O | O | Input level -6 ... + 19 dBm | | RF interface 50 Ω |
| FMREF | 40-MHz reference for step synthesis/FM | O | O | Output level + 3 ... + 7 dBm | X82 | RF interface 50 Ω |
| FRMREF | 40-MHz reference for FRN synthesis | O | O | Output level + 3 ... + 7 dBm | X72 | RF interface 50 Ω |
| BBREF | 40-MHz reference for option WBM | O | O | Output level + 3 ... + 7 dBm | X92 | RF interface 50 Ω |
| MIXLO | LO signal 130 / 520 MHz for OPM | O | O | Output level + 3 ... + 7 dBm | X93 | RF interface 50 Ω |
| REF300 | 300-MHz reference for SUM | O | O | Output level + 3 ... + 7 dBm | X94 | RF interface 50 Ω |
| FMOUT | 40 MHz | I | O | Input level + 4 ... + 6 dBm | X83 | RF interface 50 Ω |

Direction

I Input
O Output
B Bidirectional
M Measurement

Type

A Analog
H Digital high
L Digital low
P Power

5.5 Positions of Plug-in Jumpers

X55 A-B to 2
X50 to A-B
X43 to A-B
X16 to A-B

5.6 Required Equipment

Power supply unit

+ 4.9 to + 5.1 V, 0.2 A

+ 14.9 to + 15.1 V, 0.5 A

+ 23.8 to + 24.2 V, 50 mA

-14.4 to -15.1 V, 0.1 A

2 x 0 to 25 V, 10 mA

(e.g. NGT35)

Spectrum analyzer (1 GHz)

(e.g. FSA)

RF generator 10 MHz, 40 MHz

(e.g. SMG)

Network analyzer (to 500 MHz)

Oscilloscope

(e.g. BOL)

RF adapter cable

Test adapter

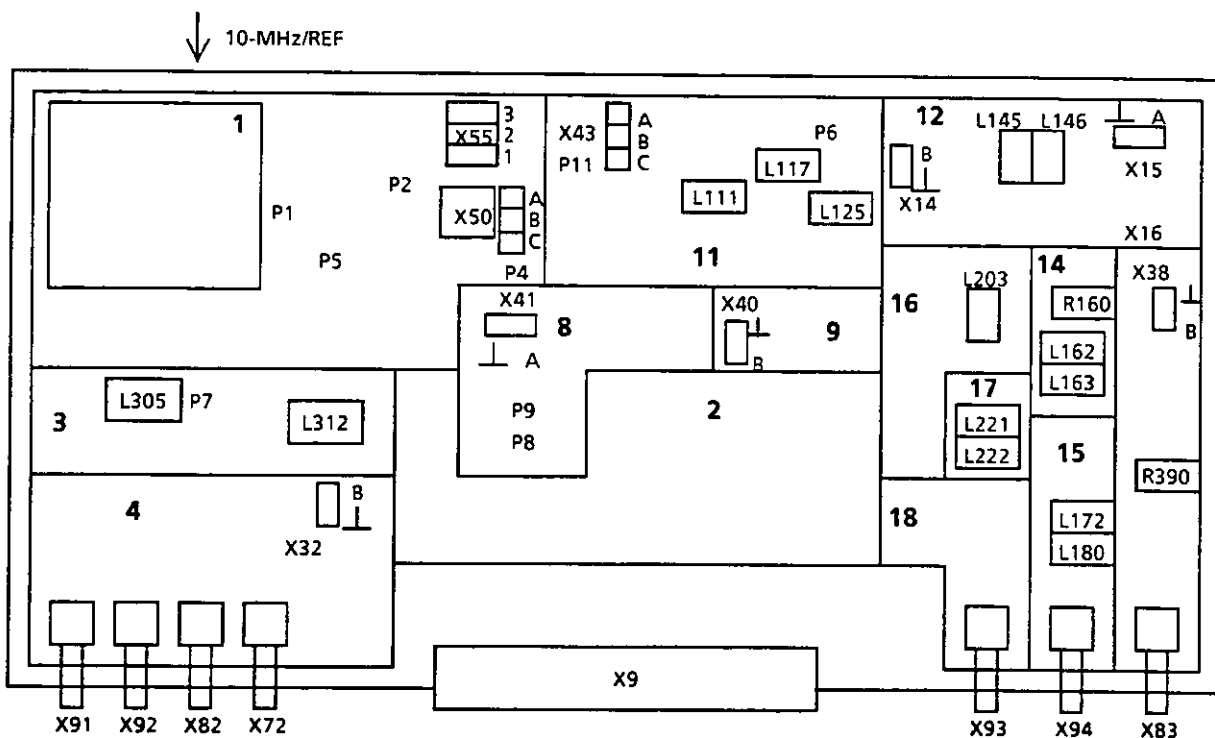
2 x voltmeter (1 x $Z_{in} = 1\text{ M}\Omega$; 1 x $Z_{in} \geq 10\text{ M}\Omega$)

(e.g. URE)


Controller


(e.g. PUC)

Layout diagram




Schaltteillisten
Stromläufe
Bestückungspläne
Part lists
Circuit diagrams
Components plans
Listes des pièces détachées
Schémas de Circuit
Plans des composants


| Kennz. Comp. No. | Benennung Designation | Sachnummer Stock No. | Hersteller Manufacturer | Bezeichnung Designation | enthalten in contained in |
|--|---|-------------------------|--|----------------------------|------------------------------|
| | XX VARIANTENERKLAERUNG IDENTIFICATION OF MODELS VAR 02 = GRUNDAUSFUEHRUNG VAR 02 = BASIC VERSION | | | | |
| C10 | CE 1UF +-10% 25V EIA3528 TANTALUM SMD-CAPACITOR | CE 0007.7217.00 | KEMET | T 491 B105 K025 AS | |
| C11 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C12 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C13 | CE 10UF+-20%25V SAL ELECTR.CAPACITOR | CE 0007.3934.00 | VALVO | 2222 128 36109 | |
| C15 | CE 47UF+-20%6,3V SAL ELECTR.CAPACITOR | CE 0007.3957.00 | VALVO | 2222 128 33479 | |
| C20 | CC 330PF+-2%6X9N750 CERAMIC CAPACITOR | CC 0087.6964.00 | PHILIPS_CO | 2222 678 58331 | |
| C21 | CC 560PF+-10%3X4R2000 CAPACITOR | CC 0087.7002.00 | PHILIPS_CO | 2222 632 51561 | |
| C22 | CC 330PF+-2%6X9N750 CERAMIC CAPACITOR | CC 0087.6964.00 | PHILIPS_CO | 2222 678 58331 | |
| C23 | CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR | CC 0007.7398.00 | PHILIPS_CO | 2222 863 *8102 | |
| C25 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C26 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C30 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C31 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C32 | CE 47UF+-20%6,3V SAL ELECTR.CAPACITOR | CE 0007.3957.00 | VALVO | 2222 128 33479 | |
| C33 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C35 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C40 | CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR | CC 0007.7398.00 | PHILIPS_CO | 2222 863 *8102 | |
| C42 | CC 220PF+-2%6X7N750 CAPACITOR | CC 0087.6941.00 | PHILIPS_CO | 2222 678 58221 | |
| C43 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C45 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C46 | CE 4,7UF+-10% 10V 3528 TANTALUM SMD-CAPACITOR | CE 0007.7275.00 | KEMET | T491 B 475 K 010 AS | |
| C48 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C49 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C50 | CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR | CC 0007.7398.00 | PHILIPS_CO | 2222 863 *8102 | |
| C51 | CK 68NF+-5%63V RD2,5H7MKT CAPACITOR | CK 0099.2923.00 | ROEDERSTEI | MKT 1826-368-06-4 | |
| C52 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C53 | CK 220NF+-5%63VRD3,5H9MKT CAPACITOR | CK 0099.2952.00 | ROEDERSTEI | MKT 1826-422-06-4 | |
| C54 | CK 1UF+-5%50V7,5X5,5X10,5 CAPACITOR | CK 0099.2998.00 | ERD | MKT 1826-510/054-R | |
| C55 | CK 100NF+-5%63VRD2,5H7MKT CAPACITOR | CK 0099.2930.00 | ROEDERSTEI | MKT 1826-410-06-4W | |
| C56 | CK 100NF+-5%63VRD2,5H7MKT CAPACITOR | CK 0099.2930.00 | ROEDERSTEI | MKT 1826-410-06-4W | |
| C60 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C69 | LD FILT.40DB/10GHZ10A300V LOWPASS-FILTER | 0911.0705.00 | SPECTRUM | SCI-9920-101HT | |
| C70 | LD FILT.40DB/10GHZ10A300V LOWPASS-FILTER | 0911.0705.00 | SPECTRUM | SCI-9920-101HT | |
| C71 | LD FILT.40DB/10GHZ10A300V LOWPASS-FILTER | 0911.0705.00 | SPECTRUM | SCI-9920-101HT | |
| C75 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C80 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| MENP5 502 3PUA AI Datum Date | | | | | |
| Schaltteilliste für Parts list for | | | Sachnummer Stock No | | Blatt-Nr Page |
|  ROHDE & SCHWARZ | | | 39 04.02.98 EE FESTFREQUENZEN REFERENCEF REQUENCIES | | 0819.6060.01 SA 1+ |

| Kennz. Comp. No. | Benennung Designation | Sachnummer Stock No. | Hersteller Manufacturer | Bezeichnung Designation | enthalten in contained in |
|--|--|-------------------------|--|----------------------------|------------------------------|
| C81 | CE 47UF+-20%6,3V SAL ELECTR.CAPACITOR | CE 0007.3957.00 | VALVO | 2222 128 33479 | |
| C82 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C83 | CE 100UF+-20%35V RM5 ELECTROLYTIC CAPACITOR | 0008.7510.00 | PHILIPS_CO | 2222 116 90042 | |
| C84 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C85 | CE 10UF+-20%25V SAL ELECTR.CAPACITOR | CE 0007.3934.00 | VALVO | 2222 128 36109 | |
| C86 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C87 | CE 2,2UF+-20%40V SAL ELECTR.CAPACITOR | CE 0007.3911.00 | VALVO | 2222 128 37228 | |
| C88 | CE 47UF+-20%6,3V SAL ELECTR.CAPACITOR | CE 0007.3957.00 | VALVO | 2222 128 33479 | |
| C105 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C110 | CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR | CC 0007.7398.00 | PHILIPS_CO | 2222 863 *8102 | |
| C111 | CK 10NF+-5%63V RD2,5H7MKT CAPACITOR | CK 0099.2869.00 | ROEDERSTEI | MKT 1826-310-014W | |
| C112 | CC 12PF+-1% 50V NPO 1206 CERAMIC CHIP CAPACITOR | CC 0099.8744.00 | MURATA | GRM42-6COG 120 F50PT | |
| C115 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C117 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C118 | CC 180PF+-5% 300V PELL CAPACITOR | CC 0556.8701.00 | TEKELEC | 301 CHB 181 JW(V)L | |
| C119 | CC 150PF+-5% 300V PELL CAPACITOR | CC 0556.8718.00 | TEKELEC | 301 CHB 151 JW | |
| C120 | CC 18PF+-2% 500V PELL CAPACITOR | CC 0552.1660.00 | TEKELEC | 501 CHB 180 GWL | |
| C121 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C122 | CE 47UF+-20%63V RM5 ELECTROLYTIC CAPACITOR | 0008.7440.00 | PHILIPS_CO | 2222 116 90112 | |
| C123 | CC 330PF+-1%50V NPO 1206 CERAMIC CHIP CAPACITOR | CC 0099.8873.00 | PHILIPS_CO | 2238 863 18331 | |
| C124 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C125 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C126 | CC 150PF+-1%50V NPO 1206 CERAMIC CHIP CAPACITOR | CC 0099.8509.00 | PHILIPS_CO | 2238 863 18151 | |
| C128 | CC 12PF+-2%3X4NPO CAPACITOR | CC 0087.6435.00 | VALVO | 2222 678 | |
| C129 | CC 470PF+-10%3X4R2000 CAPACITOR | CC 0087.6993.00 | PHILIPS_CO | 2222 630 51471 | |
| C140 | CC 10PF+-0,25PF3X4NPO CAPACITOR | CC 0087.6429.00 | PHILIPS_CO | 2222 678 10109 | |
| C141 | CC 15PF+-2%3X4NPO CAPACITOR | CC 0087.6441.00 | PHILIPS_CO | 2222 678 | |
| C142 | CC 15PF+-2%3X4NPO CAPACITOR | CC 0087.6441.00 | PHILIPS_CO | 2222 678 | |
| C143 | CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR | CC 0007.7398.00 | PHILIPS_CO | 2222 863 *8102 | |
| C144 | CC 10PF+-0,25PF3X4NPO CAPACITOR | CC 0087.6429.00 | PHILIPS_CO | 2222 678 10109 | |
| C145 | CC 6,8PF+-0,25PF3X4NPO CAPACITOR | CC 0087.6406.00 | PHILIPS_CO | 2222 678 | |
| C146 | CC 2,2PF+-0,25PF3X4NPO CAPACITOR | CC 0087.6341.00 | PHILIPS_CO | 2222 678 | |
| C147 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C148 | CC 100PF+-1%50V NPO 1206 CERAMIC CHIP CAPACITOR | CC 0099.8415.00 | MURATA | GRM42-6COG 101F 50PT | |
| C149 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C150 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C153 | CC 3,3PF+-0,25 50V NPO1206 CERAMIC CHIP CAPACITOR | CC 0007.8194.00 | MURATA | GRM42-6COG 3R3 C50PT | |
| C161 | CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR | CC 0007.7398.00 | PHILIPS_CO | 2222 863 *8102 | |
| C162 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| MENPS 502 3PUA | | | | | |
| Ai | | Datum Date | Schaltteilliste für Parts list for | | Sachnummer Stock No |
| 39 | | 04.02.98 | EE FESTFREQUENZEN REFERENCEF REQUENCIES | | 0819.6060.01 SA |
|  ROHDE & SCHWARZ | | | | | Blatt-Nr Page 2+ |


| Kennz. Comp. No. | Benennung Designation | Sachnummer Stock No. | Hersteller Manufacturer | Bezeichnung Designation | enthalten in contained in |
|---------------------|---|-------------------------|----------------------------|----------------------------|------------------------------|
| C163 | CC 47PF+-1%50V COG 1206 CERAMIC CHIP CAPACITOR | CC 0099.8496.00 | MURATA | GRM42-6COG 470F 50PT | |
| C164 | CC 3,9PF/0,25PF63V3X5N150 CAPACITOR | CC 0099.5545.00 | ROEDERSTEI | ROP 744 J4 | |
| C165 | CC 8,2PF+-0,25PF3X4N150 CAPACITOR | CC 0087.6587.00 | VALVO | 2222 678 33828 | |
| C170 | CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR | CC 0007.7398.00 | PHILIPS_CO | 2222 863 *8102 | |
| C171 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C172 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C173 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C174 | CC 47PF+-1%50V COG 1206 CERAMIC CHIP CAPACITOR | CC 0099.8496.00 | MURATA | GRM42-6COG 470F 50PT | |
| C175 | CC 10PF+-0,25PF3X4N150 CAPACITOR | CC 0087.6593.00 | PHILIPS_CO | 2222 678 34109 | |
| C176 | CC 3,3PF+-0,25 50VNPO1206 CERAMIC CHIP CAPACITOR | CC 0007.8194.00 | MURATA | GRM42-6COG 3R3 C50PT | |
| C180 | CC 12PF+-2%3X4N150 CAPACITOR | CC 0087.6606.00 | PHILIPS_CO | 2222 678 34129 | |
| C181 | CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR | CC 0007.7398.00 | PHILIPS_CO | 2222 863 *8102 | |
| C182 | CC 100PF+-1%50V NPO 1206 CERAMIC CHIP CAPACITOR | CC 0099.8415.00 | MURATA | GRM42-6COG 101F 50PT | |
| C183 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C184 | CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR | CC 0007.7398.00 | PHILIPS_CO | 2222 863 *8102 | |
| C185 | CC 1PF+-0,25 50V NPO 1206 CERAMIC CHIP CAPACITOR | CC 0099.8667.00 | PHILIPS_CO | 2238 863 15108 | |
| C186 | CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR | CC 0007.7398.00 | PHILIPS_CO | 2222 863 *8102 | |
| C190 | CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR | CC 0007.7398.00 | PHILIPS_CO | 2222 863 *8102 | |
| C191 | CC 18PF+-2%3X4NPO CAPACITOR | CC 0087.6458.00 | PHILIPS_CO | 2222 678 | |
| C192 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C194 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C195 | CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR | CC 0007.7398.00 | PHILIPS_CO | 2222 863 *8102 | |
| C200 | CC 15PF+-2%3X4NPO CAPACITOR | CC 0087.6441.00 | PHILIPS_CO | 2222 678 | |
| C201 | CC 15PF+-2%3X4NPO CAPACITOR | CC 0087.6441.00 | PHILIPS_CO | 2222 678 | |
| C202 | CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR | CC 0007.7398.00 | PHILIPS_CO | 2222 863 *8102 | |
| C203 | CC 2,7PF+-0,25PF3X4NPO CERAMIC CAPACITOR | CC 0087.6358.00 | PHILIPS_CO | 2222 678 | |
| C204 | CC 1PF+-0,25PF3X4P100 CAPACITOR | CC 0087.6170.00 | PHILIPS_CO | 2222 678 | |
| C206 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C207 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C212 | CC 100PF+-1%50V NPO 1206 CERAMIC CHIP CAPACITOR | CC 0099.8415.00 | MURATA | GRM42-6COG 101F 50PT | |
| C220 | CC 3,9PF+-0,25PF3X4NPO CAPACITOR | CC 0087.6370.00 | PHILIPS_CO | 2222 678 | |
| C222 | CC 1PF+-0,25PF3X4P100 CAPACITOR | CC 0087.6170.00 | PHILIPS_CO | 2222 678 | |
| C231 | CC 2,7PF+-0,25PF3X4NPO CERAMIC CAPACITOR | CC 0087.6358.00 | PHILIPS_CO | 2222 678 | |
| C232 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C233 | CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR | CC 0007.7398.00 | PHILIPS_CO | 2222 863 *8102 | |
| C239 | CC 1,8PF+-0,25 50VNPO1206 CERAMIC CHIP CAPACITOR | CC 0007.8165.00 | MURATA | GRM42-6COG 1R8 C50PT | |
| C240 | CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR | CC 0007.7398.00 | PHILIPS_CO | 2222 863 *8102 | |
| C241 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C242 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |


| | | | | | | |
|---|----------|----------|--|---------------------------------------|-------------------------|------------------|
| MENP5 | 502 3PUA | AI | Datum Date | Schaltteilliste für Parts list for | Sachnummer Stock No. | Blatt-Nr Page |
|  | 39 | 04.02.98 | EE FESTFREQUENZEN REFERENCEF REQUENCIES | 0819.6060.01 SA | 3+ | |


| Kennz. Comp. No. | Benennung Designation | Sachnummer Stock No. | Hersteller Manufacturer | Bezeichnung Designation | enthalten in contained in |
|---------------------|--|-------------------------|----------------------------|----------------------------|------------------------------|
| C243 | CC 100PF+-1%50V NPO 1206 CERAMIC CHIP CAPACITOR | CC 0099.8415.00 | MURATA | GRM42-6COG 101F 50PT | |
| C244 | CC 100PF+-1%50V NPO 1206 CERAMIC CHIP CAPACITOR | CC 0099.8415.00 | MURATA | GRM42-6COG 101F 50PT | |
| C245 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C246 | CC 100PF+-1%50V NPO 1206 CERAMIC CHIP CAPACITOR | CC 0099.8415.00 | MURATA | GRM42-6COG 101F 50PT | |
| C300 | CK 47NF+-5%63V RD2,5H7MK7 CAPACITOR | CK 0099.2917.00 | ERO | MKR 1826-347-06-4 | |
| C301 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C302 | CC 27PF+-1%50V NPO 1206 CERAMIC CHIP CAPACITOR | CC 0099.8409.00 | MURATA | GRM42-6COG 270F 50PT | |
| C303 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C304 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C305 | CC 620PF+-5% 100V PELL CAPACITOR | 0556.8724.00 | ATC | ATC100B 621 JW100R | |
| C307 | CC 470PF+-5% 200V PELL CERAMIC CAPACITOR | CC 0469.5905.00 | TEKELEC | 201 CHB 471 JWL | |
| C309 | CC 56PF+-5% 500V PELL CAPACITOR | CC 0556.8660.00 | TEKELEC | 501 CHB 560 J(W/V)LE | |
| C310 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C311 | CE 47UF+-20%63V RM5 ELECTROLYTIC CAPACITOR | 0008.7440.00 | PHILIPS_CO | 2222 116 90112 | |
| C312 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C313 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C314 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C315 | CC 27PF+-1%50V NPO 1206 CERAMIC CHIP CAPACITOR | CC 0099.8409.00 | MURATA | GRM42-6COG 270F 50PT | |
| C316 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C319 | CC 33PF+-2%4X5NPO CAPACITOR | CC 0087.6487.00 | PHILIPS_CO | 2222 678 | |
| C320 | CC 150PF+-2%5X6N750 CAPACITOR | CC 0087.6929.00 | PHILIPS_CO | 2222 678 58151 | |
| C322 | CC 1NF+-10%63V K2000 CERAMIC CAPACITOR | CC 0022.0784.00 | PHILIPS_CO | 2222 630 | |
| C330 | CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR | CC 0007.7398.00 | PHILIPS_CO | 2222 863 *8102 | |
| C331 | CC 10NF-20+50%7X8R4000 CAPACITOR | CC 0087.7525.00 | VALVO | 2222 640 51103 | |
| C333 | CC 18PF+-2%3X4NPO CAPACITOR | CC 0087.6458.00 | PHILIPS_CO | 2222 678 | |
| C334 | CC 100PF+-1%50V NPO 1206 CERAMIC CHIP CAPACITOR | CC 0099.8415.00 | MURATA | GRM42-6COG 101F 50PT | |
| C336 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C340 | CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR | CC 0007.7398.00 | PHILIPS_CO | 2222 863 *8102 | |
| C341 | CC 10NF-20+50%7X8R4000 CAPACITOR | CC 0087.7525.00 | VALVO | 2222 640 51103 | |
| C342 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C343 | CC 18PF+-2%3X4NPO CAPACITOR | CC 0087.6458.00 | PHILIPS_CO | 2222 678 | |
| C344 | CC 100PF+-1%50V NPO 1206 CERAMIC CHIP CAPACITOR | CC 0099.8415.00 | MURATA | GRM42-6COG 101F 50PT | |
| C345 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C346 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C350 | CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR | CC 0007.7398.00 | PHILIPS_CO | 2222 863 *8102 | |
| C351 | CC 10NF-20+50%7X8R4000 CAPACITOR | CC 0087.7525.00 | VALVO | 2222 640 51103 | |
| C352 | CC 18PF+-2%3X4NPO CAPACITOR | CC 0087.6458.00 | PHILIPS_CO | 2222 678 | |
| C353 | CC 100PF+-1%50V NPO 1206 CERAMIC CHIP CAPACITOR | CC 0099.8415.00 | MURATA | GRM42-6COG 101F 50PT | |
| C356 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |

| MENP5 | 502 | 3PUA | AI | Datum Date | Schaltteilliste für Parts list for | Sachnummer Stock No | Blatt-Nr Page |
|--|-----|----------|----|--|---------------------------------------|------------------------|------------------|
|  ROHDE & SCHWARZ | 39 | 04.02.98 | | EE FESTFREQUENZEN REFERENCEF REQUENCIES | 0819.6060.01 SA | 4+ | |

| Kennz. Comp. No. | Benennung Designation | Sachnummer Stock No. | Hersteller Manufacturer | Bezeichnung Designation | enthalten in contained in |
|---------------------|---|-------------------------|----------------------------|----------------------------|------------------------------|
| C360 | CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR | CC 0007.7398.00 | PHILIPS_CO | 2222 863 *8102 | |
| C361 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C362 | CC 12PF+-2%3X4NPO CAPACITOR | CC 0087.6435.00 | VALVO | 2222 678 | |
| C370 | CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR | CC 0007.7398.00 | PHILIPS_CO | 2222 863 *8102 | |
| C371 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C372 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C374 | CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR | CC 0007.7398.00 | PHILIPS_CO | 2222 863 *8102 | |
| C375 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C376 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C379 | CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR | CC 0007.7398.00 | PHILIPS_CO | 2222 863 *8102 | |
| C380 | CC 1NF+-1% 50V NPO 1206 SMD CERAMIC CAPACITOR | CC 0007.7398.00 | PHILIPS_CO | 2222 863 *8102 | |
| C381 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C382 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C383 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C384 | CC 1NF+-10%63V K2000 CERAMIC CAPACITOR | CC 0022.0784.00 | PHILIPS_CO | 2222 630 | |
| C385 | CC 68PF+-2%6X7NPO CAPACITOR | CC 0087.6529.00 | PHILIPS_CO | 2222 678 | |
| C386 | CC 120PF+-2%6X9NPO CAPACITOR | CC 0087.6558.00 | PHILIPS_CO | 2222 678 10121 | |
| C387 | CC 82PF+-2%6X7NPO CAPACITOR | CC 0087.6535.00 | PHILIPS_CO | 2222 678 10 829 | |
| C388 | CC 8,2PF+-0,25 50VNPO1206 CERAMIC CHIP CAPACITOR | CC 0007.8242.00 | MURATA | GRM42-6COG 8R2 C50PT | |
| C389 | CC 33PF+-1%50V NPO 1206 CERAMIC CHIP CAPACITOR | CC 0099.8780.00 | MURATA | GRM42-6COG 330F 50PT | |
| C390 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C391 | CE 220UF+-20%16V RM5 ELECTROLYTIC CAPACITOR | 0008.7562.00 | FROLYT | EKS00CC322D | |
| C392 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C393 | CC 3,3PF+-0,25 50VNPO1206 CERAMIC CHIP CAPACITOR | CC 0007.8194.00 | MURATA | GRM42-6COG 3R3 C50PT | |
| C400 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C401 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C410 | CC 10PF+-0,25PF3X4NPO CAPACITOR | CC 0087.6429.00 | PHILIPS_CO | 2222 678 10109 | |
| C411 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C412 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C413 | CE 100UF+-20%35V RM5 ELECTROLYTIC CAPACITOR | 0008.7510.00 | PHILIPS_CO | 2222 116 90042 | |
| C414 | CC 100PF+-1%50V NPO 1206 CERAMIC CHIP CAPACITOR | CC 0099.8415.00 | MURATA | GRM42-6COG 101F 50PT | |
| C415 | CC 100PF+-1%50V NPO 1206 CERAMIC CHIP CAPACITOR | CC 0099.8415.00 | MURATA | GRM42-6COG 101F 50PT | |
| C420 | CC 47PF+-1%50V COG 1206 CERAMIC CHIP CAPACITOR | CC 0099.8496.00 | MURATA | GRM42-6COG 470F 50PT | |
| C430 | CC 1NF+-10%63V K2000 CERAMIC CAPACITOR | CC 0022.0784.00 | PHILIPS_CO | 2222 630 | |
| C431 | CK 10NF+-5%63V RD2,5H7MKT CAPACITOR | CK 0099.2869.00 | ROEDERSTEI | MKT 1826-310-014W | |
| C432 | CK 100NF+-5%63VRD2,5H7MKT CAPACITOR | CK 0099.2930.00 | ROEDERSTEI | MKT 1826-410-06-4W | |
| C433 | CK 100NF+-5%63VRD2,5H7MKT CAPACITOR | CK 0099.2930.00 | ROEDERSTEI | MKT 1826-410-06-4W | |
| C435 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C436 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |


| | | | | | | |
|--|----------|----------|--|--|------------------------|------------------|
| MENP5 | 502 3PUA | AI | Datum Date | Schaltteilleiste für Parts list for | Sachnummer Stock No | Blatt-Nr Page |
|  ROHDE & SCHWARZ | 39 | 04.02.98 | EE FESTFREQUENZEN REFERENCEF REQUENCIES | 0819.6060.01 SA | 5+ | |

| Kennz. Comp. No. | Benennung Designation | Sachnummer Stock No. | Hersteller Manufacturer | Bezeichnung Designation | enthalten in contained in |
|---|--|-------------------------|--|----------------------------|------------------------------|
| C440 | CC 1NF+-10%63V K2000 CERAMIC CAPACITOR | CC 0022.0784.00 | PHILIPS_CO | 2222 630 | |
| C441 | CC 4,7PF+-0,25PF3X4NPO CAPACITOR | CC 0087.6387.00 | PHILIPS_CO | 2222 678 | |
| C442 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C443 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C444 | CC 10NF+-10%50V X7R 1206 CERAMIC CHIP CAPACITOR | CC 0099.8521.00 | MURATA | GRM42-6X7R103K 50PT | |
| C445 | CC 8,2PF+-0,25PF3X4N150 CAPACITOR | CC 0087.6587.00 | VALVO | 2222 678 33828 | |
| C446 | CC 1NF+-10%63V K2000 CERAMIC CAPACITOR | CC 0022.0784.00 | PHILIPS_CO | 2222 630 | |
| D20 | BL 74AC00SC 4X2IN NAND QUAD NAND GATTER | BL 0820.3477.00 | NSC | 74AC00(SC) | |
| D21 | BL PC74HCT74T 2XD-FLIPFL DUAL D-TYPE FLIP FLOP | BL 0007.6262.00 | PHILIPS_SE | (PC)74HCT74D(T) | |
| D40 | BL PC74HC00T 4X2IN.NAND QUAD 2INPUT NAND GATE | BL 0007.3463.00 | PHILIPS_SE | (PC)74HC00D(T) | |
| D41 | BL PC74HC00T 4X2IN.NAND QUAD 2INPUT NAND GATE | BL 0007.3463.00 | PHILIPS_SE | (PC)74HC00D(T) | |
| D50 | BL PC74HCT112T 2XJK-FF CL DUAL JK-FF | BL 0007.6327.00 | PHILIPS | (PC)74HCT112(T) | |
| D70 | BL PC74HC4094P 8ST.SH.REG 8ST.SHIFT A.STORE REGIST. | 0099.9711.00 | PHILIPS_SE | (PC)74HC4094N(P) | |
| D71 | BL MM74HC4051N 8CH.AN.MUX 8CH.ANALOG MUX/DEMUX | 0099.9670.00 | PHILIPS | (PC)74HC4051N(P) | |
| D72 | BL PC74HC4094P 8ST.SH.REG 8ST.SHIFT A.STORE REGIST. | 0099.9711.00 | PHILIPS_SE | (PC)74HC4094N(P) | |
| D100 | BL PC74HC238P 3T08 L.DEC DECODER/DEMULTIPLEXER | 0620.0847.00 | PHILIPS | (PC)74HC238N(P) | |
| D101 | BL MM74HC11N 3X3IN.ANDG TRIPLE 3-INPUT AND GATE | 0099.9486.00 | PHILIPS_SE | (PC)74HC11N(P) | |
| D150 | BM SRA1WH MIXER 0.7GHZ MIXER | BM 0252.5363.00 | MINI-CIRCU | SRA-1WH | |
| D400 | BL 74AC161SC 4B.BIN CNT 4BIT SYNC.PRES.BIN COUNT. | BL 0820.3519.00 | NSC | 74AC161(SC) | |
| D401 | BL 74AC02SC 4X2IN NORG QUAD NOR GATE | BL 0820.3490.00 | NSC | 74AC02(SC) | |
| G10 | EO 10MHZ-QU.OSZ.OCXO 12V 10MHZ CRYSTAL OSCILLATOR | 0835.0091.00 | QUARZKERAM | 2100T-S153 (H) | |
| G110 | EQ QUARZ 130MHZ SELECT | 0820.3625.00 | | | |
| G300 | EQ QUARZ 40MHZ SELECT QUARTZ 40MHZ SELECT | 0820.3631.00 | | | |
| K35 | SR 5V 1XU DIL M.DIODE+SCH RELAY | SR 0282.5003.00 | HAMLIN | HE721C0530 | |
| L10 | LD 3,30UH10%0,850HMO,285A CHOKE | LD 0067.2928.00 | DALE | IM2 | |
| L20 | LD 1,20UH10%0,180HMO,620A CHOKE | LD 0067.2870.00 | DALE | IM2 | |
| L21 | LD 1,20UH10%0,180HMO,620A CHOKE | LD 0067.2870.00 | DALE | IM2 | |
| L32 | LD 10 UH 10% 3R3 144 MA CHOKE | LD 0026.4184.00 | DALE | IM2 | |
| L80 | LD 2,20UH10%0,400HMO,415A CHOKE | LD 0067.2905.00 | DALE | IM2 | |
| L81 | LD 2,20UH10%0,400HMO,415A CHOKE | LD 0067.2905.00 | DALE | IM2 | |
| L82 | LD 1,20UH10%0,180HMO,620A CHOKE | LD 0067.2870.00 | DALE | IM2 | |
| L83 | LD 5,6UH BEI 1,15AO,330HM CHOKE | LD 0026.4090.00 | DELEVAN | 1840-24 | |
| L84 | LD 2,20UH10%0,400HMO,415A CHOKE | LD 0067.2905.00 | DALE | IM2 | |
| L110 | LD 0,15UH10%0,100HM1,230A CHOKE | LD 0067.2763.00 | DALE | IM2 | |
| L113 | LF ROHRK.U17 VI TUBULAR CORE | LF 0026.9286.00 | VOGT | 231 16 110 10 | |
| L117 | LD 85NH 3,5W CM30P FE-K COI-CORE | 0801.4865.00 | TOKO | E521 HN-030023 | |
| L123 | LD 10 UH 10% 3R3 144 MA CHOKE | LD 0026.4184.00 | DALE | IM2 | |
| MENP5 502 3PUA AI Datum Date Schalterliste für Parts list for Sachnummer Stock No Blatt-Nr Page | | | | | |
|  | | 39 04.02.98 | EE FESTFREQUENZEN REFERENCEF REQUENCIES | | 0819.6060.01 SA 6+ |


| Kennz. Comp. No. | Benennung Designation | Sachnummer Stock No. | Hersteller Manufacturer | Bezeichnung Designation | enthalten in contained in | |
|--|---|-------------------------|----------------------------|--|------------------------------|------------------|
| L124 | LD 10 UH 10% 3R3 144 MA CHOKE | LD 0026.4184.00 | DALE | IM2 | 0819.7066.00 | |
| L125 | LD 85NH 3,5W CM30P FE-K COI-CORE | 0801.4865.00 | TOKO | E521 HN-030023 | | |
| L126 | LD 1,20UH10%0,180HMO,620A CHOKE | LD 0067.2870.00 | DALE | IM2 | | |
| L130 | LU UEBERTRAGER TRANSFORMER | 0451.1937.00 | | | | |
| L140 | LD 10 UH 10% 3R3 144 MA CHOKE | LD 0026.4184.00 | DALE | IM2 | | |
| L141 | LD 10 UH 10% 3R3 144 MA CHOKE | LD 0026.4184.00 | DALE | IM2 | | |
| L142 | LU UEBERTRAGER 1 TRANSFORMER | 0819.7072.00 | | | | |
| L144 | LD 0,18UH10%0,120HM1,120A CHOKE | LD 0067.2770.00 | DALE | IM2 | | |
| L145 | LD 36NH 2,5W CM70P ALU-K COIL | 0820.3548.00 | TOKO | E521-AN-020013 | | |
| L146 | LD 36NH 2,5W CM70P ALU-K COIL | 0820.3548.00 | TOKO | E521-AN-020013 | | |
| L148 | LD 1,00UH10%1,000HMO,390A CHOKE | LD 0067.2863.00 | DALE | IM2 | | |
| L150 | LD 100NH 10% 0,080HM 1,4A CHOKE | LD 0067.2740.00 | DALE | IM2 | | |
| L160 | LD 1,00UH10%1,000HMO,390A CHOKE | LD 0067.2863.00 | DALE | IM2 | | |
| L161 | LD 1,00UH10%1,000HMO,390A CHOKE | LD 0067.2863.00 | DALE | IM2 | | |
| L162 | LD 36NH 2,5W CM70P ALU-K COIL | 0820.3548.00 | TOKO | E521-AN-020013 | | |
| L163 | LD 36NH 2,5W CM70P ALU-K COIL | 0820.3548.00 | TOKO | E521-AN-020013 | | |
| L165 | LD 0,22UH10%0,140HM1,045A CHOKE | LD 0067.2786.00 | DALE | IM2 | | |
| L170 | LD 1,00UH10%1,000HMO,390A CHOKE | LD 0067.2863.00 | DALE | IM2 | | |
| L171 | LD 10 UH 10% 3R3 144 MA CHOKE | LD 0026.4184.00 | DALE | IM2 | | |
| L172 | LD 24NH 1,5W CM105P ALU-K MOLDED COIL+ALU-CORE | 0840.2753.00 | TOKO | E 521 AN 010013 | | |
| L180 | LD 24NH 1,5W CM105P ALU-K MOLDED COIL+ALU-CORE | 0840.2753.00 | TOKO | E 521 AN 010013 | | |
| L181 | LD 0,15UH10%0,100HM1,230A CHOKE | LD 0067.2763.00 | DALE | IM2 | | |
| L190 | LD 10 UH 10% 3R3 144 MA CHOKE | LD 0026.4184.00 | DALE | IM2 | | |
| L191 | LU UEBERTRAGER 2 TRANSFORMER | 0819.7089.00 | | | | |
| L194 | LD 10 UH 10% 3R3 144 MA CHOKE | LD 0026.4184.00 | DALE | IM2 | | |
| L200 | LD 10 UH 10% 3R3 144 MA CHOKE | LD 0026.4184.00 | DALE | IM2 | | |
| L201 | LD 10 UH 10% 3R3 144 MA CHOKE | LD 0026.4184.00 | DALE | IM2 | | |
| L202 | LD 100NH 10% 0,080HM 1,4A CHOKE | LD 0067.2740.00 | DALE | IM2 | | |
| L203 | LD 24NH 1,5W CM105P ALU-K MOLDED COIL+ALU-CORE | 0840.2753.00 | TOKO | E 521 AN 010013 | | |
| L206 | LD 10 UH 10% 3R3 144 MA CHOKE | LD 0026.4184.00 | DALE | IM2 | | |
| L220 | LD 100NH 10% 0,080HM 1,4A CHOKE | LD 0067.2740.00 | DALE | IM2 | | |
| L221 | LD 24NH 1,5W CM105P ALU-K MOLDED COIL+ALU-CORE | 0840.2753.00 | TOKO | E 521 AN 010013 | | |
| L222 | LD 24NH 1,5W CM105P ALU-K MOLDED COIL+ALU-CORE | 0840.2753.00 | TOKO | E 521 AN 010013 | | |
| L230 | LD 10 UH 10% 3R3 144 MA CHOKE | LD 0026.4184.00 | DALE | IM2 | | |
| L233 | LD 10 UH 10% 3R3 144 MA CHOKE | LD 0026.4184.00 | DALE | IM2 | | |
| L240 | LD 10 UH 10% 3R3 144 MA CHOKE | LD 0026.4184.00 | DALE | IM2 | | |
| L241 | LD 10 UH 10% 3R3 144 MA CHOKE | LD 0026.4184.00 | DALE | IM2 | | |
| L300 | LD 1,20UH10%0,180HMO,620A CHOKE | LD 0067.2870.00 | DALE | IM2 | | |
| L301 | LD 8,20UH10%2,700HMO,160A CHOKE | LD 0067.2970.00 | DALE | IM2 | | |
| MENP5 502 3PUA | | AI | Datum Date | Schaltteilliste für Parts list for | Sachnummer Stock No | Blatt-Nr Page |
|  ROHDE & SCHWARZ | | 39 | 04.02.98 | EE FESTFREQUENZEN REFERENCEF REQUENCIES | 0819.6060.01 SA | 7+ |

| Kennz. Comp. No. | Benennung Designation | Sachnummer Stock No. | Hersteller Manufacturer | Bezeichnung Designation | enthalten in contained in |
|---------------------|--|-------------------------|----------------------------|----------------------------|------------------------------|
| L305 | LD 287NH 8,5W CM18P FE-K COIL+CORE | 0613.6289.00 | TOKO | E521HN080023 | |
| L306 | LF ROHRK.U17 VI TUBULAR CORE | LF 0026.9286.00 | VOGT | 231 16 110 10 | |
| L310 | LD 10 UH 10% 3R3 144 MA CHOKE | LD 0026.4184.00 | DALE | IM2 | |
| L311 | LD 10 UH 10% 3R3 144 MA CHOKE | LD 0026.4184.00 | DALE | IM2 | |
| L311 | LD 220NH 6,5W CM24P FE-K CHOKE | 1004.3700.00 | TOKO | E 521-HN060023 | |
| L312 | LD 500NH 11,5W CM10P FE-K CHOKE | 0300.8856.00 | TOKO | E521 HN-110023 | |
| L320 | LU UEBERTRAGER TRANSFORMER | 0451.1937.00 | | | |
| L330 | LD 0,82UH10%0,85OHMO,420A CHOKE | LD 0067.2857.00 | DALE | IM2 | |
| L340 | LD 0,82UH10%0,85OHMO,420A CHOKE | LD 0067.2857.00 | DALE | IM2 | |
| L341 | LD 10 UH 10% 3R3 144 MA CHOKE | LD 0026.4184.00 | DALE | IM2 | |
| L350 | LD 0,82UH10%0,85OHMO,420A CHOKE | LD 0067.2857.00 | DALE | IM2 | |
| L360 | LD 1,20UH10%0,18OHMO,620A CHOKE | LD 0067.2870.00 | DALE | IM2 | |
| L380 | LD 10 UH 10% 3R3 144 MA CHOKE | LD 0026.4184.00 | DALE | IM2 | |
| L381 | LD 0,27UH10%0,16OHMO,975A CHOKE | LD 0067.2792.00 | DALE | IM2 | |
| L382 | LD 0,33UH10%0,22OHMO,830A CHOKE | LD 0067.2805.00 | DALE | IM2 | |
| L383 | LD 100NH 10% 0,08OHM 1,4A CHOKE | LD 0067.2740.00 | DALE | IM2 | |
| L390 | LD 10 UH 10% 3R3 144 MA CHOKE | LD 0026.4184.00 | DALE | IM2 | |
| L410 | LD 0,047 UH 10% CHOKE | 0249.5995.00 | DELEVAN | 1026-08 | |
| L411 | LD 10 UH 10% 3R3 144 MA CHOKE | LD 0026.4184.00 | DALE | IM2 | |
| L412 | LU UEBERTRAGER 3 TRANSFORMER | 0819.7095.00 | | | 0819.7066.00 |
| L440 | LD 0,15UH10%0,10OHM1,230A CHOKE | LD 0067.2763.00 | DALE | IM2 | |
| L441 | LD 10 UH 10% 3R3 144 MA CHOKE | LD 0026.4184.00 | DALE | IM2 | |
| L443 | LD 10 UH 10% 3R3 144 MA CHOKE | LD 0026.4184.00 | DALE | IM2 | |
| L445 | LD 0,15UH10%0,10OHM1,230A CHOKE | LD 0067.2763.00 | DALE | IM2 | |
| N30 | BO TLO72ACD 2XFET OPAMP OPERATIONAL AMPLIFIER | 0803.1057.00 | TEXAS | TL 072 ACDR | |
| N50 | BO TLO72ACP 2XFET OPAMP OPERATIONAL AMPLIFIER | 0340.6054.00 | TEXAS | TL 072 ACP | |
| N90 | BO LM339N 4X COMPAR COMPARATOR | BO 0342.2062.00 | NSC | LM339N | |
| N204 | BM MSA0335-21 MMIC BROADBAND AMPLIFIER | 0670.7116.00 | HEWLETT_PA | MSA-0335 | |
| N240 | BM MSA0335-21 MMIC BROADBAND AMPLIFIER | 0670.7116.00 | HEWLETT_PA | MSA-0335 | |
| N250 | BO LM124J 4XLP OPAMP OPERATIONAL AMPLIFIER | 0300.6353.00 | NSC | LM124J | |
| N430 | BO TLO72ACP 2XFET OPAMP OPERATIONAL AMPLIFIER | 0340.6054.00 | TEXAS | TL 072 ACP | |
| P1 .. 11 | VL WIRE-WRAP PIN L=11,6 WIRE-WRAP PIN | 0088.4542.00 | DUPONT CON | 75403-003 | |
| R10 | RG 11,0KOHM+-1%TK100 1206 CHIP RESISTOR | RG 0007.0806.00 | ROEDERSTEI | D25 | |
| R11 | RG 39,2 OHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5543.00 | ROEDERSTEI | D25 | |
| R12 | RG 1,21KOHM+-1%TK100 1206 CHIP RESISTOR | RG 0006.9968.00 | ROEDERSTEI | D25 | |
| R13 | RG 10,0 OHM+-1%TK100 1206 CHIP -RESISTOR | RG 0006.8649.00 | PHILIPS_CO | RC02 | |
| R14 | RG 100 OHM+-1%TK100 1206 CHIP RESISTOR | RG 0006.8884.00 | PHILIPS_CO | RC02 | |


0819.7066.00


| | | | | | | | |
|---|-----|------|-----|---------------|--|------------------------|-------------------|
| MENP5 | 502 | 3PUA | Alt | Datum Date | Schaltteilliste für Parts list for | Sachnummer Stock No | Blatt-Nr. Page |
|  ROHDE & SCHWARZ | | | 39 | 04.02.98 | EE FESTFREQUENZEN REFERENCEF REQUENCIES | 0819.6060.01 SA | 8+ |

| Kennz. Comp. No. | Benennung Designation | Sachnummer Stock No. | Hersteller Manufacturer | Bezeichnung Designation | enthalten in contained in |
|---------------------|--|-------------------------|----------------------------|----------------------------|------------------------------|
| R15 | RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5820.00 | ROEDERSTEI | D25 | |
| R16 | RG 10,0KOHM+-1%TK100 1206 RG CHIP RESISTOR | RG 0007.0793.00 | PHILIPS_CO | RC02 | |
| R17 | RG 22,1KOHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5872.00 | ROEDERSTEI | D25 | |
| R18 | RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5820.00 | ROEDERSTEI | D25 | |
| R20 | RG 15,0KOHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5843.00 | ROEDERSTEI | D25 | |
| R22 | RG 82,5 OHM+-1%TK100 1206 CHIP RESISTOR | RG 0006.8861.00 | PHILIPS_CO | RC02 | |
| R23 | RG 221 OHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5614.00 | ROEDERSTEI | D25 | |
| R25 | RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5820.00 | ROEDERSTEI | D25 | |
| R30 | RG 10,0KOHM+-1%TK100 1206 RG CHIP RESISTOR | RG 0007.0793.00 | PHILIPS_CO | RC02 | |
| R31 | RG 182 KOHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5989.00 | ROEDERSTEI | D25 | |
| R32 | RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR | RG 0007.1948.00 | ROEDERSTEI | D25 | |
| R35 | RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5820.00 | ROEDERSTEI | D25 | |
| R40 | RL 0,60W 100 OHM+-1%TK50 RESISTOR | RL 0082.6543.00 | RESISTA | MK2 | |
| R41 | RL 0,60W 100 OHM+-1%TK50 RESISTOR | RL 0082.6543.00 | RESISTA | MK2 | |
| R45 | RG 6,81KOHM+-1%TK100 1206 CHIP RESISTOR | RG 0007.0758.00 | ROEDERSTEI | D25 | |
| R46 | RL 0,60W 150 OHM+-1%TK50 RESISTOR | RL 0082.9942.00 | RESISTA | MK2 | |
| R47 | RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR | RG 0007.1948.00 | ROEDERSTEI | D25 | |
| R48 | RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5820.00 | ROEDERSTEI | D25 | |
| R49 | RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5820.00 | ROEDERSTEI | D25 | |
| R50 | RG 2,21KOHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5743.00 | ROEDERSTEI | D25 | |
| R51 | RG 10,0KOHM+-1%TK100 1206 RG CHIP RESISTOR | RG 0007.0793.00 | PHILIPS_CO | RC02 | |
| R52 | RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5820.00 | ROEDERSTEI | D25 | |
| R53 | RG 1,0 KO +-1%TK100 1206 CHIP RESISTOR | RG 0006.7271.00 | PHILIPS_CO | RC02 | |
| R54 | RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5820.00 | ROEDERSTEI | D25 | |
| R55 | RL 0,60W 221 KOHM+-1%TK50 RESISTOR | RL 0083.2270.00 | RESISTA | MK2 | |
| R56 | RL 0,60W 100KOHM+-1%TK50 RESISTOR | RL 0082.1764.00 | RESISTA | MK2 | |
| R57 | RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5820.00 | ROEDERSTEI | D25 | |
| R58 | RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5820.00 | ROEDERSTEI | D25 | |
| R59 | RG 12,1KOHM+-1%TK100 1206 CHIP RESISTOR | RG 0007.0841.00 | PHILIPS_CO | RC02 | |
| R60 | RL 0,60W 365 KOHM+-1%TK50 RESISTOR | RL 0083.2487.00 | RESISTA | MK2 | |
| R61 | RL 0,60W 100KOHM+-1%TK50 RESISTOR | RL 0082.1764.00 | RESISTA | MK2 | |
| R62 | RL 0,60W 100KOHM+-1%TK50 RESISTOR | RL 0082.1764.00 | RESISTA | MK2 | |
| R63 | RL 0,60W 4,75KOHM+-1%TK50 RESISTOR | RL 0083.1097.00 | RESISTA | MK2 | |
| R64 | RL 0,60W 100KOHM+-1%TK50 RESISTOR | RL 0082.1764.00 | RESISTA | MK2 | |
| R65 | RG 2,21KOHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5743.00 | ROEDERSTEI | D25 | |
| R66 | RG 10,0KOHM+-1%TK100 1206 RG CHIP RESISTOR | RG 0007.0793.00 | PHILIPS_CO | RC02 | |
| R67 | RL 0,60W 2,21MOHM+-1%TK50 METALFILMRESISTOR | RL 0099.8173.00 | RESISTA | MK2 | |
| R68 | RG 12,1KOHM+-1%TK100 1206 CHIP RESISTOR | RG 0007.0841.00 | PHILIPS_CO | RC02 | |
| R69 | RG 100 OHM+-1%TK100 1206 CHIP RESISTOR | RG 0006.8884.00 | PHILIPS_CO | RC02 | |


| | | | | | | |
|---|----------|----------|--|---------------------------------------|-------------------------|------------------|
| MENP5 | 502 3PUA | AI | Datum Date | Schaltteilliste für Parts list for | Sachnummer Stock No. | Blatt-Nr Page |
|  | 39 | 04.02.98 | EE FESTFREQUENZEN REFERENCEF REQUENCIES | 0819.6060.01 SA | 9+ | |

| Kennz. Comp. No. | Benennung Designation | Sachnummer Stock No. | Hersteller Manufacturer | Bezeichnung Designation | enthalten in contained in |
|---------------------|--|-------------------------|----------------------------|----------------------------|------------------------------|
| R70 | RL 0,60W 475 OHM+-1%TK50 RESISTOR | RL 0083.0390.00 | RESISTA | MK2 | |
| R71 | RL 0,60W 475 OHM+-1%TK50 RESISTOR | RL 0083.0390.00 | RESISTA | MK2 | |
| R72 | RL 0,60W 475 OHM+-1%TK50 RESISTOR | RL 0083.0390.00 | RESISTA | MK2 | |
| R73 | RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5820.00 | ROEDERSTEI | D25 | |
| R74 | RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5820.00 | ROEDERSTEI | D25 | |
| R75 | RL 0,60W 475 OHM+-1%TK50 RESISTOR | RL 0083.0390.00 | RESISTA | MK2 | |
| R76 | RL 0,60W 3,32KOHM+-1%TK50 RESISTOR | RL 0083.0990.00 | RESISTA | MK2 | |
| R77 | RL 0,60W 47,5KOHM+-1%TK50 RESISTOR | RL 0083.1800.00 | RESISTA | MK2 | |
| R90 | RL 0,60W 1KOHM+-1%TK50 RESISTOR | RL 0082.2160.00 | RESISTA | MK2 | |
| R91 | RL 0,60W 22,1KOHM+-1%TK50 RESISTOR | RL 0083.1545.00 | RESISTA | MK2 | |
| R92 | RL 0,60W 18,2KOHM+-1%TK50 RESISTOR | RL 0083.1480.00 | RESISTA | MK2 | |
| R93 | RL 0,60W 3,92KOHM+-1%TK50 RESISTOR | RL 0083.1039.00 | DRALORIC | SMA 0207 | |
| R100 | RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5820.00 | ROEDERSTEI | D25 | |
| R104 | RG 100 OHM+-1%TK100 1206 CHIP RESISTOR | RG 0006.8884.00 | PHILIPS_CO | RC02 | |
| R105 | RL 0,60W 100 OHM+-1%TK50 RESISTOR | RL 0082.6543.00 | RESISTA | MK2 | |
| R106 | RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5820.00 | ROEDERSTEI | D25 | |
| R109 | RL 0,60W 39,2 OHM+-1%TK50 RESISTOR | RL 0082.9420.00 | RESISTA | MK2 | |
| R110 | RL 0,60W 39,2 OHM+-1%TK50 RESISTOR | RL 0082.9420.00 | RESISTA | MK2 | |
| R111 | RL 0,60W 39,2 OHM+-1%TK50 RESISTOR | RL 0082.9420.00 | RESISTA | MK2 | |
| R112 | RL 0,60W 1,82KOHM+-1%TK50 RESISTOR | RL 0082.2277.00 | RESISTA | MK2 | |
| R113 | RL 0,60W 392 OHM+-1%TK50 RESISTOR | RL 0082.2183.00 | RESISTA | MK2 | |
| R114 | RG 56,2 OHM+-1%TK100 1206 CHIP RESISTOR | RG 0006.8826.00 | ROEDERSTEI | D25 | |
| R115 | RL 0,60W 4,64KOHM+-1%TK50 RESISTOR | RL 0082.1687.00 | RESISTA | MK2 | |
| R116 | RL 0,60W 2,37KOHM+-1%TK50 RESISTOR | RL 0083.0878.00 | RESISTA | MK2 | |
| R117 | RG 47,5 OHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5566.00 | ROEDERSTEI | D25 | |
| R118 | RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5820.00 | ROEDERSTEI | D25 | |
| R119 | RG 68,1 OHM+-1%TK100 1206 CHIP RESISTOR | RG 0006.8849.00 | ROEDERSTEI | D25 | |
| R120 | RL 0,60W 432 OHM+-1%TK50 DEPOS.-CARBON RESISTOR | RL 0083.0355.00 | RESISTA | MK2 | |
| R121 | RL 0,60W 100 OHM+-1%TK50 RESISTOR | RL 0082.6543.00 | RESISTA | MK2 | |
| R122 | RL 0,60W 4,75KOHM+-1%TK50 RESISTOR | RL 0083.1097.00 | RESISTA | MK2 | |
| R123 | RL 0,60W 2,21KOHM+-1%TK50 RESISTOR | RL 0082.2477.00 | RESISTA | MK2 | |
| R124 | RG 68,1 OHM+-1%TK100 1206 CHIP RESISTOR | RG 0006.8849.00 | ROEDERSTEI | D25 | |
| R125 | RG 15,0 OHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5450.00 | ROEDERSTEI | D25 | |
| R126 | RG 47,5 OHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5566.00 | ROEDERSTEI | D25 | |
| R127 | RG 3,32KOHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5789.00 | ROEDERSTEI | D25 | |
| R128 | RG 1,0 KO +-1%TK100 1206 CHIP RESISTOR | RG 0006.7271.00 | PHILIPS_CO | RC02 | |
| R129 | RG 274 OHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5637.00 | ROEDERSTEI | D25 | |
| R130 | RG 100 OHM+-1%TK100 1206 CHIP RESISTOR | RG 0006.8884.00 | PHILIPS_CO | RC02 | |
| R140 | RG 475 OHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5695.00 | ROEDERSTEI | D25 | |


| | | | | | | | |
|--|-----|------|----|---------------|--|------------------------|-------------------|
| MENP5 | 502 | 3PUA | Äi | Datum Date | Schalttafeliste für Parts list for | Sachnummer Stock No | Blatt-Nr. Page |
|  ROHDE & SCHWARZ | | | | 39 04.02.98 | EE FESTFREQUENZEN REFERENCEF REQUENCIES | 0819.6060.01 SA | 10+ |

| Kennz. Comp. No. | Benennung Designation | Sachnummer Stock No. | Hersteller Manufacturer | Bezeichnung Designation | enthalten in contained in |
|--|--|-------------------------|--|----------------------------|------------------------------|
| R141 | RL 0,60W 82,5 OHM+-1%TK50 RESISTOR | RL 0082.9707.00 | RESISTA | MK2 | |
| R145 | RG 27,4 OHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5508.00 | ROEDERSTEI | D25 | |
| R146 | RG 274 OHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5637.00 | ROEDERSTEI | D25 | |
| R147 | RL 0,60W 150 OHM+-1%TK50 RESISTOR | RL 0082.9942.00 | RESISTA | MK2 | |
| R148 | RG 475 OHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5695.00 | ROEDERSTEI | D25 | |
| R150 | RG 100 OHM+-1%TK100 1206 CHIP RESISTOR | RG 0006.8884.00 | PHILIPS_CO | RC02 | |
| R152 | RG 10,0 OHM+-1%TK100 1206 CHIP -RESISTOR | RG 0006.8649.00 | PHILIPS_CO | RC02 | |
| R155 | RG 182 OHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5595.00 | ROEDERSTEI | D25 | |
| R156 | RG 27,4 OHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5508.00 | ROEDERSTEI | D25 | |
| R157 | RG 182 OHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5595.00 | ROEDERSTEI | D25 | |
| R160 | RS 0,5W100 OHM+-20%KURVE1 DEPOS.-CARBON POTENTIOMET | RS 0069.8081.00 | BOURNS | 3329 H-1 | |
| R161 | RG 33,2 OHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5520.00 | ROEDERSTEI | D25 | |
| R162 | RG 10,0 OHM+-1%TK100 1206 CHIP -RESISTOR | RG 0006.8649.00 | PHILIPS_CO | RC02 | |
| R163 | RG 150 OHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5589.00 | ROEDERSTEI | D25 | |
| R164 | RG 47,5 OHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5566.00 | ROEDERSTEI | D25 | |
| R170 | RG 100 OHM+-1%TK100 1206 CHIP RESISTOR | RG 0006.8884.00 | PHILIPS_CO | RC02 | |
| R171 | RG 1,82KOHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5720.00 | ROEDERSTEI | D25 | |
| R172 | RG 47,5 OHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5566.00 | ROEDERSTEI | D25 | |
| R173 | RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5820.00 | ROEDERSTEI | D25 | |
| R174 | RG 33,2 OHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5520.00 | ROEDERSTEI | D25 | |
| R180 | RG 18,2 OHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5466.00 | ROEDERSTEI | D25 | |
| R181 | RG 221 OHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5614.00 | ROEDERSTEI | D25 | |
| R183 | RG 332 OHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5650.00 | PHILIPS_CO | RC02 | |
| R184 | RG 100,0KOH+-1%TK100 1206 CHIP RESISTOR | RG 0007.1948.00 | ROEDERSTEI | D25 | |
| R185 | RG 100 OHM+-1%TK100 1206 CHIP RESISTOR | RG 0006.8884.00 | PHILIPS_CO | RC02 | |
| R186 | RL 0,60W 100 OHM+-1%TK50 RESISTOR | RL 0082.6543.00 | RESISTA | MK2 | |
| R190 | RG 150 OHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5589.00 | ROEDERSTEI | D25 | |
| R191 | RL 0,60W 10,0 OHM+-1%TK50 RESISTOR | RL 0082.8852.00 | RESISTA | MK2 | |
| R192 | RG 392 OHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5672.00 | ROEDERSTEI | D25 | |
| R193 | RL 0,60W 1KOHM+-1%TK50 RESISTOR | RL 0082.2160.00 | RESISTA | MK2 | |
| R194 | RL 0,60W 1,21KOHM+-1%TK50 RESISTOR | RL 0083.0655.00 | RESISTA | MK2 | |
| R195 | RG 82,5 OHM+-1%TK100 1206 CHIP RESISTOR | RG 0006.8861.00 | PHILIPS_CO | RC02 | |
| R196 | RG 82,5 OHM+-1%TK100 1206 CHIP RESISTOR | RG 0006.8861.00 | PHILIPS_CO | RC02 | |
| R197 | RG 121 OHM+-1%TK100 1206 CHIP RESISTOR | RG 0006.8903.00 | ROEDERSTEI | D25 | |
| R200 | RG 221 OHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5614.00 | ROEDERSTEI | D25 | |
| R207 | RL 0,60W 274 OHM+-1%TK50 RESISTOR | RL 0083.0178.00 | RESISTA | MK2 | |
| R210 | RG 15,0 OHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5450.00 | ROEDERSTEI | D25 | |
| R211 | RG 332 OHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5650.00 | PHILIPS_CO | RC02 | |
| R230 | RL 0,60W 1,21KOHM+-1%TK50 RESISTOR | RL 0083.0655.00 | RESISTA | MK2 | |
| MENP5 502 3PUA AI Datum Date Schalteilleiste für Parts list for Sachnummer Stock No Blatt-Nr Page | | | | | |
|  ROHDE & SCHWARZ | | 39 04.02.98 | EE FESTFREQUENZEN REFERENCEF REQUENCIES | | 0819.6060.01 SA 11+ |


| Kennz. Comp. No. | Benennung Designation | Sachnummer Stock No. | Hersteller Manufacturer | Bezeichnung Designation | enthalten in contained in |
|---------------------|--|-------------------------|----------------------------|----------------------------|------------------------------|
| R231 | RL 0,60W 1,21KOHM+-1%TK50 RESISTOR | RL 0083.0655.00 | RESISTA | MK2 | |
| R235 | RL 0,60W 1,21KOHM+-1%TK50 RESISTOR | RL 0083.0655.00 | RESISTA | MK2 | |
| R240 | RL 0,60W 274 OHM+-1%TK50 RESISTOR | RL 0083.0178.00 | RESISTA | MK2 | |
| R241 | RG 221 OHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5614.00 | ROEDERSTEI | D25 | |
| R242 | RL 0,60W 100KOHM+-1%TK50 RESISTOR | RL 0082.1764.00 | RESISTA | MK2 | |
| R244 | RG 332 OHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5650.00 | PHILIPS_CO | RC02 | |
| R245 | RG 15,0 OHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5450.00 | ROEDERSTEI | D25 | |
| R250 | RL 0,60W 12,1KOHM+-1%TK50 RESISTOR | RL 0083.1351.00 | RESISTA | MK2 | |
| R251 | RL 0,60W 2,21KOHM+-1%TK50 RESISTOR | RL 0082.2477.00 | RESISTA | MK2 | |
| R300 | RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5820.00 | ROEDERSTEI | D25 | |
| R301 | RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5820.00 | ROEDERSTEI | D25 | |
| R302 | RL 0,60W 100KOHM+-1%TK50 RESISTOR | RL 0082.1764.00 | RESISTA | MK2 | |
| R303 | RG 332 OHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5650.00 | PHILIPS_CO | RC02 | |
| R304 | RG 47,5 OHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5566.00 | ROEDERSTEI | D25 | |
| R305 | RG 100 OHM+-1%TK100 1206 CHIP RESISTOR | RG 0006.8884.00 | PHILIPS_CO | RC02 | |
| R306 | RL 0,60W4,64KOHM+-1%TK50 RESISTOR | RL 0082.1687.00 | RESISTA | MK2 | |
| R307 | RG 2,43KOHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5750.00 | ROEDERSTEI | D25 | |
| R308 | RL 0,60W 10,0KOHM+-1%TK50 RESISTOR | RL 0083.1297.00 | RESISTA | MK2 | |
| R310 | RL 0,60W 432 OHM+-1%TK50 DEPOS.-CARBON RESISTOR | RL 0083.0355.00 | RESISTA | MK2 | |
| R311 | RL 0,60W 2,21KOHM+-1%TK50 RESISTOR | RL 0082.2477.00 | RESISTA | MK2 | |
| R312 | RG 47,5 OHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5566.00 | ROEDERSTEI | D25 | |
| R313 | RG 75,0 OHM+-1%TK100 1206 CHIP RESISTOR | RG 0006.8855.00 | ROEDERSTEI | D25 | |
| R314 | RG 1,0 KO +-1%TK100 1206 CHIP RESISTOR | RG 0006.7271.00 | PHILIPS_CO | RC02 | |
| R315 | RG 47,5 OHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5566.00 | ROEDERSTEI | D25 | |
| R316 | RG 100 OHM+-1%TK100 1206 CHIP RESISTOR | RG 0006.8884.00 | PHILIPS_CO | RC02 | |
| R317 | RL 0,60W 4,75KOHM+-1%TK50 RESISTOR | RL 0083.1097.00 | RESISTA | MK2 | |
| R318 | RL 0,60W 1KOHM+-1%TK50 RESISTOR | RL 0082.2160.00 | RESISTA | MK2 | |
| R319 | RG 1,5 KOHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5714.00 | ROEDERSTEI | D25 | |
| R320 | RG 100 OHM+-1%TK100 1206 CHIP RESISTOR | RG 0006.8884.00 | PHILIPS_CO | RC02 | |
| R321 | RG 33,2 OHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5520.00 | ROEDERSTEI | D25 | |
| R322 | RG 121 OHM+-1%TK100 1206 CHIP RESISTOR | RG 0006.8903.00 | ROEDERSTEI | D25 | |
| R323 | RG 475 OHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5695.00 | ROEDERSTEI | D25 | |
| R330 | RG 100 OHM+-1%TK100 1206 CHIP RESISTOR | RG 0006.8884.00 | PHILIPS_CO | RC02 | |
| R331 | RL 0,60W 221 OHM+-1%TK50 RESISTOR | RL 0083.0084.00 | RESISTA | MK2 | |
| R332 | RG 1,82KOHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5720.00 | ROEDERSTEI | D25 | |
| R333 | RL 0,60W 100KOHM+-1%TK50 RESISTOR | RL 0082.1764.00 | RESISTA | MK2 | |
| R340 | RG 100 OHM+-1%TK100 1206 CHIP RESISTOR | RG 0006.8884.00 | PHILIPS_CO | RC02 | |
| R341 | RL 0,60W 221 OHM+-1%TK50 RESISTOR | RL 0083.0084.00 | RESISTA | MK2 | |
| R342 | RG 1,82KOHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5720.00 | ROEDERSTEI | D25 | |

| MENP5 | 502 | 3PUA | AI | Datum Date | Schaltteilliste für Parts list for | Sachnummer Stock No | Blatt-Nr Page |
|---|-----|------|----|---------------|--|------------------------|------------------|
|  ROHDE & SCHWARZ | | | 39 | 04.02.98 | EE FESTFREQUENZEN REFERENCEF REQUENCIES | 0819.6060.01 SA | 12+ |


| Kennz. Comp. No. | Benennung Designation | Sachnummer Stock No. | Hersteller Manufacturer | Bezeichnung Designation | enthalten in contained in |
|---------------------|--|-------------------------|----------------------------|----------------------------|------------------------------|
| R343 | RL 0,60W 100KOHM+-1%TK50 RESISTOR | RL 0082.1764.00 | RESISTA | MK2 | |
| R344 | RL 0,60W 100 OHM+-1%TK50 RESISTOR | RL 0082.6543.00 | RESISTA | MK2 | |
| R347 | RG 100 OHM+-1%TK100 1206 CHIP RESISTOR | RG 0006.8884.00 | PHILIPS_CO | RC02 | |
| R350 | RL 0,60W 221 OHM+-1%TK50 RESISTOR | RL 0083.0084.00 | RESISTA | MK2 | |
| R351 | RG 1,82KOHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5720.00 | ROEDERSTEI | D25 | |
| R352 | RL 0,60W 100KOHM+-1%TK50 RESISTOR | RL 0082.1764.00 | RESISTA | MK2 | |
| R353 | RG 100 OHM+-1%TK100 1206 CHIP RESISTOR | RG 0006.8884.00 | PHILIPS_CO | RC02 | |
| R360 | RL 0,60W 221 OHM+-1%TK50 RESISTOR | RL 0083.0084.00 | RESISTA | MK2 | |
| R361 | RG 18,2 OHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5466.00 | ROEDERSTEI | D25 | |
| R370 | RG 68,1 OHM+-1%TK100 1206 CHIP RESISTOR | RG 0006.8849.00 | ROEDERSTEI | D25 | |
| R371 | RL 0,60W 1,50KOHM+-1%TK50 RESISTOR | RL 0083.0732.00 | RESISTA | MK2 | |
| R372 | RL 0,60W 1,50KOHM+-1%TK50 RESISTOR | RL 0083.0732.00 | RESISTA | MK2 | |
| R373 | RG 100 OHM+-1%TK100 1206 CHIP RESISTOR | RG 0006.8884.00 | PHILIPS_CO | RC02 | |
| R374 | RG 15,0 OHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5450.00 | ROEDERSTEI | D25 | |
| R375 | RL 0,60W 1,50KOHM+-1%TK50 RESISTOR | RL 0083.0732.00 | RESISTA | MK2 | |
| R376 | RL 0,60W 1,50KOHM+-1%TK50 RESISTOR | RL 0083.0732.00 | RESISTA | MK2 | |
| R377 | RG 82,5 OHM+-1%TK100 1206 CHIP RESISTOR | RG 0006.8861.00 | PHILIPS_CO | RC02 | |
| R378 | RG 100 OHM+-1%TK100 1206 CHIP RESISTOR | RG 0006.8884.00 | PHILIPS_CO | RC02 | |
| R379 | RL 0,60W 1,50KOHM+-1%TK50 RESISTOR | RL 0083.0732.00 | RESISTA | MK2 | |
| R380 | RG 15,0 OHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5450.00 | ROEDERSTEI | D25 | |
| R381 | RG 221 OHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5614.00 | ROEDERSTEI | D25 | |
| R382 | RG 12,1 OHM+-1%TK100 1206 CHIP RESISTOR | RG 0006.8661.00 | ROEDERSTEI | D25 | |
| R383 | RL 0,60W 274 OHM+-1%TK50 RESISTOR | RL 0083.0178.00 | RESISTA | MK2 | |
| R384 | RL 0,60W 274 OHM+-1%TK50 RESISTOR | RL 0083.0178.00 | RESISTA | MK2 | |
| R385 | RL 0,60W 18,20 OHM+-1%TK50 RESISTOR | RL 0082.9107.00 | RESISTA | MK2 | |
| R386 | RG 475 OHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5695.00 | ROEDERSTEI | D25 | |
| R387 | RG 100 OHM+-1%TK100 1206 CHIP RESISTOR | RG 0006.8884.00 | PHILIPS_CO | RC02 | |
| R388 | RG 56,2 OHM+-1%TK100 1206 CHIP RESISTOR | RG 0006.8826.00 | ROEDERSTEI | D25 | |
| R389 | RS 0,5W 200 OHM+-20%KURV1 DEPOS.-CARBON POTENTIOMET | RS 0069.8017.00 | BI_TECHNOL | 82 P | |
| R390 | RG 2,21KOHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5743.00 | ROEDERSTEI | D25 | |
| R392 | RG 3,32KOHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5789.00 | ROEDERSTEI | D25 | |
| R393 | RL 0,60W 150 OHM+-1%TK50 RESISTOR | RL 0082.9942.00 | RESISTA | MK2 | |
| R394 | RG 392 OHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5672.00 | ROEDERSTEI | D25 | |
| R395 | RG 392 OHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5672.00 | ROEDERSTEI | D25 | |
| R396 | RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5820.00 | ROEDERSTEI | D25 | |
| R400 | RG 562 OHM+-1%TK100 1206 CHIP RESISTOR | RG 0006.9068.00 | PHILIPS_CO | RC02 | |
| R402 | RG 4,75KOHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5820.00 | ROEDERSTEI | D25 | |
| R403 | RG 100 OHM+-1%TK100 1206 CHIP RESISTOR | RG 0006.8884.00 | PHILIPS_CO | RC02 | |
| R410 | RG 475 OHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5695.00 | ROEDERSTEI | D25 | |
| R412 | | | | | |

| | | | | | | |
|--|----------|----|---------------|--|------------------------|------------------|
| MENP5 | 502 3PUA | AI | Datum Date | Schaltteilliste für Parts list for | Sachnummer Stock No | Blatt-Nr Page |
|  ROHDE & SCHWARZ | | | 39 04.02.98 | EE FESTFREQUENZEN REFERENCEF REQUENCIES | 0819.6060.01 SA | 13+ |


Für diese Unterlage behalten wir uns alle Rechte vor.

| Kennz. Comp. No. | Benennung Designation | Sachnummer Stock No. | Hersteller Manufacturer | Bezeichnung Designation | enthalten in contained in |
|--|--|---------------------------------------|----------------------------|--|------------------------------|
| R413 | RG 100 OHM+-1%TK100 1206 CHIP RESISTOR | RG 0006.8884.00 | PHILIPS_CO | RC02 | |
| R415 | RG 1,21KOHM+-1%TK100 1206 CHIP RESISTOR | RG 0006.9968.00 | ROEDERSTEI | D25 | |
| R416 | RG 47,5 OHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5566.00 | ROEDERSTEI | D25 | |
| R417 | RG 100 OHM+-1%TK100 1206 CHIP RESISTOR | RG 0006.8884.00 | PHILIPS_CO | RC02 | |
| R418 | RG 121 OHM+-1%TK100 1206 CHIP RESISTOR | RG 0006.8903.00 | ROEDERSTEI | D25 | |
| R419 | RG 47,5 OHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5566.00 | ROEDERSTEI | D25 | |
| R420 | RG 47,5 OHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5566.00 | ROEDERSTEI | D25 | |
| R421 | RG 1,21KOHM+-1%TK100 1206 CHIP RESISTOR | RG 0006.9968.00 | ROEDERSTEI | D25 | |
| R430 | RG 1,0 KO +-1%TK100 1206 CHIP RESISTOR | RG 0006.7271.00 | PHILIPS_CO | RC02 | |
| R431 | RL 0,60W 1,21KOHM+-1%TK50 RESISTOR | RL 0083.0655.00 | RESISTA | MK2 | |
| R432 | RL 0,60W 15,0KOHM+-1%TK50 RESISTOR | RL 0083.1400.00 | RESISTA | MK2 | |
| R434 | RG 100 OHM+-1%TK100 1206 CHIP RESISTOR | RG 0006.8884.00 | PHILIPS_CO | RC02 | |
| R435 | RL 0,60W 365 KOHM+-1%TK50 RESISTOR | RL 0083.2487.00 | RESISTA | MK2 | |
| R436 | RL 0,60W 100KOHM+-1%TK50 RESISTOR | RL 0082.1764.00 | RESISTA | MK2 | |
| R437 | RL 0,60W 100KOHM+-1%TK50 RESISTOR | RL 0082.1764.00 | RESISTA | MK2 | |
| R440 | RG 475 OHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5695.00 | ROEDERSTEI | D25 | |
| R441 | RG 121 OHM+-1%TK100 1206 CHIP RESISTOR | RG 0006.8903.00 | ROEDERSTEI | D25 | |
| R442 | RG 182 OHM+-1%TK100 1206 RESISTOR CHIP | RG 0007.5595.00 | ROEDERSTEI | D25 | |
| R443 | RL 0,60W 100 OHM+-1%TK50 RESISTOR | RL 0082.6543.00 | RESISTA | MK2 | |
| V5 | AK BCX69-16 P 20V 1 A TRANSISTOR | AK 0007.5420.00 | SIEMENS | BCX69-16 | |
| V6 | AD BAS32 75V UDI DIODE | AD 0006.7288.00 | PHILIPS | BAS32 (L) | |
| V10 | AK BCX68-16 N 20V 1 A TRANSISTOR | AK 0801.8383.00 | SIEMENS | BCX 68-16 E-6327 | |
| V11 | AK BCX70H N 45V 200MA TRANSISTOR | AK 0007.3105.00 | VALVO | BCX 70 H | |
| V12 | AK BCX68-16 N 20V 1 A TRANSISTOR | AK 0801.8383.00 | SIEMENS | BCX 68-16 E-6327 | |
| V35 | AK BC550B N 50V 100MA TRANSISTOR | AK 0007.2050.00 | SIEMENS | BC550B | |
| V40 | AD BAV99 70V DUO UDI DIODE | AD 0911.0092.00 | VALVO | BAV99 | |
| V43 | AK 2N2369A N 15V 200MA TRANSISTOR | AK 0010.4680.00 | VALVO | 2N2369A ODER BSX20 | |
| V52 | AE BZX55/B10 0,5W ZDI ZENER DIODE | AE 0289.4302.00 | VALVO | BZX79B10 | |
| V71 | AE BZX55/B5V1 0,5W ZDI ZENER DIODE | AE 0262.5837.00 | TELEFUNKEN | BZX55B5V1 | |
| V110 | AE BB909B 25/ 3PF CDI TUNING DIODE | AE 0092.9600.00 | PHILIPS | BB909B | |
| V111 | AK BFY90 N 15V 25MA TRANSISTOR | AK 0010.4550.00 | VALVO | BFY90 | |
| V121 | AE 5082-2810 SCHOTTKY DIODE | AE 0012.9389.00 | HEWLETT_PA | 5082-2810 GEGURTET | |
| V125 | AK BFR96S N 15V 100MA TRANSISTOR | 0644.0830.00 | VALVO | BFR 96S | |
| V140 | AE HSMS2820T31 SCHOTTKY DIODE | 0820.3502.00 | HEWLETT_PA | HSMS2820L31 | |
| V141 | AE HSMS2820T31 SCHOTTKY DIODE | 0820.3502.00 | HEWLETT_PA | HSMS2820L31 | |
| V145 | AE BZX79/B5V6 0,5W ZDI ZENER DIODE | AE 0012.5254.00 | VALVO | BZX79B5V6 | |
| V146 | AK BFQ34T N 18V 150MA TRANSISTOR | 0801.8283.00 | PHILIPS | BFQ34T | |
| V160 | AM U310 N-D 25V JFET FET | AM 0454.6217.00 | SILICONIX | U310 | |
| MENP5 502 3PUA AI | | Schaltteilliste für Parts list for | | Sachnummer Stock No | Blatt-Nr. Page |
|  ROHDE & SCHWARZ | | 39 | 04.02.98 | EE FESTFREQUENZEN REFERENCEF REQUENCIES | 0819.6060.01 SA 14+ |

| Kennz. Comp. No. | Benennung Designation | Sachnummer Stock No. | Hersteller Manufacturer | Bezeichnung Designation | enthalten in contained in |
|---------------------|---------------------------------------|-------------------------|----------------------------|----------------------------|------------------------------|
| V161 | AK BFR91 N 15V 35MA TRANSISTOR | AK 0210.6049.00 | VALVO | BFR91 | |
| V180 | AE HSMS2810 SCHOTTKY DIODE | 0520.7340.00 | HEWLETT_PA | HSMS2810 | |
| V190 | AE BAR14-1 2X 100V PIN PIN DIODE | 0820.3283.00 | SIEMENS | BAR14-1 | |
| V195 | AE BAR14-1 2X 100V PIN PIN DIODE | 0820.3283.00 | SIEMENS | BAR14-1 | |
| V200 | AE HSMS2820T31 SCHOTTKY DIODE | 0820.3502.00 | HEWLETT_PA | HSMS2820L31 | |
| V201 | AE HSMS2820T31 SCHOTTKY DIODE | 0820.3502.00 | HEWLETT_PA | HSMS2820L31 | |
| V230 | AE BAR14-1 2X 100V PIN PIN DIODE | 0820.3283.00 | SIEMENS | BAR14-1 | |
| V232 | AD BAS16 75V UDI DIODE | AD 0007.4924.00 | VALVO | BAS16 (A6P) | |
| V234 | AE BAR14-1 2X 100V PIN PIN DIODE | 0820.3283.00 | SIEMENS | BAR14-1 | |
| V235 | AD BAS16 75V UDI DIODE | AD 0007.4924.00 | VALVO | BAS16 (A6P) | |
| V240 | AE HSMS2810 SCHOTTKY DIODE | 0520.7340.00 | HEWLETT_PA | HSMS2810 | |
| V300 | AE BBY40 30/05PF CDI TUNING DIODE | AE 0007.2109.00 | VALVO | BBY40 | |
| V301 | AE BB909B 25/ 3PF CDI TUNING DIODE | AE 0092.9600.00 | PHILIPS | BB909B | |
| V302 | AE BBY40 30/05PF CDI TUNING DIODE | AE 0007.2109.00 | VALVO | BBY40 | |
| V303 | AE BB909B 25/ 3PF CDI TUNING DIODE | AE 0092.9600.00 | PHILIPS | BB909B | |
| V305 | AK BFY90 N 15V 25MA TRANSISTOR | AK 0010.4550.00 | VALVO | BFY90 | |
| V306 | AE 5082-2800 SCHOTTKY DIODE | AE 0012.9066.00 | HEWLETT_PA | 5082-2800 | |
| V310 | AK BC550B N 50V 100MA TRANSISTOR | AK 0007.2050.00 | SIEMENS | BC550B | |
| V315 | AK BFR96S N 15V 100MA TRANSISTOR | 0644.0830.00 | VALVO | BFR 96S | |
| V330 | AM U310 N-D 25V JFET FET | AM 0454.6217.00 | SILICONIX | U310 | |
| V335 | AE HSMS2800 SCHOTTKY DIODE | AE 0836.8421.00 | HEWLETT_PA | HSMS-2800(#L31) | |
| V340 | AM U310 N-D 25V JFET FET | AM 0454.6217.00 | SILICONIX | U310 | |
| V345 | AE HSMS2800 SCHOTTKY DIODE | AE 0836.8421.00 | HEWLETT_PA | HSMS-2800(#L31) | |
| V350 | AM U310 N-D 25V JFET FET | AM 0454.6217.00 | SILICONIX | U310 | |
| V355 | AE HSMS2800 SCHOTTKY DIODE | AE 0836.8421.00 | HEWLETT_PA | HSMS-2800(#L31) | |
| V360 | AM U310 N-D 25V JFET FET | AM 0454.6217.00 | SILICONIX | U310 | |
| V370 | AE BAT18 BER.SCH.DI.VHF DIODE | 0820.3260.00 | VALVO | BAT18 | |
| V371 | AE BAT18 BER.SCH.DI.VHF DIODE | 0820.3260.00 | VALVO | BAT18 | |
| V372 | AE BAT18 BER.SCH.DI.VHF DIODE | 0820.3260.00 | VALVO | BAT18 | |
| V375 | AE BAT18 BER.SCH.DI.VHF DIODE | 0820.3260.00 | VALVO | BAT18 | |
| V376 | AE BAT18 BER.SCH.DI.VHF DIODE | 0820.3260.00 | VALVO | BAT18 | |
| V377 | AE BAT18 BER.SCH.DI.VHF DIODE | 0820.3260.00 | VALVO | BAT18 | |
| V380 | AK BFR96S N 15V 100MA TRANSISTOR | 0644.0830.00 | VALVO | BFR 96S | |
| V381 | AE BZX55/B8V2 0.5W ZDI ZENER DIODE | AE 0012.2178.00 | VALVO | BZX79B8V2 | |
| V391 | AK BC550B N 50V 100MA TRANSISTOR | AK 0007.2050.00 | SIEMENS | BC550B | |
| V410 | AK BFQ34T N 18V 150MA TRANSISTOR | 0801.8283.00 | PHILIPS | BFQ34T | |
| V411 | AE HSMS2800 SCHOTTKY DIODE | AE 0836.8421.00 | HEWLETT_PA | HSMS-2800(#L31) | |
| V420 | AE HSMS2810 SCHOTTKY DIODE | 0520.7340.00 | HEWLETT_PA | HSMS2810 | |
| ..423 | | | | | |
| V431 | AE BZX55/B10 0.5W ZDI ZENER DIODE | AE 0289.4302.00 | VALVO | BZX79B10 | |

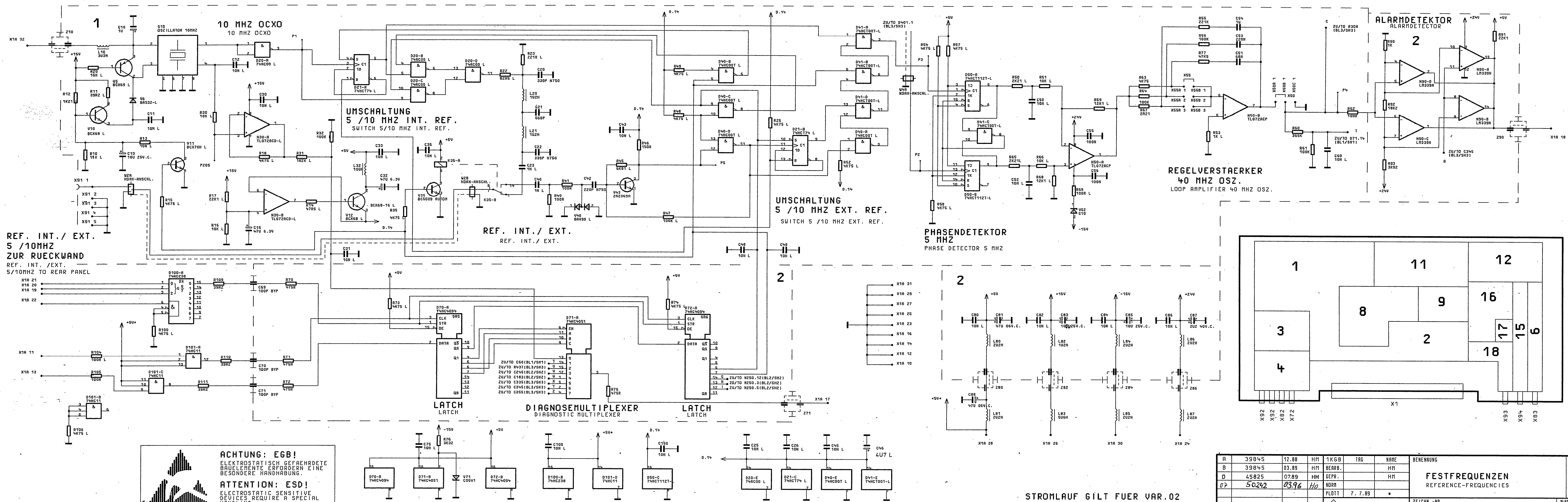
| | | | | | | | |
|--|-----|------|----|---------------|--|-------------------------|-------------------|
| MENP5 | 502 | 3PUA | AI | Datum Date | Schaltteilliste für Parts list for | Sachnummer Stock No. | Blatt-Nr. Page |
|  ROHDE & SCHWARZ | | | | 39 04.02.98 | EE FESTFREQUENZEN REFERENCEF REQUENCIES | 0819.6060.01 SA | 15+ |

| Kennz. Comp. No. | Benennung Designation | Sachnummer Stock No. | Hersteller Manufacturer | Bezeichnung Designation | enthalten in contained in |
|---------------------|--|-------------------------|----------------------------|----------------------------|------------------------------|
| V440 | AM U310 N-D 25V JFET FET | AM 0454.6217.00 | SILICONIX | U310 | |
| V445 | AM U310 N-D 25V JFET FET | AM 0454.6217.00 | SILICONIX | U310 | |
| V450 | AE HSMS2800 SCHOTTKY DIODE | AE 0836.8421.00 | HEWLETT_PA | HSMS-2800(#L31) | |
| V451 | AE HSMS2800 SCHOTTKY DIODE | AE 0836.8421.00 | HEWLETT_PA | HSMS-2800(#L31) | |
| X1 | FP STECKERLEISTE 32POL. MULTIPOINT CONNECTOR | FP 0514.4550.00 | SIEMENS | V42254-B1200-B641 | |
| X16 | FP KURZSCHLUSSBUCHSE SHORTING PLUG | FP 0491.7042.00 | IS | IPC-254-BL01 | |
| X50 | FP KURZSCHLUSSBUCHSE SHORTING PLUG | FP 0491.7042.00 | IS | IPC-254-BL01 | |
| X55 | FP KURZSCHLUSSBUCHSE SHORTING PLUG | FP 0491.7042.00 | IS | IPC-254-BL01 | |
| X72 | FJ EINBAUSTECKER F.GS SMB ANGLE CONNECTOR | FJ 0602.8804.00 | IMS | 81.1524.201 | |
| X82 | FJ EINBAUSTECKER F.GS SMB ANGLE CONNECTOR | FJ 0602.8804.00 | IMS | 81.1524.201 | |
| X83 | FJ EINBAUSTECKER F.GS SMB ANGLE CONNECTOR | FJ 0602.8804.00 | IMS | 81.1524.201 | |
| X91 | FJ EINBAUSTECKER F.GS SMB ANGLE CONNECTOR | FJ 0602.8804.00 | IMS | 81.1524.201 | |
| ..94 | FP KURZSCHLUSSBUCHSE SHORTING PLUG | FP 0491.7042.00 | IS | IPC-254-BL01 | |
| X430 | VL WIRE-WRAP PIN L=11,6 WIRE-WRAP PIN | 0088.4542.00 | DUPONT CON | 75403-003 | |
| X14A | VL WIRE-WRAP PIN L=11,6 WIRE-WRAP PIN | 0088.4542.00 | DUPONT CON | 75403-003 | |
| X14B | VL WIRE-WRAP PIN L=11,6 WIRE-WRAP PIN | 0088.4542.00 | DUPONT CON | 75403-003 | |
| X15A | VL WIRE-WRAP PIN L=11,6 WIRE-WRAP PIN | 0088.4542.00 | DUPONT CON | 75403-003 | |
| X15B | VL WIRE-WRAP PIN L=11,6 WIRE-WRAP PIN | 0088.4542.00 | DUPONT CON | 75403-003 | |
| X16A | VL WIRE-WRAP PIN L=11,6 WIRE-WRAP PIN | 0088.4542.00 | DUPONT CON | 75403-003 | |
| X16B | VL WIRE-WRAP PIN L=11,6 WIRE-WRAP PIN | 0088.4542.00 | DUPONT CON | 75403-003 | |
| X16C | VL WIRE-WRAP PIN L=11,6 WIRE-WRAP PIN | 0088.4542.00 | DUPONT CON | 75403-003 | |
| X32A | VL WIRE-WRAP PIN L=11,6 WIRE-WRAP PIN | 0088.4542.00 | DUPONT CON | 75403-003 | |
| X32B | VL WIRE-WRAP PIN L=11,6 WIRE-WRAP PIN | 0088.4542.00 | DUPONT CON | 75403-003 | |
| X38A | VL WIRE-WRAP PIN L=11,6 WIRE-WRAP PIN | 0088.4542.00 | DUPONT CON | 75403-003 | |
| X38B | VL WIRE-WRAP PIN L=11,6 WIRE-WRAP PIN | 0088.4542.00 | DUPONT CON | 75403-003 | |
| X40A | VL WIRE-WRAP PIN L=11,6 WIRE-WRAP PIN | 0088.4542.00 | DUPONT CON | 75403-003 | |
| X40B | VL WIRE-WRAP PIN L=11,6 WIRE-WRAP PIN | 0088.4542.00 | DUPONT CON | 75403-003 | |
| X41A | VL WIRE-WRAP PIN L=11,6 WIRE-WRAP PIN | 0088.4542.00 | DUPONT CON | 75403-003 | |
| X41B | VL WIRE-WRAP PIN L=11,6 WIRE-WRAP PIN | 0088.4542.00 | DUPONT CON | 75403-003 | |
| X43A | VL WIRE-WRAP PIN L=11,6 WIRE-WRAP PIN | 0088.4542.00 | DUPONT CON | 75403-003 | |
| X43B | VL WIRE-WRAP PIN L=11,6 WIRE-WRAP PIN | 0088.4542.00 | DUPONT CON | 75403-003 | |
| X43C | VL WIRE-WRAP PIN L=11,6 WIRE-WRAP PIN | 0088.4542.00 | DUPONT CON | 75403-003 | |
| X50A | VL WIRE-WRAP PIN L=11,6 WIRE-WRAP PIN | 0088.4542.00 | DUPONT CON | 75403-003 | |
| X50B | VL WIRE-WRAP PIN L=11,6 WIRE-WRAP PIN | 0088.4542.00 | DUPONT CON | 75403-003 | |
| X50C | VL WIRE-WRAP PIN L=11,6 WIRE-WRAP PIN | 0088.4542.00 | DUPONT CON | 75403-003 | |
| X55A | FP STIFTLISTE 36P.R2,54 PIN CONNECTOR | FP 0242.3600.00 | BINDER | 742-11-0179-00-36 | |
| X55B | FP STIFTLISTE 36P.R2,54 PIN CONNECTOR | FP 0242.3600.00 | BINDER | 742-11-0179-00-36 | |
| Z10 | LD 10GHZ 50DB100V10A4RDX9 LEAD-THROUGH FILTER | LD 0451.4636.00 | SPECTRUM | 51-713-036 | |

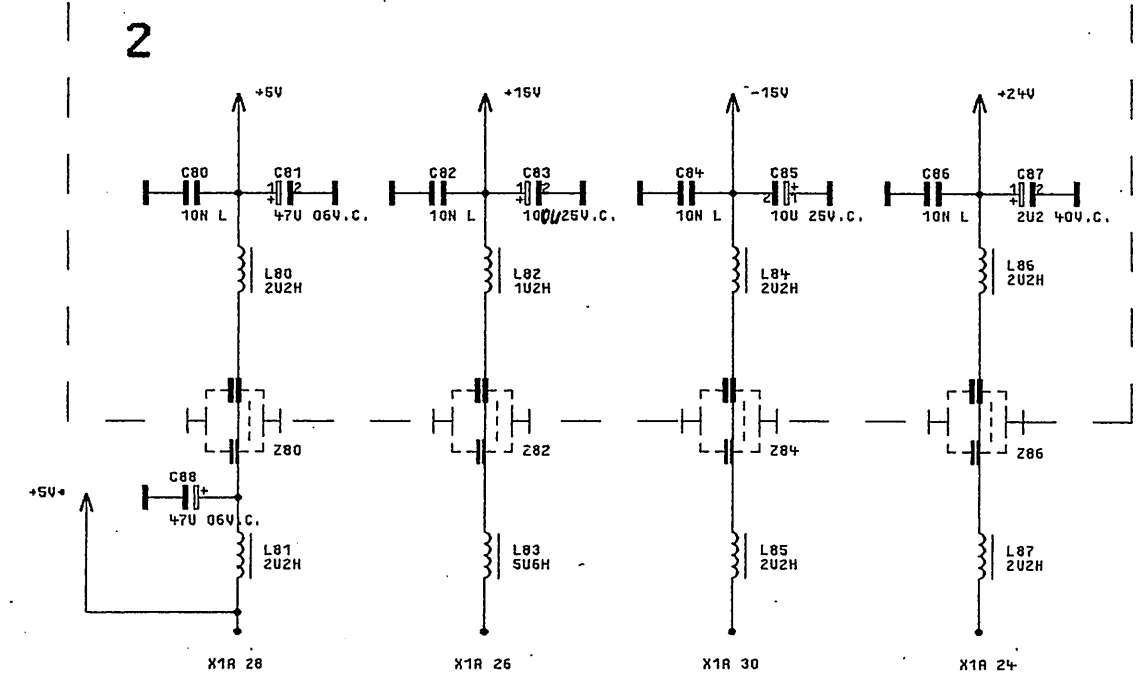
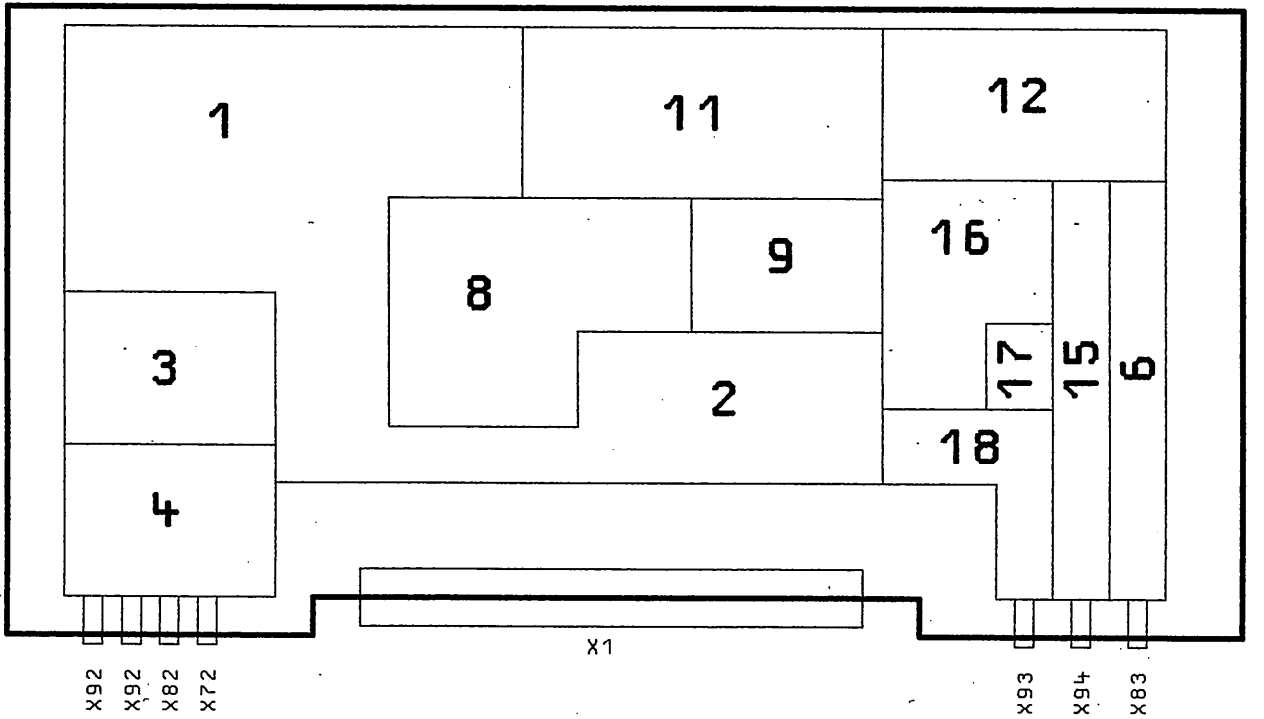
| | | | | | | | |
|---|-----|------|----|---------------|---------------------------------------|--|------------------------|
| MENP5 | 502 | 3PUA | AI | Datum Date | Schaltteilliste für Parts list for | Sachnummer Stock No. | Blatt-Nr. Page |
|  | | | | 39 | 04.02.98 | EE FESTFREQUENZEN REFERENCE FREQUENCIES | 0819.6060.01 SA 16+ |

095.0026-0693

| Kennz. Comp. No. | Benennung Designation | Sachnummer Stock No. | Hersteller Manufacturer | Bezeichnung Designation | enthalten in contained in |
|---------------------|--|-------------------------|----------------------------|----------------------------|------------------------------|
| Z71 | LD 10GHZ 50DB100V10A4RDX9 LEAD-THROUGH FILTER | LD 0451.4636.00 | SPECTRUM | 51-713-036 | |
| Z80 | LD 10GHZ 50DB100V10A4RDX9 LEAD-THROUGH FILTER | LD 0451.4636.00 | SPECTRUM | 51-713-036 | |
| Z82 | LD 10GHZ 50DB100V10A4RDX9 LEAD-THROUGH FILTER | LD 0451.4636.00 | SPECTRUM | 51-713-036 | |
| Z84 | LD 10GHZ 50DB100V10A4RDX9 LEAD-THROUGH FILTER | LD 0451.4636.00 | SPECTRUM | 51-713-036 | |
| Z86 | LD 10GHZ 50DB100V10A4RDX9 LEAD-THROUGH FILTER | LD 0451.4636.00 | SPECTRUM | 51-713-036 | |
| Z90 | LD 10GHZ 50DB100V10A4RDX9 LEAD-THROUGH FILTER | LD 0451.4636.00 | SPECTRUM | 51-713-036 | |
| Z150 | LD 10GHZ 50DB100V10A4RDX9 LEAD-THROUGH FILTER | LD 0451.4636.00 | SPECTRUM | 51-713-036 | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |



ACHTUNG: EGB!
ELEKTROSTATISCH GEFÄHRDETE
BAUELEMENTE ERFORDERN EINE
BESONDERE HANDHABUNG.
ATTENTION: ESD!
ELECTROSTATIC SENSITIVE
DEVICES REQUIRE A SPECIAL
HANDLING.



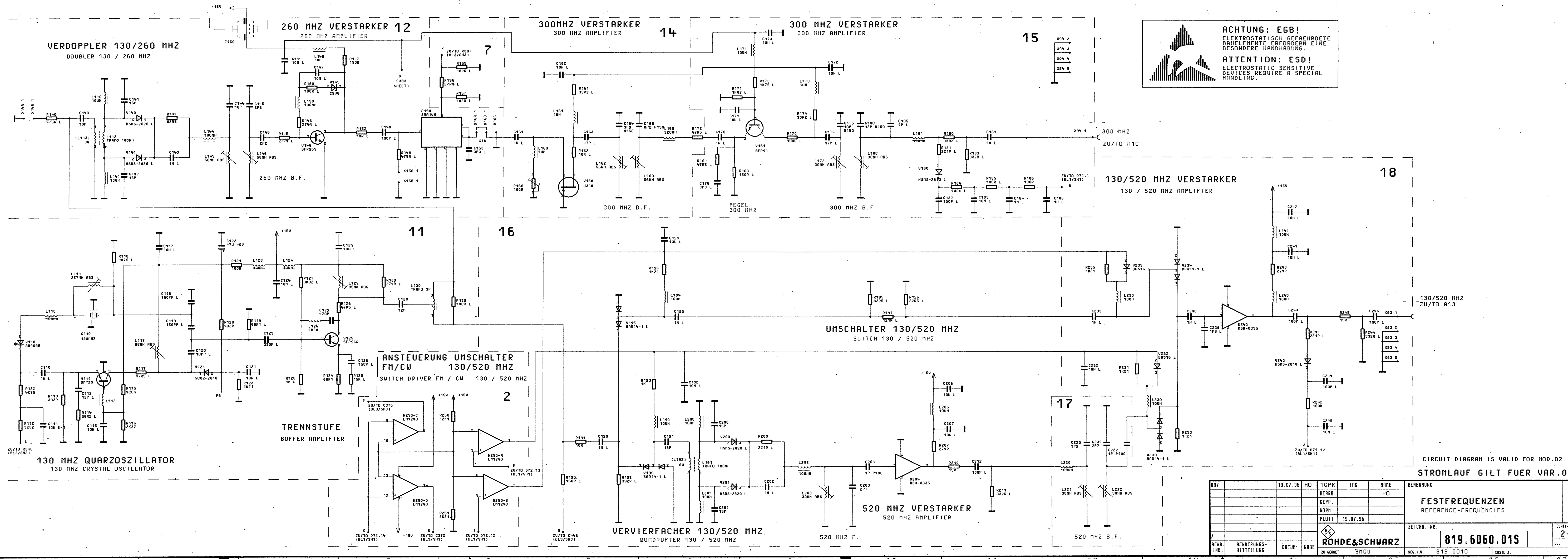
STROMLAUF GILT FÜR VAR.02

CIRCUIT DIAGRAM IS VALID FOR MOD.02

| | | | | | | | |
|------------|------------------------|-------|------|----------|---------|-------------|--------------|
| A | 39845 | 12.88 | HM | 1K68 | TRG | NAME | BENENNUNG |
| B | 39845 | 03.89 | HM | BEARR. | | HM | |
| D | 45825 | 07.89 | HM | GEPR. | | HM | |
| 07 | 50242 | 03.96 | H0 | NORM | | | |
| | | | | PLOTT | 7. 7.89 | * | |
| REND. IND. | BEWERBUNGS- MITTEILUNG | DATUM | NAME | ZU GERÄT | SMGU | REG. I. V. | 819.0010 |
| | | | | | | ERSTE Z. | |
| | | | | | | ZEICHN.-NR. | 819.6060.015 |
| | | | | | | BLATT-NR. | 1 |
| | | | | | | V. 3 | BL. |

FÜR DIESE UNTERLAGE
BEHALTEN UND ALLE RECHTE VOR

ZEICHN.-NR.



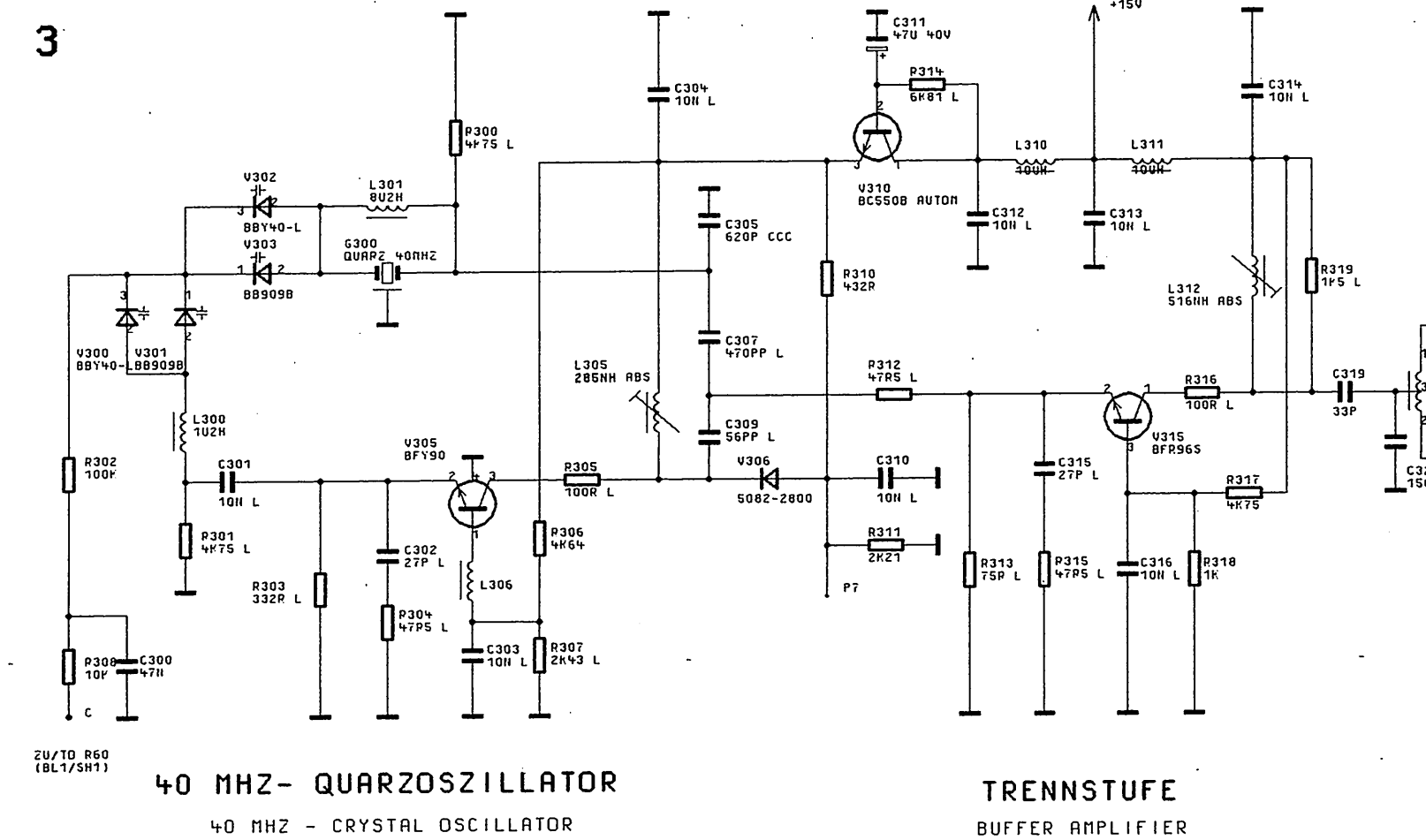
ACHTUNG: EGB!
ELEKTROSTATISCH GEFAHRDETE
BAUELEMENTE ERFORDERN EINE
BESONDERE HANDLUNG.

ATTENTION: ESD!
ELECTROSTATIC SENSITIVE
DEVICES REQUIRE A SPECIAL
HANDLING.

CIRCUIT DIAGRAM IS VALID FOR MOD.02
STROMLAUF GILT FÜR VAR.02

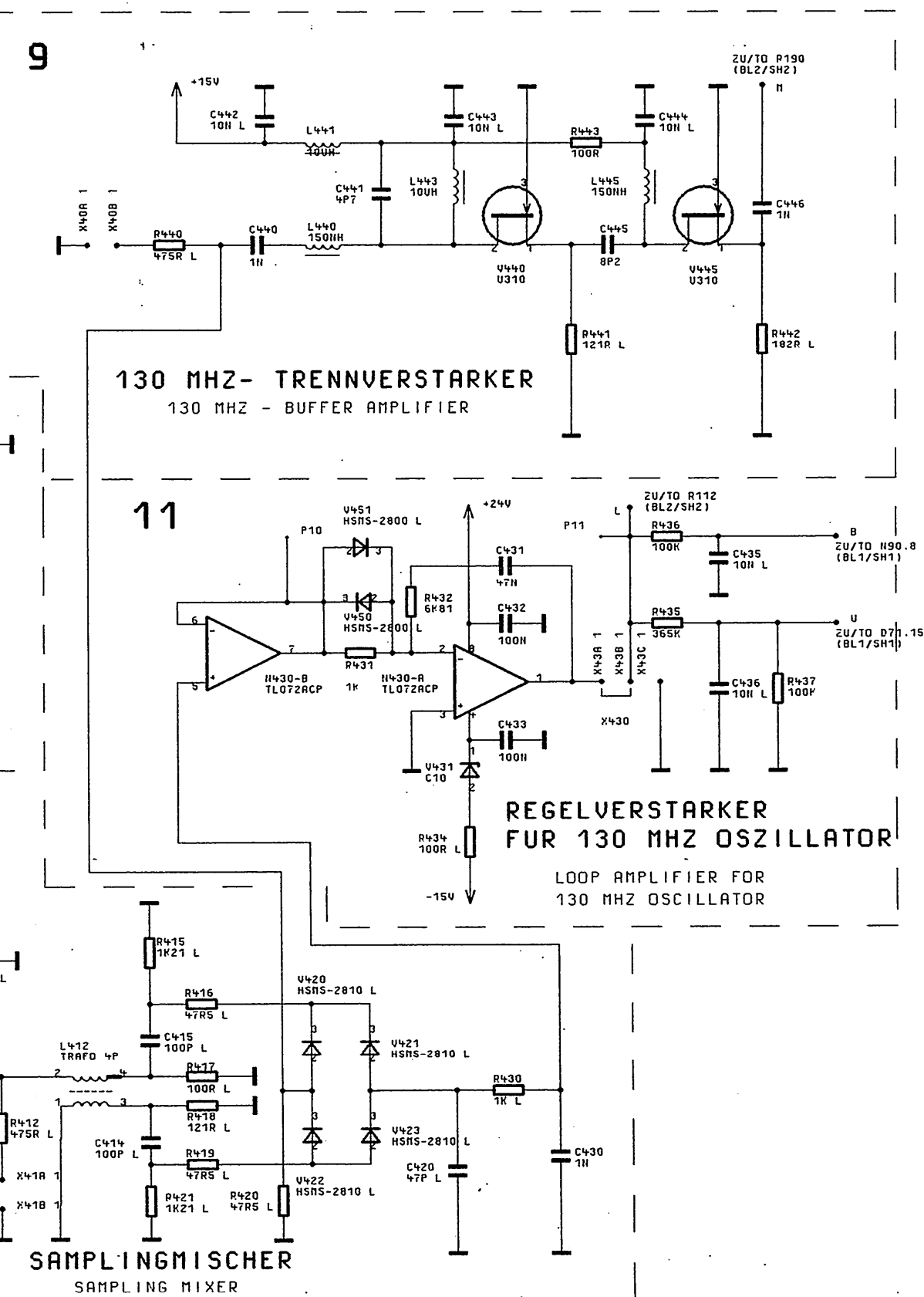
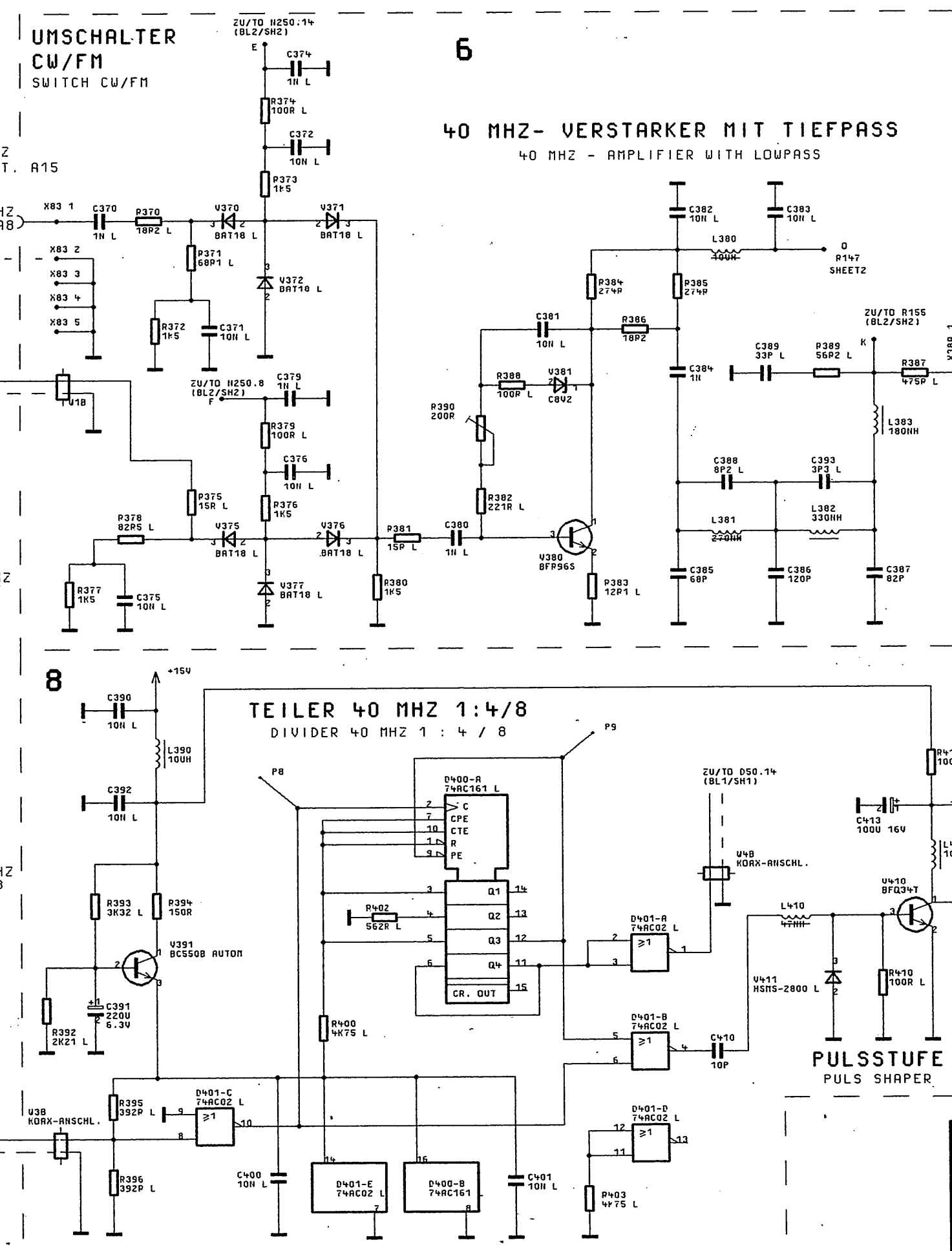
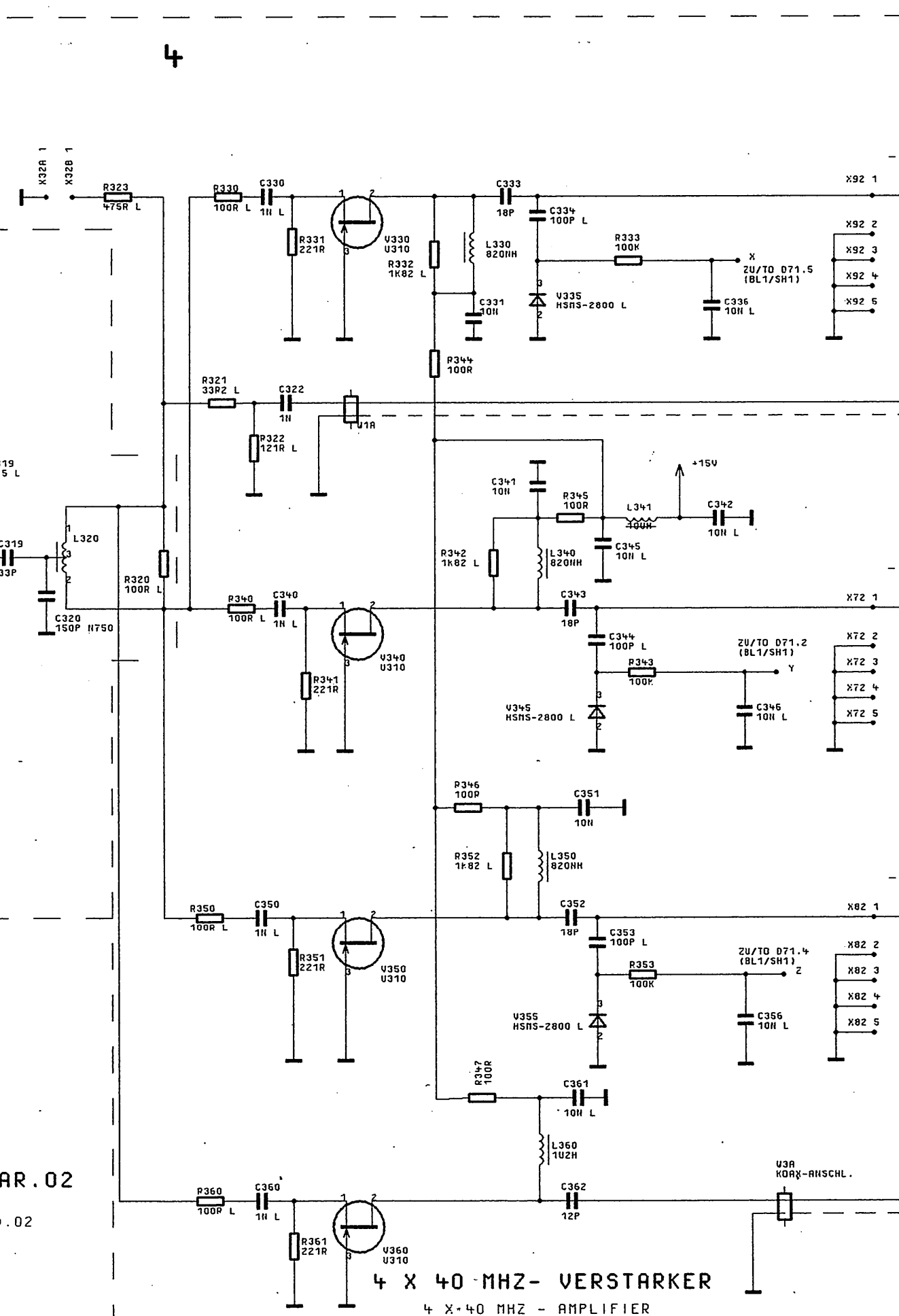
| | | | | | | |
|-----------------|-------------|-------|-------|----------|------|--------------|
| 09/ | 19.07.96 | HO | 1GPK | TAG | NAM | BENENNUNG |
| | | | BEAR. | | HO | |
| | | | GEPR. | | | |
| | | | NORM | | | |
| | | | PLOTT | 19.07.96 | | |
| ROHDE & SCHWARZ | | | | | | 819.6060.015 |
| REND. | RENDERUNGS- | DATUM | NAM | ZU GERÄT | SIGU | REG. I. V. |
| IND. | MITTEILUNG | | | | | 819.0010 |
| | | | | | | ERSTE Z. |


ZEICHN. - NR.



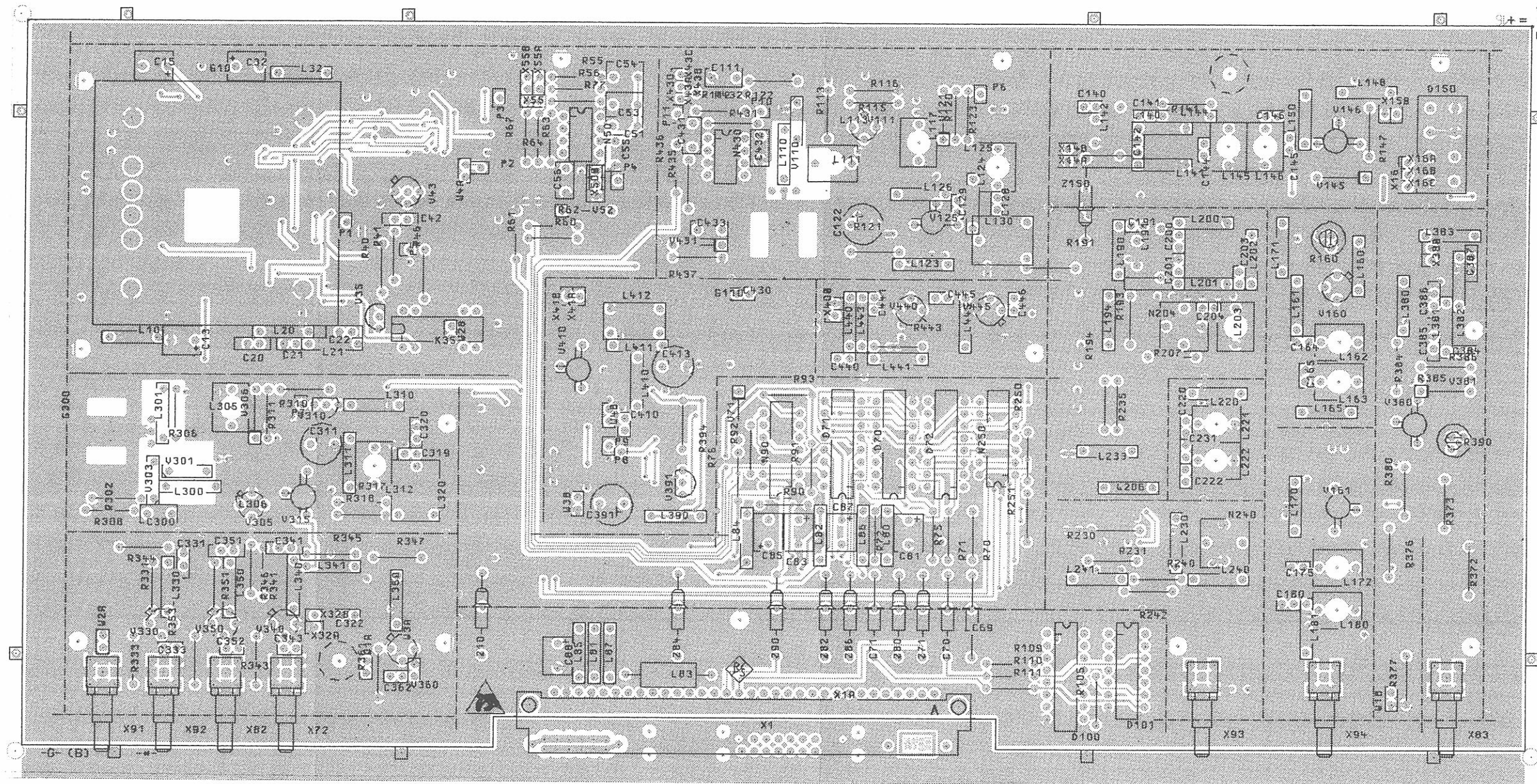
STROMLAUF GILT FUER VAR.02

CIRCUIT DIAGRAM IS VALID FOR MOD.02



| | | | | | | | | | |
|---------------|---------------------------|----------|------|---|----------|----------|---|-----------|-------|
| 09/ | | 19.07.96 | HO | 1 GPK | TAG | NAMÉ | BENENNUNG | | |
| | | | | BEAPB. | | HO | FESTFREQUENZEN REFERENCE-FREQUENCIES | | |
| | | | | GEPP. | | | | | |
| | | | | HOPN | | | | | |
| | | | | PLOTT | 19.07.96 | | | | |
| / | | | |  | | | ZETCHN.-NR. | BLATT-NR. | |
| | | | | ROHDE&SCHWARZ | | | 819.6060.01S | 3+ | |
| REND. IND. | RENDEPUNGS- MITTEILUNG | DATUM | NAMÉ | ZU GEPÄRT | SMGU | PEG.I.V. | 819.0010 | ERSTE Z. | V. BI |

Für diese Unterlage behalten
wir uns alle Rechte vor.



Ansicht und Leitungsführung Bauteilseite
View of tracks on component side

VARIANTENERKLÄRUNG/VERSION
VAR02-GRUNDAUSFÜHRUNG/BASIC MODEL

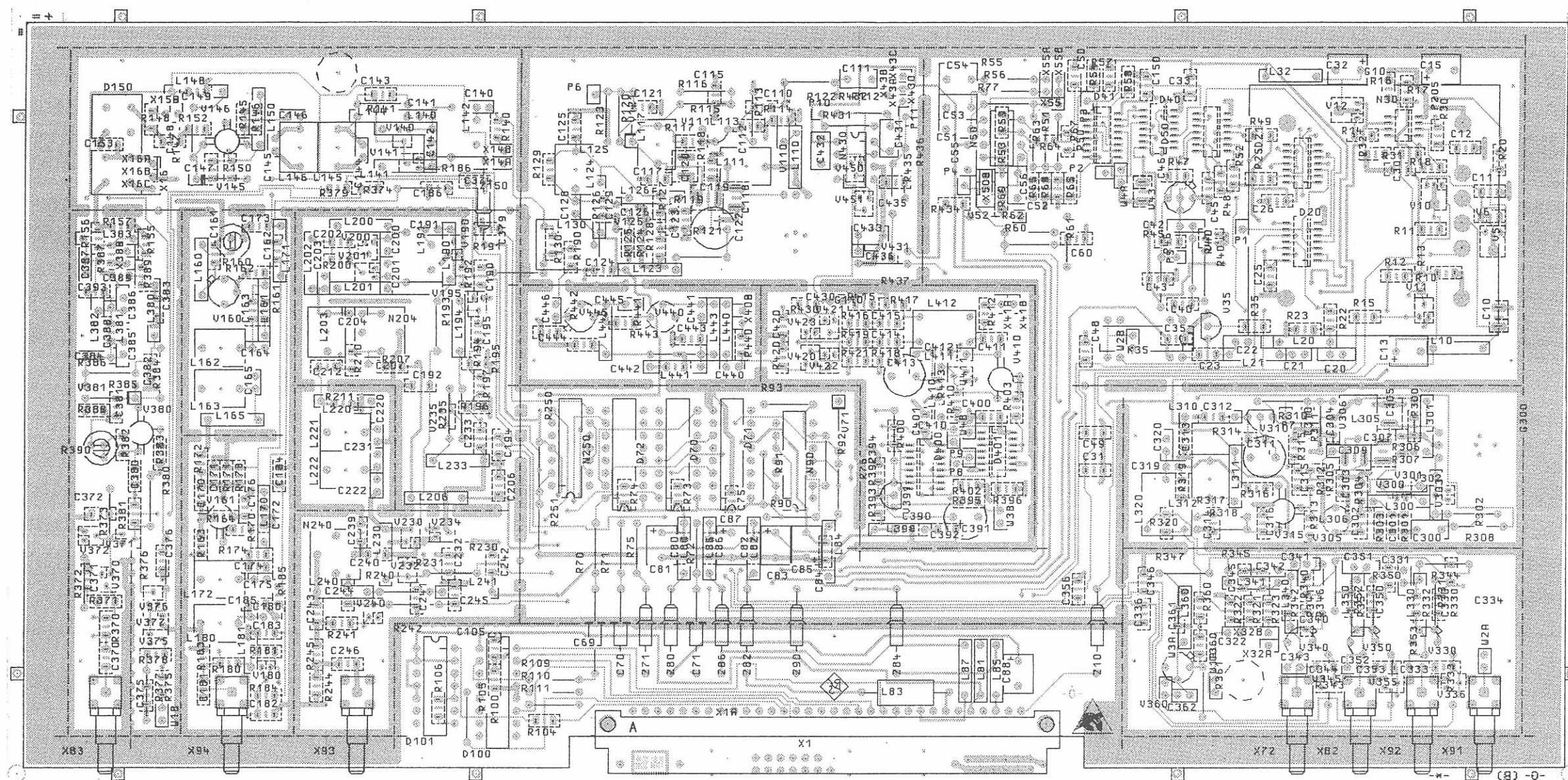
| | | | | | | | | | | | | |
|---|-------|-------|----|-----------------------------|-------|---------------------|-----------------------|-------|--|--|--|---|
| F | 41825 | 07.89 | HM | Maße ohne Toleranzangabe | | Maßstab | | 1 : 1 | | | | |
| | | | | | | Halbzeug, Werkstoff | | | | | | |
| | | | | | | | | | | | | |
| | | | | 1KGB | Tag | Name | Benennung | | | | | Z |
| | | | | Bearb. | 07.89 | HM | FESTFREQUENZEN | | | | | |
| | | | | Gepr. | | | REFERENCE-FREQUENCIES | | | | | |
| | | | | Norm | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

(hierzu HVC 250)




ACHTUNG: EGB!
Elektrostatisch gefährdete
Bauelemente erfordern eine
besondere Handhabung.
ATTENTION ESD!
Electrostatic sensitive
devices require a special
handling.

Für diese Unterlage behalten
wir uns alle Rechte vor.



Ansicht und Leitungsfuehrung Loetseite
View of tracks on solder side

VARIANTENERKLAERUNG/VERSION
VAR02-GRUNDAUSFUEHRUNG/BASIC MODEL

| | | | | | | | | | | |
|---------------|--------------------------|-------|------|---|-------|---------------------|-----------------------|--|-----------|----------|
| F | 41825 | 07.89 | HM | Maße ohne Toleranzangabe | | Maßstab 1 : 1 | | | | |
| | | | | | | Halbzeug, Werkstoff | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | 1KGB | Tag | Name | Benennung | | Z | |
| | | | | Bearb. | 07.89 | HM | FESTFREQUENZEN | | | |
| | | | | Gepr. | | | REFERENCE-FREQUENCIES | | | |
| | | | | Norm | | | | | | |
| | | | | | | | | | | |
| | | | |  ROHDE & SCHWARZ | | | Zeichn.-Nr. | | Blatt-Nr. | |
| | | | | | | | 819.6060.01 | | 3 | |
| Änd. Zust. | Änderungs- Mitteilung | Tag | Name | zu Gerät SMGU | | | reg. i. V. 819.0010 V | | erste Z. | v. 4 Bl. |



ACHTUNG: EGB!
Elektrostatisch gefährdete
Bauelemente erfordern eine
besondere Handhabung.
ATTENTION ESD!
Electrostatic sensitive
devices require a special
handling.