PRECISION WIREWOUND RESISTORS HERMETICALLY SEALED
UP175, UP400, UP500

A COMPANY OF VISHAY COMPONENTS (U.K.)

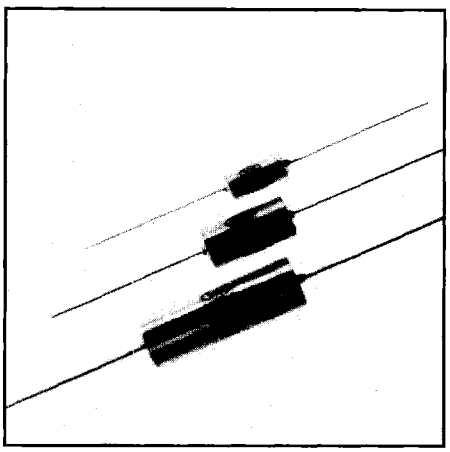
NITROGEN FILLED TO GIVE EXCELLENT LONG-TERM STABILITY
VERY LOW TEMPERATURE COEFFICIENT AND CLOSE TOLERANCE

TYPE	DIMENSIONS (mm) BODY	LEADS	BEST TOLERANCE	OHMIC RANGE	MAXIMUM BODY TEMP	TEMP RISE	VOLTAGE RATING @ 70°C
UP175	16 x ø7.1	25 x ø0.5	±0.1% ±0.05% ±0.02% ±0.01% ±0.005%	5R0 - 650K 10R - 650K 50R - 650K 80R - 650K 500R - 650K	+135°C	0.12°C/mW	250V dc
UP400	23.4 x ø11.2	25 x ø0.6	±0.1% ±0.05% ±0.02% ±0.01% ±0.005% ±0.002%	5R0 - 5M0 10R - 5M0 10R - 5M0 50R - 5M0 100R - 5M0 1K0 - 5M0	+135°C	0.1°C/mW	500V dc
UP500	41 x ø13.5	25 x ø0.9	±0.1% ±0.05% ±0.02% ±0.01% ±0.005% ±0.002%	2R0 - 10M 5R0 - 10M 5R0 - 10M 10R - 10M 100R - 10M 1K0 - 10M	+135°C	0.045°C/mW	1000V dc

The UP Range of resistors are wound on polyester bobbins, and are sealed into Nitrogen-filled brass tubes which then have an insulation sleeve fitted over them. The integrity of the seal is checked using electronic equipment capable of the detection of leaks as small as 10^{-7} cm^3/second.

Typical applications for these devices include use as reference resistors and accurate input attenuators for measurement equipment. To this end ,Vishay is able to offer matched sets to customer requirements.

For lower ohmic value resistors, four terminal versions of the UP400 and UP500 are available. When ordering, a suffix "R" denotes the four-terminal version.



	UP175	UP400	UP500
LONG TERM DRIFT	<±0.0015%/2000 hours	<±0.0015%/2000 hours	<±0.0015%/2000 hours
RECOMMENDED POWER At +20°C	350mW (At +70°C 200mW)	850mW (At +70°C 500mW)	1W (At +70°C 600mW)
MAXIMUM POWER At +20°C	800mW (At +70°C 450mW)	1.1W (At +70°C 650mW)	1.7W (At +70°C 1.1W)
THERMAL EMF	<0.5µV/°C: All Values	<0.5µV/°C: All Values	<0.5µV/°C: All Values
TEMPERATURE COEFFICIENT Standard:	<±5ppm/°C	<±5ppm/°C	<±5ppm/°C
OF RESISTANCE Suffix C:	<±3ppm/°C: Above 35R	<±3ppm/°C: Above 150R	<±3ppm/°C
Suffix D:	<±2ppm/°C: Above 50R	<±2ppm/°C: Above 150R	<±2ppm/°C: Above 500R
Suffix F:	<±1ppm/°C: Above 50R	<±1ppm/°C: Above 300R	<±1ppm/°C: Above 500R

Ordering Example	Type	TCR	Value	Tolerance
	UP500	***/F***	***111K11***	***±0.002%***