

MBC13706

Product Preview

The RF Building Block Series **GSM Low Noise Amplifier with Gain Control**

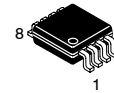
Designed primarily for use in GSM wireless communication systems. The MBC13706 is a silicon low noise amplifier with three available gain settings. Two gain control pins control the gain settings. The LNA can be turned off during transmit mode to save current by disabling the RX Enable pin. The LNA is packaged in a low-cost Micro-8 package.

- Usable Frequency Range: 925 to 960 MHz
- Three Gain States: 26, 18, and 0 dB
- 3.0 dB Max Noise @ Max Gain
- High Reverse Isolation: > 40 dB @ 945 MHz
- Low Power Consumption = 30 mW @ Max Gain, 3.0 V
- Low Standby Current = 200 μ A (Typ)
- Low Cost Surface Mount Plastic Package

* Patent Pending

GSM LNA WITH GAIN CONTROL

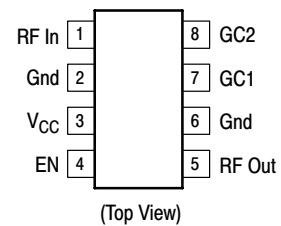
SEMICONDUCTOR TECHNICAL DATA



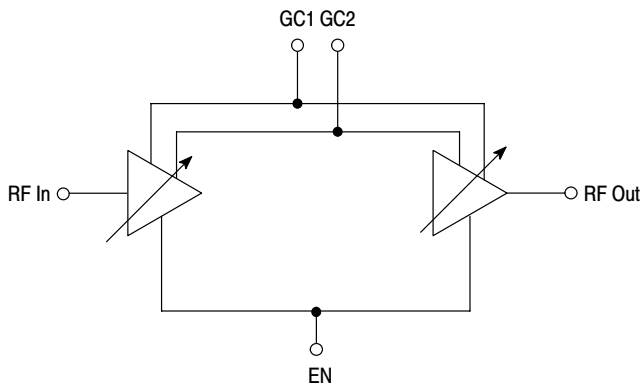
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PLASTIC PACKAGE
 CASE 846A
 (Micro-8)

PIN CONNECTIONS



Simplified Block Diagram



ORDERING INFORMATION

Device	Operating Temperature Range	Package
MBC13706	T _A = -30 to 70°C	Micro-8



Freescale Semiconductor, Inc.

MBC15708

NOTES

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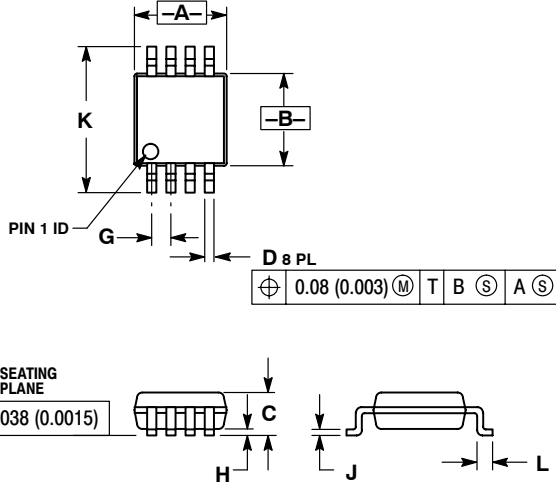
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NOTES

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OUTLINE DIMENSIONS

PLASTIC PACKAGE
CASE 846A-02
(Micro-8)
ISSUE D



NOTES:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: MILLIMETER.
3. DIMENSION A DOES NOT INCLUDE MOLD FLASH, PROTRUSIONS OR GATE BURRS. MOLD FLASH, PROTRUSIONS OR GATE BURRS SHALL NOT EXCEED 0.15 (0.006) PER SIDE.
4. DIMENSION B DOES NOT INCLUDE INTERLEAD FLASH OR PROTRUSION. INTERLEAD FLASH OR PROTRUSION SHALL NOT EXCEED 0.25 (0.010) PER SIDE.

DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	2.90	3.10	0.114	0.122
B	2.90	3.10	0.114	0.122
C	---	1.10	---	0.043
D	0.25	0.40	0.010	0.016
G	0.65 BSC		0.026 BSC	
H	0.05	0.15	0.002	0.006
J	0.13	0.23	0.005	0.009
K	4.75	5.05	0.187	0.199
L	0.40	0.70	0.016	0.028

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