

AR2087

10 TO 2000 MHz TO-8B CASCADABLE AMPLIFIER

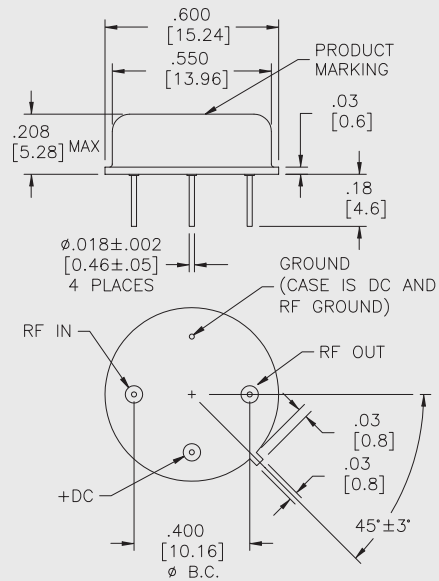
Typical Values

| | |
|---|------------------|
| High Second Order I.P. | +54.0 dBm |
| High Second Order Harmonic I.P. | +60.0 dBm |
| High Output Power | +21.0 dBm |
| High Performance Thin Film TO-8B Package | |

AR2087

AR2087

TO-8B Package for Amplifiers



SPECIFICATIONS*

| Parameter | Typical | Guaranteed | |
|-------------------------------------|------------|-------------|---------------|
| | | 0 to 50 °C | -55 to +85 °C |
| Frequency (Min.) | 5-2000 MHz | 10-2000 MHz | 10-2000 MHz |
| Small Signal Gain (Min.) | 16.0 dB | 15.0 dB | 14.5 dB |
| Gain Flatness (Max.) | ±0.5 dB | ±0.8 dB | ±1.0 dB |
| Noise Figure (Max.) 200-2000 MHz | 4.5 dB | 5.5 dB | 6.0 dB |
| SWR (Max.) Input/Output | 1.5:1 | 1.7:1 | 2.0:1 |
| Power Output (Min.) @ 1dB comp. | +21.0 dBm | +20.0 dBm | +19.5 dBm |
| Reverse Isolation | 30 dB | — | — |
| DC Current (Max.) | 115 mA | 118 mA | 122 mA |

* Measured in a 50-ohm system at +15 Vdc unless otherwise specified.

INTERMODULATION PERFORMANCE

Typical @ 25 °C

| | |
|---|----------------|
| Second Order Harmonic Intercept Point | +60 dBm |
| Second Order Two Tone Intercept Point | +54 dBm |
| Third Order Two Tone Intercept Point | +34 dBm |

AR2087

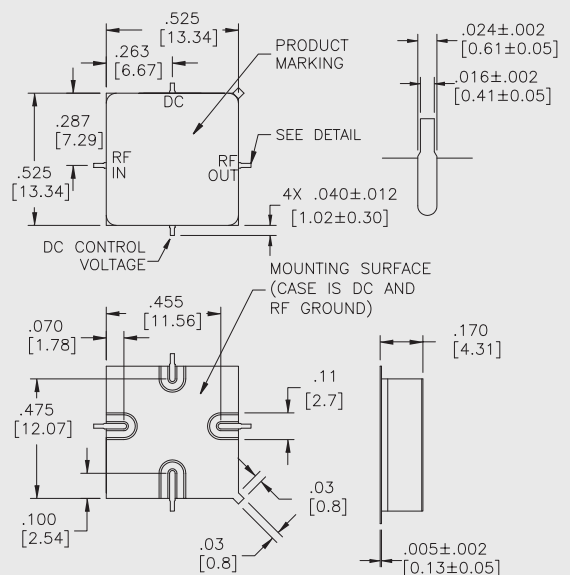
ABSOLUTE MAXIMUM RATINGS

| | |
|--|----------------|
| Storage Temperature | -62 to +125 °C |
| Maximum Case Temperature | +125 °C |
| Maximum DC Voltage | +17 Volts |
| Maximum Continuous RF Input Power | +15 dBm |
| Maximum Short Term Input Power (1 Minute Max.) | 100 Milliwatts |
| Maximum Peak Power (3 µsec Max.) | 0.5 Watt |
| Burn-in Temperature | +100°C |
| Thermal Resistance ¹ (θjc) | — °C/Watt |
| Junction Temperature Rise Above Case (Tjc) | — °C |

¹ Thermal resistance is based on total power dissipation.

ARS2087

SMT0-8B Package for Amplifiers



DIMENSIONS ARE IN INCHES [MILLIMETERS]