

AC3556 3000 TO 3600 MHz TO-8 CASCADABLE AMPLIFIER

| Typical Values | AC3556 |
|---|----------|
| Ultra Low Noise Figure | 1.2 dB |
| High Gain | 20.5 dB |
| Low Voltage | +5.0 Vdc |
| High Performance Thin Film Standard Size TO-8 Package | |

SPECIFICATIONS*

| Parameter | Typical | Guaranteed | |
|---------------------------------|---------------|---------------|---------------|
| | | 0 to 50 °C | -55 to +85 °C |
| Frequency (Min.) | 2900-3600 MHz | 3000-3600 MHz | 3000-3600 MHz |
| Small Signal Gain (Min.) | 20.5 dB | 19.5 dB | 19.0 dB |
| Gain Flatness (Max.) | ±0.5 dB | ±0.8 dB | ±1.0 dB |
| Noise Figure (Max.) | 1.2 dB | 1.4 dB | 1.7 dB |
| SWR (Max.) Input/Output | 1.5:1 | 1.8:1 | 1.9:1 |
| Power Output (Min.) @ 1dB comp. | +12.5 dBm | +11.5 dBm | +11.0 dBm |
| DC Current (Max.) | 45 mA | 48 mA | 51 mA |

* Measured in a 50-ohm system at +5 Vdc unless otherwise specified.

INTERMODULATION PERFORMANCE

| Typical @ 25 °C | AC3556 |
|---|---------|
| Second Order Harmonic Intercept Point | +48 dBm |
| Second Order Two Tone Intercept Point | +42 dBm |
| Third Order Two Tone Intercept Point | +25 dBm |

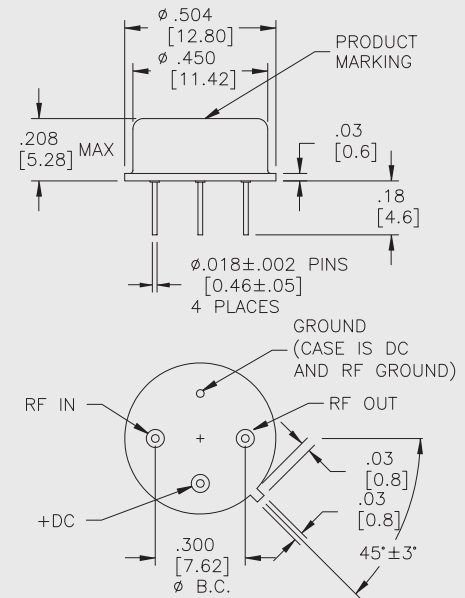
ABSOLUTE MAXIMUM RATINGS

| | |
|--|----------------|
| Storage Temperature | -62 to +125 °C |
| Maximum Case Temperature | +125 °C |
| Maximum DC Voltage | +10 Volts |
| Maximum Continuous RF Input Power | +10 dBm |
| Maximum Short Term Input Power (1 Minute Max.) | 50 Milliwatts |
| Maximum Peak Power (3 μsec Max.) | 0.5 Watt |
| Burn-in Temperature | +125 °C |
| Thermal Resistance ¹ (θjc) | — °C/Watt |
| Junction Temperature Rise Above Case (Tjc) | — °C |

¹ Thermal resistance is based on total power dissipation.

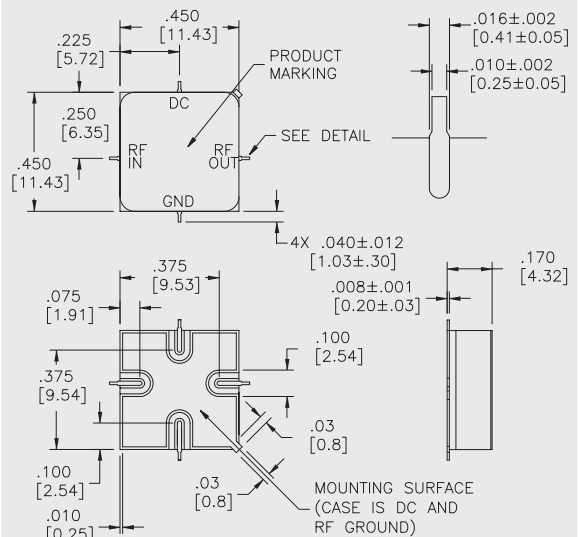
AC3556

TO-8 Package for Amplifiers



AS3556

SMT0-8 Package for Amplifiers



DIMENSIONS ARE IN INCHES [MILLIMETERS]