

# AC2554

## 1000 TO 2500 MHz TO-8 CASCADABLE AMPLIFIER

Typical Values	AC2554
High Gain .....	25.0 dB
Low Noise Figure .....	1.9 dB
Medium Output Power .....	+15.5 dBm
High Performance Thin Film Standard Size TO-8 Package	

### SPECIFICATIONS\*

Parameter	Typical	Guaranteed	
		0 to 50 °C	-55 to +85 °C
Frequency (Min.)	900-2500 MHz	1000-2500 MHz	1000-2500 MHz
Small Signal Gain (Min.)	25.0 dB	24.0 dB	23.5 dB
Gain Flatness (Max.)	±0.6 dB	±0.8 dB	±1.0 dB
Noise Figure (Max.)	1.9 dB	2.3 dB	2.6 dB
SWR (Max.)	Input 1.7:1 Output 1.5:1	1.9:1 1.7:1	2.0:1 1.8:1
Power Output (Min.) @ 1dB comp.	+15.5 dBm	+14.5 dBm	+14.0 dBm
DC Current (Max.)	75 mA	78mA	80 mA

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

### INTERMODULATION PERFORMANCE

Typical @ 25 °C	AC2554
Second Order Harmonic Intercept Point .....	+51 dBm
Second Order Two Tone Intercept Point .....	+45 dBm
Third Order Two Tone Intercept Point .....	+26 dBm

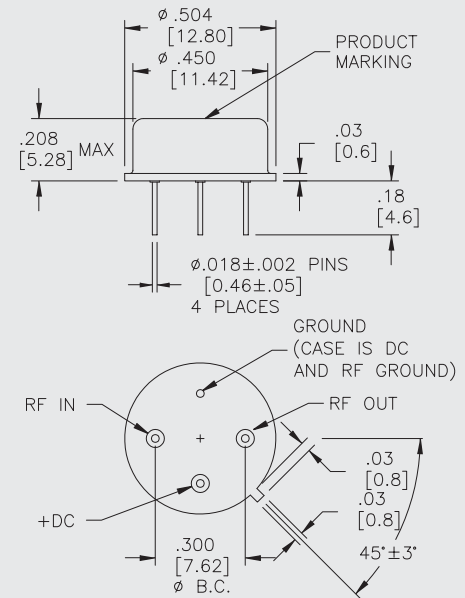
### ABSOLUTE MAXIMUM RATINGS

Storage Temperature .....	-62 to +125 °C
Maximum Case Temperature .....	+125 °C
Maximum DC Voltage .....	+10 Volts
Maximum Continuous RF Input Power .....	+7 dBm
Burn-in Temperature .....	+125 °C
Thermal Resistance <sup>1</sup> (θ <sub>jc</sub> ) .....	51 °C/Watt
Junction Temperature Rise Above Case (T <sub>jc</sub> ) .....	19.5 °C

<sup>1</sup> Thermal resistance is based on total power dissipation.

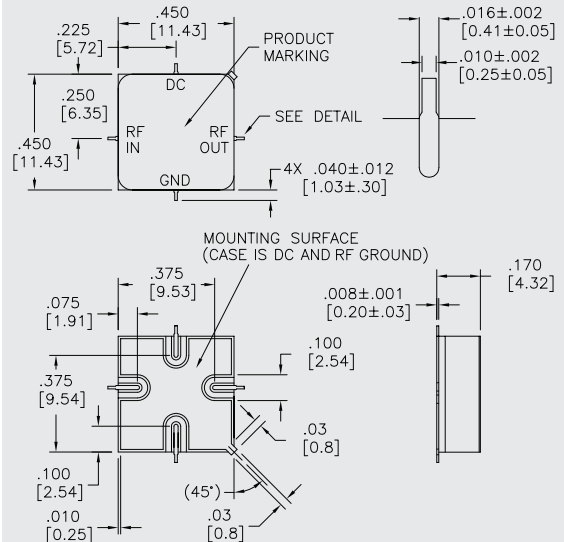
### AC2554

#### TO-8 Package for Amplifiers



### AS2554

#### SMT0-8 Package for Amplifiers



DIMENSIONS ARE IN INCHES [MILLIMETERS]