

# AP560

## 10 TO 500 MHz TO-8 CASCADABLE AMPLIFIER

**Typical Values**

<b>High Output Level</b> .....	<b>AP560</b> <b>+24.5 dBm</b>
<b>High Third Order I.P.</b> .....	<b>+36 dBm</b>
<b>High Performance Thin Film</b>	
<b>Standard Size TO-8 Package</b>	

### SPECIFICATIONS\*

Parameter	Typical	Guaranteed		
		0 to 50° C	-55 to +85° C	
Frequency (Min.)	5-600 MHz	5-500 MHz	5-500 MHz	
Small Signal Gain (Min.)	13.3 dB	12.5 dB	12.0 dB	
Gain Flatness (Max.)	±0.4 dB	±0.5 dB	±0.7 dB	
Noise Figure (Max.)	<4.6 dB	5.5 dB	6.0 dB	
SWR (Max.) Input/Output	<1.3:1	1.7:1	2.0:1	
Power Output (Min.) @ 1dB comp.	+24.5 dBm	+23.5 dBm	+23.0 dBm	
DC Current (Max.)	130 mA	135 mA	140 mA	

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

### INTERMODULATION PERFORMANCE

**Typical @ 25° C; 100 MHz**

<b>Second Order Harmonic Intercept Point</b> .....	<b>AP560</b> <b>+41 dBm</b>
<b>Second Order Two Tone Intercept Point</b> .....	<b>+35 dBm</b>
<b>Third Order Two Tone Intercept Point</b> .....	<b>+36 dBm</b>

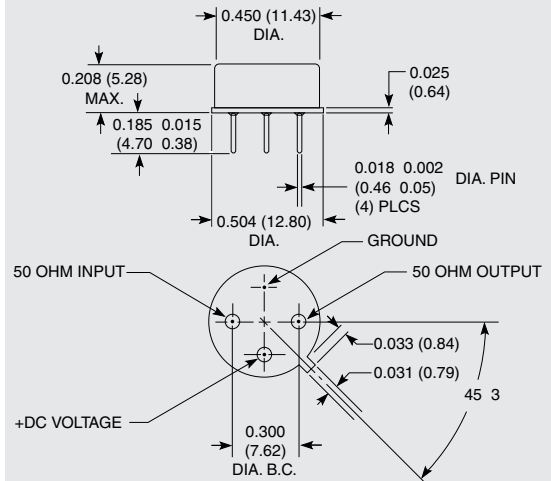
### ABSOLUTE MAXIMUM RATINGS

<b>Storage Temperature</b> .....	<b>-62 to +125° C</b>
<b>Maximum Case Temperature</b> .....	<b>+125° C</b>
<b>Maximum DC Voltage</b> .....	<b>+19 Volts</b>
<b>Maximum Continuous RF Input Power</b> .....	<b>+13 dBm</b>
<b>Maximum Short Term Input Power (1 Minute Max.)</b> .....	<b>100 Milliwatts</b>
<b>Maximum Peak Power (3 μsec Max.)</b> .....	<b>0.5 Watt</b>
<b>Burn-in Temperature</b> .....	<b>+105°C</b>
<b>Thermal Resistance<sup>1</sup> (θjc)</b> .....	<b>+15° C/Watt</b>
<b>Junction Temperature Rise Above Case (Tjc)</b> .....	<b>+29.6° C</b>

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

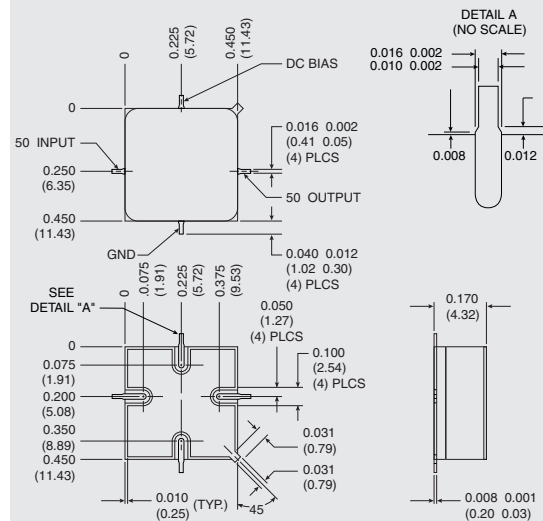
### AP560

#### TO-8 Package for Amplifiers



### APS560

#### SMT0-8 Package for Amplifiers



DIMENSIONS ARE IN INCHES (MILLIMETERS)