

# AC238

## 5 TO 200 MHz TO-8 CASCADABLE AMPLIFIER

Typical Values	AC238
High Gain	32.0 dB
Low Noise	2.6 dB
Medium Output Level	+15.5 dBm
High Reverse Isolation	+38 dB
High Efficiency	
High Performance Thin Film	
Standard Size TO-8 Package	

### SPECIFICATIONS

Parameter	Typical	Guaranteed*	
		0 to 50° C	-55 to +85° C
Frequency (Min.)	5-300 MHz	5-200 MHz	5-200 MHz
Small Signal Gain (Min.)	32.0 dB	31.0 dB	30.0 dB
Gain Flatness (Max.)	±0.2 dB	±0.4 dB	±0.7 dB
Noise Figure (Max.)	2.6 dB	3.0 dB	3.5 dB
SWR (Max.) Input/Output	1.1:1	1.3:1	1.4:1
Power Output (Min.) @ 1dB comp.	+15.5 dBm	+14.5 dBm	+14.0 dBm
Reverse Isolation	38 dB	—	—
DC Current (Max.)	64 mA	67 mA	69 mA

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

### INTERMODULATION PERFORMANCE

Typical @ 25° C	AC238
Second Order Harmonic Intercept Point	+54.5 dBm
Second Order Two Tone Intercept Point	+48.5 dBm
Third Order Two Tone Intercept Point	+30.0 dBm

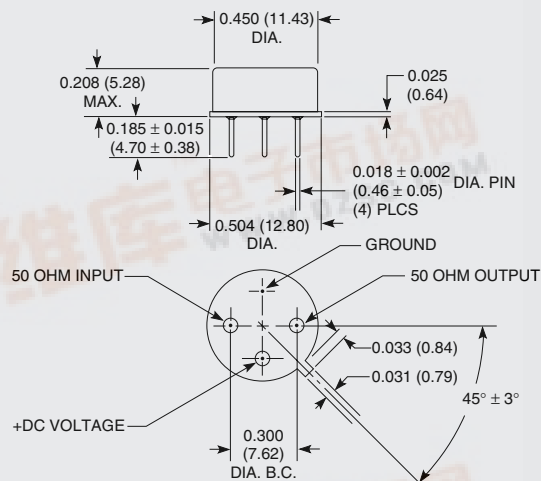
### ABSOLUTE MAXIMUM RATINGS

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 <sup>1</sup> (θjc)	—° C/Watt
Junction Temperature Rise Above Case (Tjc)	—° C

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

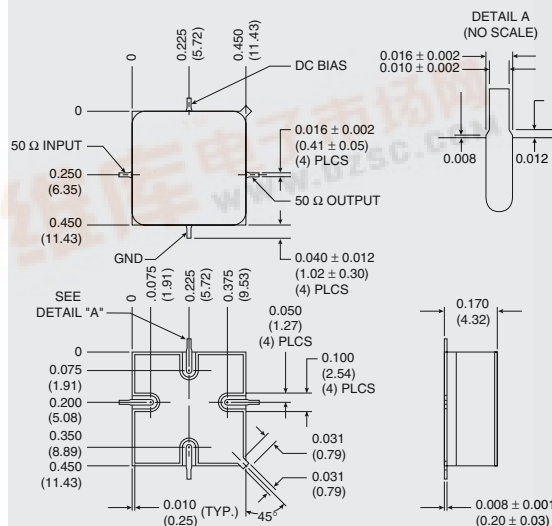
### AC238

#### TO-8 Package for Amplifiers



### AS238

#### SMT0-8 Package for Amplifiers



DIMENSIONS ARE IN INCHES (MILLIMETERS)