

AS7004

100 TO 7000 MHz SMTO-8 CASCADABLE AMPLIFIER

Typical Values

High Gain	AS7004 18.5 dB
Medium Output Power	+18.5 dBm
Ultra Broadband Width	0.1 - 7.0 GHz
High Performance Thin Film	
Standard Size SMTO-8 Package	

SPECIFICATIONS*

Parameter	Typical	Guaranteed	
		0 to 50 °C	-55 to +85 °C
Frequency (Min.)	100-7000 MHz	100-7000 MHz	100-7000 MHz
Small Signal Gain (Min.)	18.5 dB	17.0 dB	16.5 dB
Gain Flatness (Max.)	±1.0 dB	±1.2 dB	±1.6 dB
Noise Figure (Max.)	2.5 dB	3.3† dB	3.8† dB
SWR (Max.) Input/Output	2.0:1	2.2:1	2.2:1
Power Output (Min.) @ 1dB comp. 100-1500 MHz 1500-5000 MHz 5000-8000 MHz	+15.5 dBm +16.5 dBm +18.5 dBm	+15.0 dBm +15.5 dBm +17.0 dBm	+14.5 dBm +15.0 dBm +16.5 dBm
Reverse Isolation	40 dB	—	—
DC Current (Max.)	140 mA	150 mA	155 mA

* Measured in a 50-ohm system at +15 Vdc unless otherwise specified.
† 0.5 higher below 100 MHz.

INTERMODULATION PERFORMANCE

Typical @ 25 °C

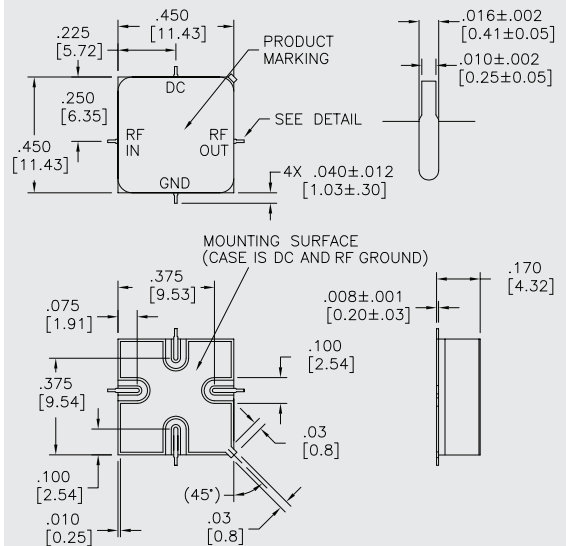
Second Order Harmonic Intercept Point	AS7004 +39 dBm
Second Order Two Tone Intercept Point	+33 dBm
Third Order Two Tone Intercept Point	+25 dBm

ABSOLUTE MAXIMUM RATINGS

Storage Temperature	-62 to +150 °C
Maximum Case Temperature	+120 °C
Maximum DC Voltage	+17 Volts
Maximum Continuous RF Input Power	+10 dBm
Maximum Short Term Input Power (1 Minute Max.)	+16 dBm
Maximum Peak Power (3 μsec Max.)	+19 dBm
Burn-in Temperature	+75 °C
Thermal Resistance (θjc)	+125 °C/Watt
Junction Temperature Rise Above Case (Tjc)	+55 °C

AS7004

SMTO-8 Package for Amplifiers



DIMENSIONS ARE IN INCHES [MILLIMETERS]