

AGC1025

10 TO 1000 MHz TO-8 GAIN CONTROL AMPLIFIER

Typical Values	AGC1025
High Gain	21.5 dB
AGC Range (Vc = 0 to 5)	+25.0 dB
High Performance Thin Film Standard Size TO-8 Package	

SPECIFICATIONS*

Parameter	Typical	Guaranteed	
		0 to 50 °C	-55 to +85 °C
Frequency (Min.)	5-1100 MHz	10-1000 MHz	10-1000 MHz
Gain (Min.)	21.5 dB	20.5 dB	19.0 dB
Gain Flatness (Max.)	±0.5 dB	±0.7 dB	±0.8 dB
AGC Range (Min.)	25 dB	20 dB	—
Noise Figure (Max.)	5.2 dB	6.0 dB	6.5 dB
SWR (Max.) Input/Output	1.6:1	2.0:1	2.0:1
Power Output (Min.) @ 1dB comp.	+9.0 dBm	+8.0 dBm	+7.0 dBm
Response Time Full AGC	<10 usec	—	—
DC Current (Max.) Bias	50 mA	55 mA	60 mA
DC Current (Max.) Vc [^]	0 to 10 mA	—	—

* Measured in a 50-ohm system at +15 Vdc unless otherwise specified.
[^]AGC Voltage: 0 to 5 Volts.

INTERMODULATION PERFORMANCE

Typical @ 25 °C	AGC1025
Second Order Harmonic Intercept Point	36 dBm
Second Order Two Tone Intercept Point	30 dBm
Third Order Two Tone Intercept Point	20 dBm

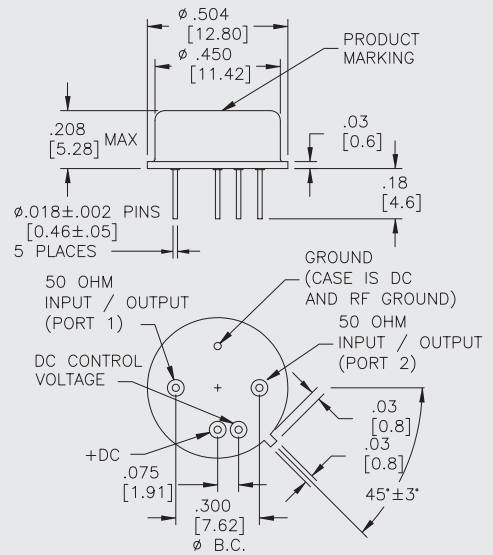
ABSOLUTE MAXIMUM RATINGS

Storage Temperature	-62 to 125 °C
Maximum Case Temperature	+125 °C
Maximum DC Voltage	+13 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)	+17 °C/Watt
Junction Temperature Rise Above Case (Tjc)	+12.0 °C

¹ Thermal resistance is based on total power dissipation.

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TO-8 Package for Gain Control Amplifier



Connectorized attenuator case available.

SWITCHING SPEED

Not Yet Available

DIMENSIONS ARE IN INCHES [MILLIMETERS]