

DESCRIPTION

This class A GaAs module is designed for both military and commercial applications. It is capable of supporting any signal type and modulation format, including but not limited to 3-4G telecom, WLAN, OFDM, DVB, and CW/AM/FM. The latest device technologies and design methods are employed to offer high power density, efficiency, and linearity in a small, lightweight package.

**FEATURES**

- Over / Under / Reverse Voltage Protection
- Forward Power Measurement
- Reflected Power Measurement
- High Speed On/Off Control
- Temperature Output
- Optional Heatsink

APPLICATIONS

- Military / Commercial Data links
- Telecommunications
- BTS / Repeaters / DAS
- Test and Measurement
- General Purpose Lab Use

RF / ELECTRICAL

PARAMETER	MIN	TYP	MAX	UNIT
Operating Frequency	800		1000	MHz
P1dB Power Output	43.5	44.0		dBm
PSat Power Output	44.0	44.0		dBm
Gain	44.0	45.0		dB
Gain Flatness		1.0	1.5	dB
Linear Power		37.0		dBm dBm
Linear Power Test Conditions	W-CDMA @ -55 dBc ACPR			--
Input Return Loss	18	20		dB
Operating Voltage	12		14	VDC
Current Draw		12.0	14.0	A
Quiescent Current Draw		15.0		A
Switching Time			1.0	uS

MECHANICAL

PARAMETER	VALUE	UNIT
Dimensions (L x W x H)	6 x 3.5 x 0.693	in.
RF Connectors (Input / Output)	SMA-F / SMA-F	--
DC / Control Connector	7W2 Male	--
Cooling	Baseplate Conduction - Optional Heatsink Available	--
Mounting	4-40 Thru Holes	--

PARAMETER	MIN	MAX	UNIT
Operating Temp. (Housing Temp.)	-40	+85	°C
Storage Temp Range	-60	+100	°C
Humidity Range	0-100		%
Altitude	0-30,000		ft.
Shock / Vibration	MIL-STD-810 and equivalents		--
Max RF Input	2.0		dBm
Load VSWR @ P1dB	Open / Short Output Protection		--
PA Baseplate Shutoff Temperature	85		°C

10 dB/div **Ref 40.00 dBm**

Log

-56.3 dBc

-54.5 dBc

27.7 dBm

-55.2 dBc

-56.4 dBc

Average

Center 900 MHz
#Res BW 100 kHz

#VBW 1 MHz

Span 24.68 MHz
#Sweep 29 ms

Technical drawing of a rectangular PCB layout, showing dimensions in inches. The drawing includes a top view, a bottom view, and a side view.

Top View Dimensions:

- Horizontal dimensions: .000, 1.250, 3.850, 4.750, 6.000.
- Vertical dimensions: .000, .125, 2.250, 3.375, 3.500.
- Feature: $\varnothing.150(5x)$ (5 circular features).

Bottom View Dimensions:

- Horizontal dimensions: .000, 6.750.

Side View Dimensions:

- Vertical dimensions: .000, .855, 2.200, 3.050.
- Horizontal dimensions: .000, .358, .380, .693, .000.

DC / CONTROL PINS

PIN LABEL	NAME	DESCRIPTION
A1	GND	Ground
A2	+VDC	Supply Voltage - Range Specified in Datasheet
1	TEMP	Temp Monitor: Temp in DegC = (Vout - 0.5V) / 10
2	I/O	On / Off Control (+5V = On / 0V = Off)
3	REV	Reflected Power Measurement -
4	GND	Detector Ground
5	FWD	Forward Power Measurement -