

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

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	1900		2000	MHz
P1dB Power Output	43.5	44.0		dBm
PSat Power Output	44.0	44.5		dBm
Gain	44.0	45.0		dB
Gain Flatness		0.5	0.8	dB
OIP3		55.0		dBm
OIP3 Measurement Conditions	2 Tone @ 30 dBm / Tone, 10 MHz Spacing			--
Input Return Loss	16	18		dB
Operating Voltage	12		14	VDC
Current Draw		11.0	12.0	A
Quiescent Current Draw		12.0		A
Switching Time			1.0	uS

MECHANICAL

PARAMETER	VALUE	UNIT
Dimensions (L x W x H)	8.5x5.54x2.175	in.
RF Connectors (Input / Output)	N-F / N-F	--
DC / Control Connector	Waterproof Circular Locking	--
Cooling	Integral Heatsink – Fan options available	--
Mounting	#6 Thru-Holes	--

PARAMETER	MIN	MAX	UNIT
Operating Temp. (Housing Temp.)	-40	+85	°C
Storage Temp Range	-60	+100	°C
Weatherproofing	IP67 Equivalent		--
Altitude	0-30,000		ft.
Shock / Vibration	MIL-STD-810 and equivalents		--
Max RF Input	2.5		dBm
Load VSWR @ P1dB	Open / Short Output Protection		--
PA Baseplate Shutoff Temperature	85		°C

Technical drawing of a mechanical part, showing four views: front, top, left side, and right side. The drawing includes dimensions in inches and millimeters, and a note for hole diameter.

Front View (Top): Shows the main body with a width of 8.500 inches. The top surface has a thickness of .000 inches. The bottom surface has a thickness of .180 inches. There are three holes along the top edge, with center-to-center distances of 1.250, 4.250, and 7.250 inches. The bottom edge has a thickness of .360 inches and a hole with a diameter of $\varnothing .150(6x)$. The total height of the front view is 5.540 inches.

Top View (Bottom): Shows the top surface with a width of 9.245 inches and a thickness of .000 inches. The front edge has a radius of .125 inches.

Left Side View (Left): Shows the left side of the part with a width of 2.175 inches. The top surface has a thickness of .000 inches. The bottom surface has a thickness of .090 inches. The total height of the left side view is 5.540 inches.

Right Side View (Right): Shows the right side of the part with a width of .645 inches. The top surface has a thickness of .000 inches. The bottom surface has a thickness of .145 inches. The total height of the right side view is 4.090 inches.

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 = $(V_{out} - 0.5V) / 10$
2	I/O	On / Off Control (+5V = On / 0V = Off)
3	REV	Reflected Power Measurement -
4	GND	Detector Ground
5	FWD	Forward Power Measurement -