

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	900		1000	MHz
P1dB Power Output	42.5	43.0		dBm
PSat Power Output	43.0	43.5		dBm
Gain	44.0	45.0		dB
Gain Flatness		0.5	0.8	dB
OIP3		58.0		dBm
OIP3 Measurement Conditions	2 Tone @ 33 dBm / Tone, 10 MHz Spacing			--
Input Return Loss	18	20		dB
Operating Voltage	12		14	VDC
Current Draw		7.0	7.5	A
Quiescent Current Draw		7.5		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	1.5		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, spaced at 1.250, 4.250, and 7.250 inches from the left. There are three holes along the bottom edge, spaced at 5.360, 5.540, and 5.540 inches from the left. A note indicates the hole diameter is $\varnothing .150(6x)$.

Top View (Bottom): Shows the top surface with a width of 9.245 inches. The top surface has a thickness of .000 inches. The bottom surface has a thickness of .125 inches. There are three holes along the top edge, spaced at 1.250, 4.250, and 7.250 inches from the left. There are three holes along the bottom edge, spaced at 5.360, 5.540, and 5.540 inches from the left. A note indicates the hole diameter is $\varnothing .150(6x)$.

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 .125 inches. There are three holes along the top edge, spaced at 1.250, 4.250, and 7.250 inches from the left. There are three holes along the bottom edge, spaced at 5.360, 5.540, and 5.540 inches from the left. A note indicates the hole diameter is $\varnothing .150(6x)$.

Right Side View (Right): Shows the right side of the part with a width of 4.090 inches. The top surface has a thickness of .000 inches. The bottom surface has a thickness of .125 inches. There are three holes along the top edge, spaced at 1.250, 4.250, and 7.250 inches from the left. There are three holes along the bottom edge, spaced at 5.360, 5.540, and 5.540 inches from the left. A note indicates the hole diameter is $\varnothing .150(6x)$.

DC / CONTROL PINS

PIN LABEL	NAME	DESCRIPTION
1	+VDC	Supply Voltage - Range Specified in Datasheet
2	+VDC	Supply Voltage - Range Specified in Datasheet
3	TEMP	Temp Monitor: Temp in DegC = $(V_{out} - 0.5V) / 10$
4	I/O	On / Off Control (+5V = On / 0V = Off)
5	REV	Reflected Power Measurement -
6	FWD	Forward Power Measurement -
7	GND	