

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 T/R Switching Control
- Temperature Output

APPLICATIONS

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

TX SPECIFICATIONS

PARAMETER	MIN	TYP	MAX	UNIT
Operating Frequency	3800		4000	MHz
P1dB Power Output	43.5	44.0		dBm
PSat Power Output	44.0	44.5		dBm
Gain	43.0	44.0		dB
Gain Flatness		0.5	0.8	dB
OIP3		56.0		dBm
OIP3 Measurement Conditions	2 Tone @33.5 dBm / Tone, 10 MHz Spacing			--
Input Return Loss	14	18		dB
Operating Voltage	12		14	VDC
Current Draw		7.5	8.4	A
Quiescent Current Draw		7.5		A
Switching Time			1.0	uS

RX SPECIFICATIONS

PARAMETER	MIN	TYP	MAX	UNIT
P1dB Power Output	19.0	20.0		dBm
Gain	19.0	20.0		dB
Gain Flatness		0.5	1.0	dB
Noise Figure		2.0	3.0	
OIP3		32.0		dBm
Input Return Loss	8	10		dB
Current Draw		200.0		mA

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	3.5		dBm
Load VSWR @ P1dB	Open / Short Output Protection		--
PA Baseplate Shutoff Temperature	85		°C

Technical drawing of a rectangular electronic component, showing four views: Top, Bottom, Left Side, and Right Side. The drawing includes dimensions in inches.

Top View Dimensions:

- Overall Width: 8.500
- Overall Height: 5.540
- Slot Spacing (from left edge): .000, 1.250, 4.250, 7.250
- Mounting Hole Diameter: $\varnothing.150(6x)$
- Connector Spacing (from right edge): 5.360, 5.540

Left Side View Dimensions:

- Overall Height: 5.090
- Base Thickness: .125
- Slot Width: .000
- Slot Depth: 2.175

Bottom View Dimensions:

- Overall Length: 9.245
- Overall Width: .000

Right Side View Dimensions:

- Overall Width: .000
- Slot Width: .645
- Slot Depth: 1.450, 2.370, 3.170, 4.090

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	Tx/Rx	TTL T/R Control (+5V = Tx / 0V = Rx)
5	REV	Reflected Power Measurement -
6	FWD	Forward Power Measurement -
7	GND	