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	2000		2300	MHz
P1dB Power Output	41.0	42.0		dBm
PSat Power Output	42.0	42.5		dBm
Gain	44.0	45.0		dB
Gain Flatness		0.3	0.5	dB
OIP3		59.0		
OIP3 Measurement Conditions	2 Tone @ 34 dBm / Tone, 10 MHz Spacing			--
Input Return Loss	22	25		dB
Operating Voltage	12		12	VDC
Current Draw		5.5	6.0	A
Quiescent Current Draw		6.0		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		0.3	0.5	dB
Noise Figure		2.5	3.0	
OIP3		35.0		dBm
Input Return Loss	8	10		dB
Current Draw		200.0		mA

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	--

ENVIRONMENTAL / PROTECTIONS

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

OUTLINE DRAWING
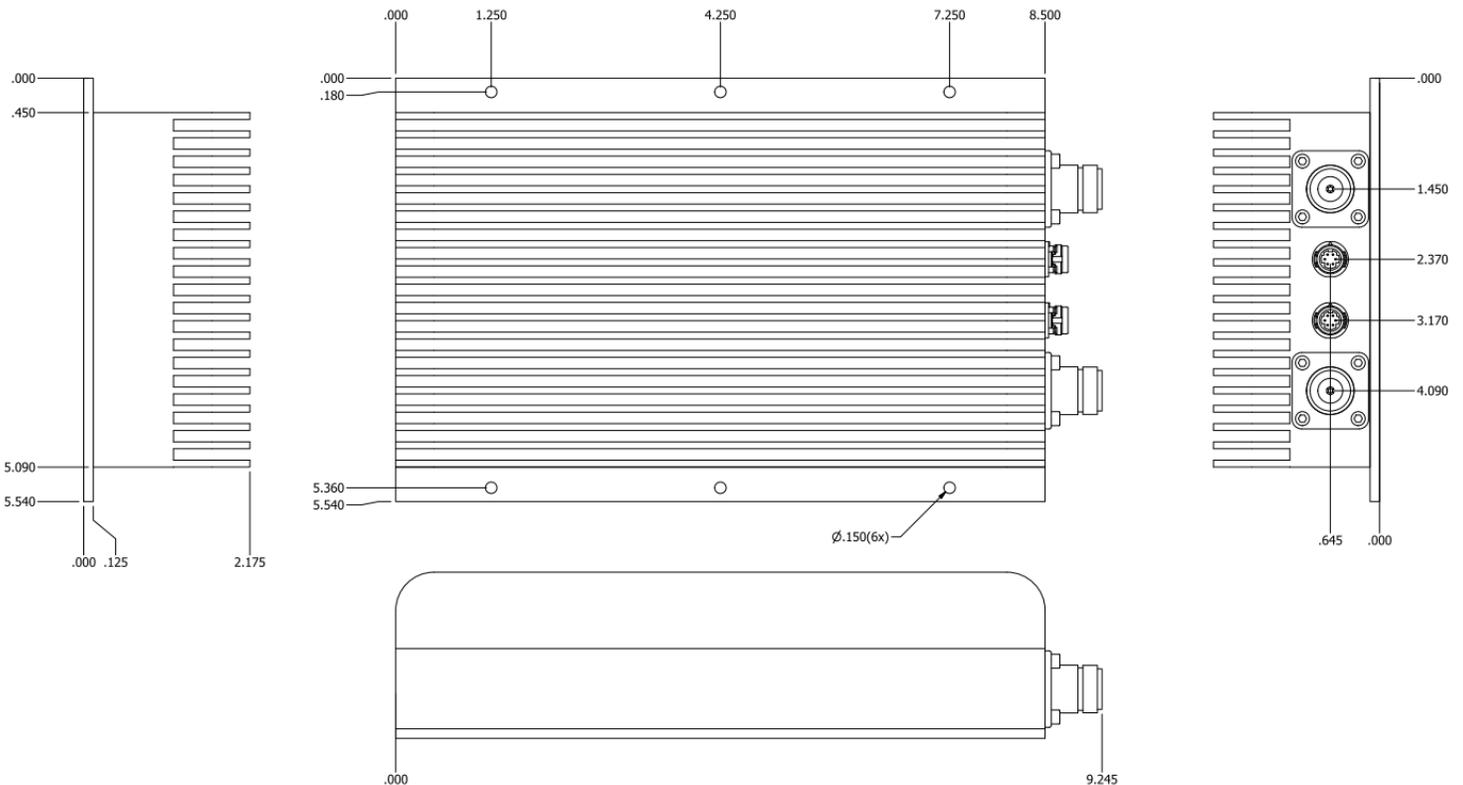
DC / CONTROL PINS

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	Tx/Rx	TTL T/R Control (+5V = Tx / 0V = Rx)
3	REV	Reflected Power Measurement -
4	GND	Detector Ground
5	FWD	Forward Power Measurement -