

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	4000		4200	MHz
P1dB Power Output	46.5	47.0		dBm
PSat Power Output	47.0	47.5		dBm
Gain	46.0	47.0		dB
Gain Flatness		0.5	0.8	dB
OIP3		60.0		dBm
OIP3 Measurement Conditions	2 Tone @36.5 dBm / Tone, 10 MHz Spacing			--
Input Return Loss	14	18		dB
Operating Voltage	12		14	VDC
Current Draw		15.0	17.0	A
Quiescent Current Draw		16.0		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	3.5		dBm
Load VSWR @ P1dB	Open / Short Output Protection		--
PA Baseplate Shutoff Temperature	85		°C

Technical drawing of a 100W LED module, showing three views: top, side, and front. Dimensions are in inches.

Top View Dimensions:

- Horizontal dimensions: .000, 1.250, 4.250, 7.250, 8.500
- Vertical dimensions: .000, .180, 5.360, 5.540
- Bottom hole diameter: $\varnothing.150(6x)$

Side View Dimensions:

- Vertical dimensions: .000, .450, 5.090, 5.540, 2.175
- Bottom hole diameter: $\varnothing.150(6x)$

Front View Dimensions:

- Horizontal dimensions: .000, .125, 2.175
- Vertical dimensions: .000, .645, .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 = $(V_{out} - 0.5V) / 10$
2	I/O	On / Off Control (+5V = On / 0V = Off)
3	REV	Reflected Power Measurement -
4	GND	Detector Ground
5	FWD	Forward Power Measurement -