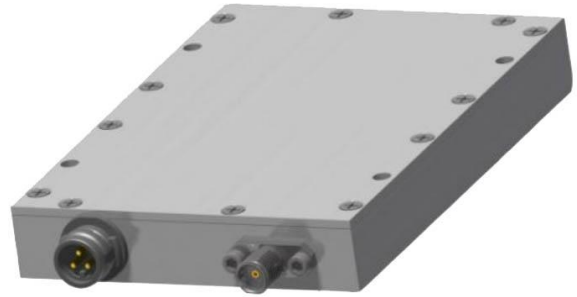


**DESCRIPTION**

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
- Reflected Power Measurement
- Temperature Output
- Manual or Automatic Tx/Rx Switching Available
- Forward Power Measurement
- High Speed T/R Switching Control
- Optional Heatsink

Specifications subject to change without notice. Typical performance at +12VDC at 25°C in a 50Ω system

TX SPECIFICATIONS				
PARAMETER	MIN	TYP	MAX	UNIT
Operating Frequency	3000		4200	MHz
P1dB Power Output	+36.0	+37.0		dBm
Gain		28.0		dB
Gain Flatness		1.0	2.0	dB
Input Return Loss	-14			dB
Operating Voltage	+11	+12	+13	VDC
Current Draw		1.0		A
Tx / Rx Switching Time		1.0	2.0	uS

RX SPECIFICATIONS				
PARAMETER	MIN	TYP	MAX	UNIT
P1dB Power Output		+5.0		dBm
Gain	19.0	20.0		dB
Gain Flatness		1.0	2.0	dB
Noise Figure		3.0	3.0	
OIP3		+15.0		dBm
Input Return Loss	-8	-10		dB
Current Draw		200.0		mA

MECHANICAL		
PARAMETER	VALUE	UNIT
Dimensions (L x W x H)	4.5 x 3.5 x 0.553	in
RF Connectors (Input / Output)	SMA-F / SMA-F	--
DC / Control Connector	Circular Locking	--
Cooling	Baseplate Conduction - Optional Heatsink Available	--
Mounting	4-40 Thru Holes	--
Weight		oz
Weight With Heatsink		oz

ENVIRONMENTAL / PROTECTIONS			
PARAMETER	MIN	MAX	UNIT
Operating Temp. (Housing Temp.)	-40	+85	°C
Storage Temp Range	-60	+100	°C
Humidity Range	0-100		%
Altitude	0-30,000		ft.
Shock / Vibration	MIL-STD-810 and equivalents		--
Max RF Input	+12		dBm
Load VSWR @ P1dB	Open / Short Output Protection		--
PA Baseplate Shutoff Temperature	+90		°C

DC / CONTROL PINS		
PIN LABEL	NAME	DESCRIPTION
1	GND	Ground
2	TEMP	Temp Monitor: $\text{Temp in DegC} = (\text{Vout} - 0.5\text{V}) / 10$
3	Tx/Rx	Tx / Rx Switching (+5V = Tx Amp Active / 0V = Rx Amp Active)
4	FWD	Forward Power Detection
5	REV	Reverse Power Detection
6	+VDC	Supply Voltage - Range Specified in Datasheet

DATA RATE VS. OUTPUT POWER	
OFDM MODULATION	POut (W)
64QAM OFDM	1.26
16QAM OFDM	2.0
QPSK	2.82
BPSK	3.98

See our [application note](#) that describes how this data was taken and how you can apply it to your system

