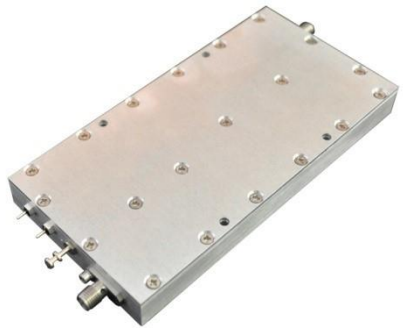
TTRM1012 |700-2700MHz 6W Bi-Directional Amplifier

Bi-Directional Amplifiers

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

Optional Heatsink

High Speed T/R Switching Control

Manual or Automatic Tx/Rx Switching Available

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	700		2700	MHz
P1dB Power Output	+37.0	+38.0		dBm
Gain	36.0	37.0		dB
Gain Flatness		2.0	3.0	dB
Input Return Loss	-11	-12		dB
Operating Voltage	+11	+12	+13	VDC
Current Draw		2.0	3.0	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		
OIP3		+15.0		dBm
Input Return Loss	-8	-10		dB
Current Draw		200.0		mA

Triad RF Systems Inc. | 180 Tices Lane, Building A, Suite 107, East Brunswick, NJ 08816
Tel: 1-(855) 558-1001 x1 | sales@triadrf.com

Bi-Directional Amplifiers

MECHANICAL		
PARAMETER	VALUE	UNIT
Dimensions (L x W x H)	5.75 x 3.5 x 0.553	in
RF Connectors (Input / Output)	SMA-F / SMA-F	--
DC / Control Connector	Feedthru Pins	--
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	+4		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	Tx/Rx	Tx / Rx Switching (+5V = Tx Amp Active / 0V = Rx Amp Active)
3	+VDC	Supply Voltage - Range Specified in Datasheet

DATA RATE VS. OUTPUT POWER	
OFDM MODULATION	POUT (W)
64QAM OFDM	2.0
16QAM OFDM	3.16
QPSK	4.47
BPSK	6.31

See our application note that describes how this data was taken and how you can apply it to your system