Power Amplifiers

TA1053|2000-2300 MHz
16W PA

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
Current Sense
Forward Power Measurement
High Speed On/Off Control
Optional Heatsink

Specifications subject to change without notice. Typical performance at 12.0VDC at 25°C in a 50Ω system

RF / ELECTRICAL				
PARAMETER	MIN	TYP	MAX	UNIT
Operating Frequency	2000		2300	MHz
P1dB Power Output	41.0	42.0		dBm
PSat Power Output	42.0	42.0		dBm
Gain	44.0	45.0	v	dB
Gain Flatness		1.0	0.0	dB
Linear Power		35.0		dBm
Input Return Loss	-20	0		dB
Operating Voltage	11.0	12.0	13.0	VDC
Current Draw		6.0	6.0	A
Quiescent Current Draw		6.0		A
Switching Time			1.0	uS

MECHANICAL		
PARAMETER	VALUE	UNIT
Dimensions (L x W x H)	6x3.5x0.693	in
RF Connectors (Input / Output)	SMA-F / SMA-F	--
DC / Control Connector	7W2 Male	--
Cooling	Baseplate Conduction - Optional Heatsink Available	--
Mounting	4-40 Thru Holes	--
Weight	14	oz
Weight with Heatsink	24	Oz

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

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

DC / CONTROL PINS		
PIN LABEL	NAME	DESCRIPTION
A1	GND	Ground
2	TEMP	Temp Monitor: Temp in DegC = (Vout - 0.5V) / 10
3	Amp Enable	TTL On/Off Low=Enable, High=Disable
4	FWD	Forward Power Measurement
5	REV	Reflected Power Measurement
+VDC	+VDC	Supply Voltage - Range Specified in Datasheet