

TA1137

6000-18000 MHz 1 W Power Amplifier

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

Optional Heatsink

Specifications subject to change without notice. Typical performance at $+12VDC + 25^{\circ}C$, and in a 50Ω system.

RF / ELECTRICAL					
Parameter	Min	TYP.	Max	Unit	
Operating Frequency	6000		18000	MHz	
P1dB Power Output	+29.0	+30.0		dBm	
Gain	34.0	35.0		dB	
Gain Flatness		1.0	2.0	dB ¹	
Input Return Loss	-10	-12		dB	
Operating Voltage	+11	+12	+13	VDC	
Current Draw		1.0	2.0	А	
Switching Time		1.0	2.0	uS	

^{1 –} Gain flatness recorded represents a peak-peak measurement across the **entire operating band**. Gain flatness is typically much lower across significant portions of this band. Consult the gain response plots for details if available.



TA1137 6000-18000 MHz 1 W Power Amplifier

MECHANICAL			
PARAMETER	VALUE	Unit	
Dimensions (L x W x H)	3 x 1.9 x 0.5	in	
RF Connectors (Input / Output)	SMA-F / SMA-F		
DC / Control Connector	Feedthru Pins		
Cooling	Baseplate Conduction - Optional Heatsink Available		
Mounting	2-56 Threaded Holes in Baseplate		
Weight	3	OZ.	
Weight with Heatsink	6	OZ.	

ENVIRONMENTAL / PROTECTIONS				
PARAMETER	Min	Max	Unit	
Operating Temp. (Housing Temp.)	-40	+85	°C	
Humidity Range	0-100		%	
Altitude	0-60,000		ft.	
Shock / Vibration	MIL-STD-810 and equivalents			
Max RF Input	-2		dBm	
PA Baseplate Shutoff Temperature	+ 90		°C	

INPUT/OUTPUT PINS			
AMPLIFIER CONNECTOR TYPE: FEEDTHROUGH PINS		FEEDTHROUGH PINS	
TRIAD CABLE PA	ART NUMBER:	N/A	
PIN NUMBER	LABEL	DESCRIPTION	
1	GND	Ground	
2	+VDC	Supply Voltage - Range Specified in Datasheet	

Configuration Options			
Model Number	Description		
TA1137	No Heat Sink Included		
TA1137 – HS	Standard Heat Sink		
TA1137 – HSF	Heat Sink with Integrated Cooling Fan		
TA1137 – HSX	Custom Heat Sink Configuration		
TA1137 – D0X	Custom Amplifier Configuration (issued by Triad upon customer request)		

