



1780-1820MHz 10W 45dB SOLID STATE POWER AMPLIFIER
MtronPTI P/N: PA7003

FEATURES

- Class AB linear GaN design
- Instantaneous wide bandwidth
- Suitable for all modulations standards
- Built-in protection circuits
- High reliability and ruggedness



ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	1780 - 1820 MHz	
Output Power @ P1dB	10 Watt Min	
Power Gain	45 dB Min	
Power Gain Flatness	1.0 dB p-p Max	Constant input power
Input Return Loss	10 dB Min	Relative to 50 Ohm
Noise Figure	5 dB Max	
2-Tone Intermodulation (IMD)	>30 dBc	32dBm/Tone, Δ = 1MHz
Harmonics 2 nd / 3rd	>20 dBc	At Rated Pout
Non Harmonics Spurious	>60 dBc	
Operating Voltage	28 VDC Nom	
Current Consumption	4.0 Amp Max	At rated Pout
Load VSWR Protection	∞ : 1	

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Case Temperature	-20 to +75 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	5 to 95 %	Non Condensation

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	147 X 69 X 27 mm	Excluding Connectors
Weight	490 gr.	Max Weight
RF Connectors In/Out	SMA female	
DC Power / Interface Connector	9-Pin D-Sub	
Cooling	External Heatsink	Forced air required

D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	FWD	N/C
2	REV	N/C
3	CURRENT SENSOR	I _p @100mV/100mA Typ
4	TEMP SENSOR	V _T @10mV/°C + 500mV Typ
5	SHUTDOWN	TTL
6, 7	VDD	28VDC
8, 9	GND	Ground



2525 Shader Road, Orlando Florida 32804 USA
Phone: 407-298-2000 Fax: 407-293-2979
Website: mtronpti.com NYSE MKT: LGL

1780-1820MHz 10W 45dB SOLID STATE POWER AMPLIFIER
MtronPTI P/N: PA7003

OUTLINE DRAWING

