



AMP5010 SOLID STATE HIGH POWER AMPLIFIER

FEATURES

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

ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	8.175 - 8.210 GHz	
Power Output Psat	400 Watt Min	CW
Power Gain	60 dB Min	
Input Return Loss	14 dB Min	Relative to 50 Ohm
Harmonics	>50 dBc	At rated Pout
2-Tone Intermodulation (IMD)	>25 dBc	50W/Tone, $\Delta = 1\text{MHz}$
Spurious	>60 dBc	Non Harmonics
Power Stability	<0.5 dB / 24 Hours	At 20 °C
Output Noise Spectral Density	<155 dBm / Hz	
Operating Voltage	40 - 42 VDC Nom	
Current Consumption	30 Amp Max	At rated Pout
Max Input Power	8 dBm	Without damage
Load VSWR Protection	$\infty : 1$	O/P Isolator

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Case Temperature	-20 to +75 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	100 %	

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	240 X 180 X 30 mm	Excluding Connectors
Weight	1.3Kg	Typical Weight
RF Connectors In/Out	SMA F / WG CPR-112G	
DC Power / Interface Connector	Hybrid 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 NONITOR	$I_D @ 20\text{mV}/100\text{mA Typ}$
4	TEMP SENSOR	$V_T @ 10\text{mV}/^\circ\text{C} + 500\text{mV Typ}$
5	SHUTDOWN	TTL
A1	VDD	40VDC
A2	GND	Ground

OUTLINE DRAWING

