

FEATURES

Class AB linear GaN design
 High dynamic range
 Suitable for airborne and phase array X-Band pulse applications
 Built-thermal, load VSWR, pulse width, duty cycle protections
 High reliability and ruggedness



ELECTRICAL SPECIFICATIONS

Parameter	Specification			Notes	
Operating Frequency Range	9.1 - 9.9 GHz				
Peak Pulse Output @ Psat	1000 Watt Min				
Power Gain at Peak Power	60 dB Min				
Pulse Characteristics (Max values)	Width	Duty	PRF	Rise/Fall	Droop
	100 μ S	10 %	500 KHz	60 nS Typ	0.8 dB
Max Input Power	+5 dBm			No damage	
Power Gain Flatness	3.0 dB p-p Max				
Input VSWR	1.5 : 1 Max			Relative to 50 Ohm	
Output VSWR	2.0 : 1 Max			Relative to 50 Ohm	
Harmonics	-35 dBc Max @ Psat				
Spurious	-60 dBc Max			Non-harmonics or Gaussian	
Switching Delay Time (Td)	300 nS Typical				
Noise Figure	10 dB Max				
Operating Voltage	42 VDC Nom				
Current Consumption	10 Amp Avg			At 10% Duty-Cycle	
Load VSWR Protection	∞ : 1			Output isolator	

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Note
Operating Case Temperature	-40 to +65 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	5 to 95 %	Non-condensation

MECHANICAL SPECIFICATIONS

Parameter	Specifications	Note
Dimensions	250 x 175 x 50 mm	Excluding Connectors
Weight	4 Kg. Max	
Cooling	External Heatsink	Forced air required
Input / Output Connectors	SMA-F / WG	Type-N optional

I/O INTERFACE

Pin	Function	Test Results
A1	VDD	+42VDC
A2	GND	Ground
P1	N/C	N/C
P2	GATING SIGNAL	TTL "Hi" = Disable Function @ 50mS (Option: 5uS Trigger/Pulse Modulator)
P3	CURRENT MONITOR:	I _D @ 25mV/100mA
P4	TEMP. MONITOR:	10mV/°C + 500mV
P5	SHUTDOWN	TTL HIGH

OUTLINE DRAWING (mm)
