



# AMP4054P SOLID STATE HIGH POWER PULSE AMPLIFIER

## FEATURES

- Rack mounted system
- Class AB linear GaN design
- Suitable for S-Band high power pulse applications
- Built in fast pulse modulator
- Built-in monitoring and protection circuits
- High reliability and ruggedness



## ELECTRICAL SPECIFICATIONS: 50Ω, 25°C

Parameter	Specification			Notes
Operating Frequency	2.8 - 3.6 GHz			
Peak Pulse Power Output	1000 Watt Min			NOTE: 800W Min/1000W Typical from 2.8-2.9 and 3.5-3.6GHz
Power Gain	60 dB Min			
Pulse Characteristics	<b>Width</b>	<b>Duty</b>	<b>Droop</b>	Max rating
	120 μS	10 %	<1 dB	
Pulse Rise / Fall Time	75 nS Max			Nominal Peak Power 10% - 90%
Switching Delay Time (Td)	200 nS Typ			
Power Gain Flatness	3 dB p-p Max			
Input Return Loss	-12 dB Max			Relative to 50 Ohm
Harmonics	-30 dBc Max			
Spurious	-60 dBc Max			Non-harmonics
Operating Voltage	100 - 240 VAC			
Power Consumption	750 Watt Avg			At 1KW Peak Pulse
Input Power Protection	+3 dBm Max			<10 seconds without damage
Load VSWR Protection	∞ : 1			<1 Minute without damage
Pulse Trigger / Modulator Speed	1 μS Max			

## ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Ambient Temperature	0 to +50 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	5 to 95 %	Non-condensing

## MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions W x H x D	430 x 133.3 x 560 mm	3U - Excluding handles
Weight	20 kg.	
RF Connectors In / Out	Type-N Female	
Pulse Gating Input	BNC-F	2.4V ±0.25V switching threshold
AC Power / Interface Connector	IEC 60320-C14 / 9-Pin D-Sub	Or equivalent
Cooling	Built in Fan Cooling	Variable speed
<b>OPTION:</b> Digital LCD Monitor & Control FWD, REV, VSWR, GAIN, ALC, V & I, TEMP	Ethernet RJ-45 TCP/IP, RS422/485, USB Optional GPIB Interface	Optional Remote Bluetooth application
Cooling	Built in Fan Cooling	Variable speed

### D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	Reserved	N/C
2	Reserved	N/C
3	Reserved	N/C
4	TEMP SENSOR	$V_T @ 10\text{mV}/^\circ\text{C} + 500\text{mV Typ}$
5	Reserved	N/C
6	VDD	Internal Power Supply Voltage
7	Reserved	N/C
8, 9	GND	Ground

### OUTLINE DRAWING

