



AMP4003P SOLID STATE HIGH POWER PULSE AMPLIFIER

FEATURES

- High peak power S-Band pulse applications
- High power advanced GaN pulse devices
- Instantaneous bandwidth
- Suitable for linear pulse applications
- Built-in control, monitoring and protection circuits
- High efficiency, reliability and ruggedness



ELECTRICAL SPECIFICATIONS

Parameter	Specification			Notes
Operating Frequency Range	2.7 - 3.0 GHz			
Peak Output Power	10 KWatt Mom			
Pulse Characteristics	Duty	Width	PRF	
	10 %	150 μ Sec	0 - 2 KHz	
Rise / Fall Time	<100 nS			10% to 90%
Input Peak Power for Nominal Output	17 dBm \pm 1.0dB Nom			Power Gain = 53 dB Min
Harmonics	-30 dBc Max			
Spurious	-70 dBc Max			
Power flatness	\leq 1.0 dB			Over operating frequency
Pulse Width Variation (Jitter)	<-70 nS			
Amplitude Pulse Droop	\leq 0.5 dB for 150 μ Sec Pulse \leq 0.1 dB for 10 μ Sec Pulse			
Amplitude Ripple	\leq 0.3 dB			
Phase change along the pulse	\leq 35°, 0 \leq t \leq 5 μ Sec \leq 50°, 5 \leq t \leq 100 μ Sec			
Phase ripple along the pulse	\leq 1°			
Pulse to pulse phase stability	<0.018°			
Pulse Amplitude Stability	<0.0027 dB			
Stability	65 dB			
Input / Output VSWR	1.5 : 1 Min			
Pulse Phase Noise	\leq 100 dBc/Hz @ 1 KHz from carrier			
System Efficiency	15 % Min			

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions W x H x D	18 U	Without cabinet
Weight	115 Kg. Max	Including cabinet
RF Connectors In/Out	Type N-F / Waveguide WR284	Front Panel Standard
RF Output Monitoring FWD / REV	Type N-F	
AC Power	380/220 VAC, 48-64Hz, 3 Phase & Natural	4 Wires
Interface Connector	TBD	
Monitor & Control - OPTIONAL Interface	1 Ethernet RJ-45 circular connector TCP/IP 1 RS422/485 D-dub 9S port for redundancy	Remote Bluetooth application
Cooling	Built in forced air	



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ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Ambient Temperature	-20 to +55°C	
Storage Temperature	-40 to +70°C	
Relative Humidity	95% @ 40°C	Non Condensing
Shock & Vibrations	MIL STD 810E	
EMI/EMC	MIL STD 461E	
Cabinet Emitted Radiation	Residual RF radiation < 5mW/cm ³	Continuous 8 hours exposure

