

AMP40052 SOLID STATE HIGH PULSE POWER AMPLIFIER

FEATURES

Designed for EMI/RFI, lab, HIRF/Pulse applications
 Small form factor rack-mounted system
 Class AB linear advanced technology design
 X-Band Linear high peak pulse applications
 Built-in protection circuits with extensive monitoring
 Local LCD & remote flexible interfaces
 High efficiency with unprecedented reliability and ruggedness
 LEGACY PN: AMP4022DBP-LC-1KW



ELECTRICAL SPECIFICATIONS : 50Ω, 25°C

Parameter	Specification			Notes	
	A	B			
Band				Band switching @ 15 mS Typ	
Operating Frequency Range	8.0 - 10.0 GHz	10.0 - 12.0 GHz			
Power Output @ Pulse	1.0 kW Typ			Peak Pulse	
Input Pulse Characteristics	Width	Duty	PRF	Rise/Fall	Drop
	up to 100 μS	6 % Max	up to 100 KHz	<50 nS Typ	<1 dB
Power Gain	60 dB Min			0dBm or less for rated Pout	
Power Gain Flatness	5.0 dB p-p Max			Constant input power	
Gain Adjustment Range	20 dB Min			Local or remote capable	
Input Return Loss	-10 dB Max				
Output Power On/Off Ratio	-80 dB Min			TTL Gate Control	
Harmonics	< -20 dBc Typ			At rated output power	
Spurious	-60 dBc Max			Non-harmonics	
Operating Voltage	180 - 240 VAC, 50 - 60Hz				
Power Consumption	1000 Watt Avg Max			At rated Pout	
Input Power Protection	+3 dBm Max ¹				
Load VSWR Protection	4 : 1: Max ²			Foldback @ preset limit	
Sample Port (optional)	-60 dB			N-Female	

¹ Units with optional digital monitor and control, for basic units <10 Sec without damage

² Units with optional digital monitor and control, for basic units <1 minute at rated Pout

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Ambient Temperature	0 to +50 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	up to 95 %	Non-condensing
Altitude	3000 meters	
Shock & Vibration	Normal transport ³	

³ MIL Spec available for quotation

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions W x H x D	421 x 442 x 700 mm	10U, excluding handles
Weight	40 kg.	
RF Connectors In/Out/Sample	N-Female / WR90 / N-Female	Front or rear panel
Gate Control	BNC Female	Front panel
AC Power / Interface Connector	IEC60320-14 / D-Sub 9-Pins	Rear panel
Cooling: Built in Quiet-Cool	Close circuit Air-liquid cooling	
OPTIONAL: Digital Monitor & Control (DMC) FWD, REV, VSWR, GAIN, ALC, V & I, TEMP, Optional Safety Interlock (INT)	Ethernet RJ-45 TCP/IP, RS422/485, USB Optional GPIB Interface Open=STBY/Short=RFON	IEEE rear panel BNC-F rear panel

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AVAILABLE SPECIAL OPTIONS

Parameter	Specification	Notes
Option FRS: Forward RF Sample	-60dB, Type N-Female	Front or rear panel
Option RRS: Reflected RF Sample	-50dB, Type N-Female	Front or rear panel
Option GPIB: GPIB remote control	GPIB IEEE-488 Remote capability	
Included CPM: Calibrated Power Monitoring (With purchase of Option DMC)	Offset correction entry for +/- 0.2dB accuracy	9-points standard ⁴

⁴ Consult the factory if additional points are required.

OUTLINE DRAWING SHOWN WITH LCD DIGITAL CONTROLLER

