



AMP3020-1P SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Class AB linear LDMOS design
 Designed for L-Band High Power Pulse applications
 Built-in protection circuits
 High reliability and ruggedness

ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	1030 MHz	Optional 950 - 1250 MHz
Output Power Peak Pulse	2 KW Typ	Pulse
Power Gain	20 - 30 dB Min	
Power Gain Flatness	2.0 dB p-p Max	
Input / Output Return Loss	15 dB / 10 dB Min	
Harmonics	-30 dBc Typ	At rated Pout
Spurious	-60 dBc Max	Non-harmonics
Pulse Width	100 μ S	
Pulse Duty Cycle	10 %	
Pulse Droop	1.0 dB	
Rise & Fall Time	75 nS	
Switching Delay	400 nS Typ	
Noise Figure	10 dB Max	
Operating Voltage	50 VDC Nom	
Current Consumption	15 Amp Avg Max	
Max Input Power Protection	+33 dBm Max	<10 Sec without damage
Load VSWR Protection	5 : 1	<1 minute at rated Pout

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Case Temperature	-30 to +60°C	
Storage Temperature	-40 to +70°C	
Relative Humidity	5 to 95 %	Non-condensation

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	136.4 x 220 x 40 mm	See outline drawings
Weight	-	
RF Connectors In/Out	SMA-F / Type N-F	
DC Power / Interface Connector	7-Pin Hybrid D-Sub	
Cooling	External Heatsink	Forced air required

D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Test Results
A1	VDD	+50VDC
P1	CURRENT MONITOR:	$I_D @ 20mV/100mA$ Typ.
P2	TEMP. MONITOR:	$10mV/^{\circ}C + 500mV$
P3	N/C	N/C
P4	SHUTDOWN	TTL
P5	GND	Ground
A2	GND	Ground

OUTLINE DRAWING

