AMP3045
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Class AB linear LDMOS design
Instantaneous wide bandwidth
Suitable for all modulations standards
Built-in monitoring and protection circuits
High reliability and ruggedness

ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	880 - 940 MHz	
Power Output @ P1dB	30 Watt Min	CW
Power Gain	20 dB Min	
Power Gain Flatness	1.0 dB p-p Max	
Input Return Loss	14 dB Min	Relative to 50 Ohm
2-Tone Intermodulation (IMD)	>30 dBc Typ	34dBm/Tone, Δ = 1MHz
Harmonics	>45 dBc Typ	At rated Pout
Non Harmonics Spurious	>60 dBc	
Operating Voltage	28 VDC	
Current Consumption	4 Amp Max	At rated Pout
Max Input Power	+30 dBm	Without damage
Load VSWR Protection	∞ : 1 Min	
Turn On / Off Speed	5 µSec Max	

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Case Temperature	-20 to +60 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	5 to 95 %	Non Condensation

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	170 X 80 X 24 mm	Excluding Connectors
Weight	400 gr.	Typical Weight
RF Connectors In/Out	SMA female	
DC Power / Interface Connector	9-Pin D-Sub	
Cooling	External Heatsink	Forced air required

D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	FWD	Forward Power Monitor - Analog
2	VVA	Reverse Power Monitors - Analog
3	CURRENT SENSOR	I_D@50mV/100mA Typ
4	TEMP SENSOR	V_T@10mV/°C + 500mV Typ
5	SHUTDOWN	Enable/Disable - TTL
6, 7	VDD	28VDC
8, 9	GND	Ground

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OUTLINE DRAWING