



SOLID STATE HIGH POWER AMPLIFIER

MPH140145MT100M

FEATURES

- Wide Bandwidth
- Low Power Consumption
- Low Noise Figure
- Miniature Sizes for drop-In Assembly
- Hermetically Sealed Package for Military Application

APPLICATIONS

- Microwave Radio & VSAT
- Military & Space
- Test Instrumentation
- Fiber Optics



ELECTRICAL SPECIFICATIONS@25°C:

Parameter	Min	Typical	Max	Units
Frequency Range	14		14.5	GHz
Small Signal Gain	45			dB
Small Signal Gain Flatness			±1	dB
Input signal Range	0		10	dBm
Output Power 1dB compression	50			dBm
Spurious	-45			dBc
VSWR Input/output			2:1	Ratio
DC Power Supply		28		Volt
Current		50		A

ENVIRONMENTAL RATINGS:

Parameter	Min	Typical	Max	Units
Max Input power			+25	dBm
Operating Temperature	-55		+85	°C
Non-operating Temperature	-65		+125	°C
Relative humidity (non-condensing)		95		%
Altitude (MIL-STD-810F)	10000		30000	feet
Shock / Vibration (MIL-STD-810F)		Airbone		

PROTECTIONS:

Input Power Overdrive	+10 dBm	Max
Load VSWR	∞ @ all load phase & amplitude for duration of 1 minute 3:1 @ all load phase & amplitude continuous	Nom
Thermal Overload	85°C shutdown	Max



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MECHANICAL SPECIFICATIONS:

Parameter	Value	Limits	Units
Dimensions	TBD	Max	Millimeter
Weight	TBD	Max	gram
RF Connectors Input	SMA-F		
RF Connectors output	SMA-F		
Impedance	50		ohms

INTERFACE CONNECTION:

Pin #	Description	Specifications
1	GND	Ground
2	+12 VDC	+11 to ± 1 VDC
3	Shutdown	Amplifier Enable: TTL "Low" or Open Amplifier Disable: TTL "High"

OUTLINE DRAWING(mm):

TBD