



communications

Electron Devices

M1125

Ka-Band Microwave Power Module (MPM)

Features

- **40 Watts Output Power**
- **240 Cubic Inches**

Performance Characteristics

Frequency.....	27.5 to 31.5 GHz
RF Output Power.....	40 Watts (min)
RF Input Power.....	14 ± 2 dBm
Small Signal Gain.....	45 dB (min)
Gain Var. Vs. Freq.....	2.0 dB/500 MHz (max)
Intermodulation.....	-24 dBc@ 7dB backoff
Noise Power Density	-85 dBW/4 KHz
Group Delay	2 nsec pk-pk (max)
Harmonics	-12 dBc (max)
AM/PM Conversion.....	6°/dB (max)
Spurious	-60 dBc (max)
Phase Noise	-50 dBc (max)

Environment

Temperature	-30 to +70° C
Cooling	Conduction
Altitude.....	15,000 ft
Humidity.....	Up to 95%
Shock & Vibration	Normal Transportation

Mechanical Description

Dimensions.....	12.0" x 10.0" x 2.0"
.....	305mm x 255 mm x 50mm
Weight	12 lbs/5.3 kgs. (max)
RF Input Connector	2.9mm
RF Output Connector	WRD-180
DC Input	15 Pin D-Subminiature



The M1125 represents the state of the art in low noise, compact, high efficiency, RF amplifiers for satellite communications. This MPM contains a TWT and power supply within a single conduction-cooled package for indoor or outdoor use. DS11251102

Interface

Prime Power	90-260VAC 50/60Hz
	Single Phase with power
	Factor correction, 300W max.
Controls	Standby/Operate
	RF On
Indicators	Warm-up Complete
	Operate
	Fault
Monitor	Helix Current
Low Voltage Output.....	+5V, 75mA

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