



communications

Electron Devices

M1040

Millimeter Microwave Power Module

Features:

- **20-60 Watts Output Power**
- **Up to 25% Efficiency**
- **240 Cubic Inches**

Performance Characteristics

Frequency	18.0 to 40.0 GHz
RF Output Power	20 Watts (min)
RF Input Power	7 to 14 dBm
Small Signal Gain	50 dB (min)
PRF	Up to 10 KHz
Harmonics	-2dBc @ 18GHz
AM/PM Conversion	6°/dB (max)
Spurious	-50 dBc (max)
Spectral Purity	-50 dBc (max)

Environment

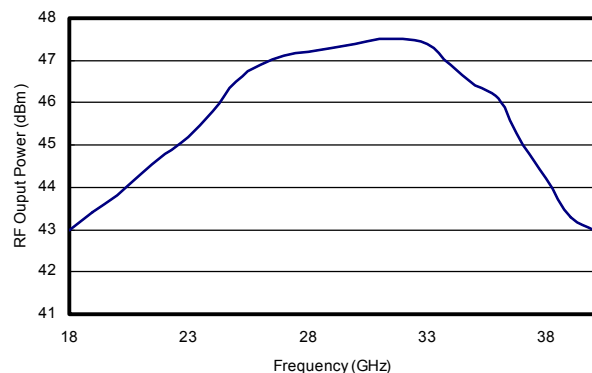
Temperature	-30 to +70° C
Cooling	Conduction
Altitude	25,000 ft
Humidity	Up to 95% with condensation
Shock	10g, 11 msec
Acceleration	10 g's
Vibration	0.1g ² /Hz from 5 to 20 Hz
.....	0.02g ² /Hz from 20 to 2 KHz

Interface

Prime Power	90–260VAC 50/60 Hz,
.....	single phase with power
.....	factor correction, 350 Watts (max)
Controls	Standby/Operate/RF On
Indicators	Warm-up Complete
.....	Operate
.....	Fault
Monitor	Helix Current
Low Voltage Output	+5 V, 75 mA



The M1040 represents the state of the art in low noise, compact, high efficiency, wideband RF amplifiers for instrumentation and simulator applications. This MPM contains a TWT and power supply within a single conduction-cooled package for a variety of platforms. DS1040103



Mechanical Description

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

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