



communications

Electron Devices

M1020

High Band Microwave Power Module

Features:

- **60-100 Watts Output Power**
- **20 - 35% Efficiency**
- **200 Cubic Inches**

Performance Characteristics

Frequency	6.0 to 18.0 GHz
RF Output Power	60 Watts (min)
RF Input Power	20 to 30 dBm
Small Signal Gain.....	30 dB (min)
PRF	up to 10 KHz
Harmonics @ 6 GHz	-3 dBc (max)
@ 8 GHz	-5 dBc (max)
@10 GHz	-11 dBc (max)
AM/PM Conversion	6°/dB (max)
Spurious	-50 dBc (max)
Spectral Purity	-50 dBc (max)

Environment

Temperature.....	-30 to +70° C
Cooling	Conduction
Altitude	15,000ft.
Humidity	Up to 95%, with condensation
Shock	10 g, 11 msec
Acceleration	10 g's
Vibration	0.1 g ² /Hz from 5 to 20 Hz
.....	0.02 g ² /Hz from 20 to 2 KHz

Mechanical Description

Dimensions	10.3" x 9.6" x 2.0"
Weight	9.9 lbs/4.5 kgs. (max)
RF Input Connector	SMA
RF Output Connector	TNC
DC Input	15-Pin D-Subminiature

Interface

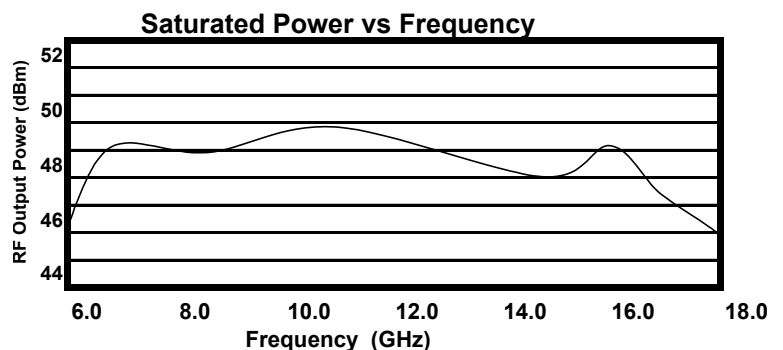
Prime Power	90-260VAC 50/60 Hz, Single phase with power factor correction, 375 Watts (max.)
Controls	Standby/Operate RF On
Indicators	Warm-up Complete Operate Fault
Monitor.....	Helix Current
Low Voltage Output.....	+5V, 75mA



The M1020 represents the state of the art in low noise, compact, high efficiency, RF amplifiers for instrumentation and simulation applications. This MPM contains a TWT and power supply within a single conduction-cooled package for a variety of platforms.

NOTE: A built-in SSA with equalizer which provides for 0 ± 1 dBm input power is optional at additional cost. Also optional is a modulator with a PRF up to 10 KHz.

DSM10200703



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