



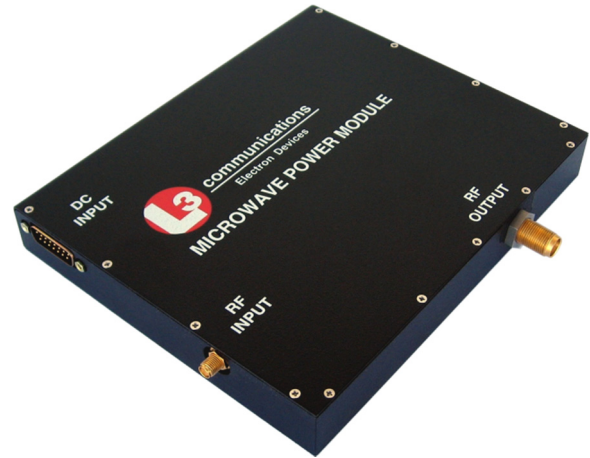
Electron Devices

M1220

High Band

Microwave Power Module

- **Features**
- **60 W to 75 W output power**
- **20 to 35% efficiency**
- **<50 cubic inches**



Performance

Frequency.....	6.0 GHz to 18.0 GHz
RF Output Power.....	60 W to 75 W min
RF Input Power.....	0 $\pm$ 1 dBm
Small Signal Gain.....	50 dB min
PRF	50 kHz max
Harmonics @ 6 GHz.....	-3 dBc max
@ 8 GHz.....	-5 dBc max
@10 GHz.....	-11 dBc max
AM/PM Conversion.....	6°/dB max
Spurious	-47 dBc max
Spectral Purity	-45 dBc max
Noise Power Density	-38 dBm/MHz max

Interface

Prime Power, operating.....	270 VDC
	375 W max
Prime Power, standby	40 W max
Controls	Standby/Operate, Radiate
Digital Indicators	Warm-up Complete Indicator
	Fault Indicator
	High Voltage Indicator
Analog Monitor	Helix Current

L-3's M1220 represents the state of the art in low noise, compact, high efficiency, wideband RF amplifiers for airborne, shipboard, and ground military applications. This MPM contains a TWT, an SSA and power supply within a single conduction-cooled package.

Environment

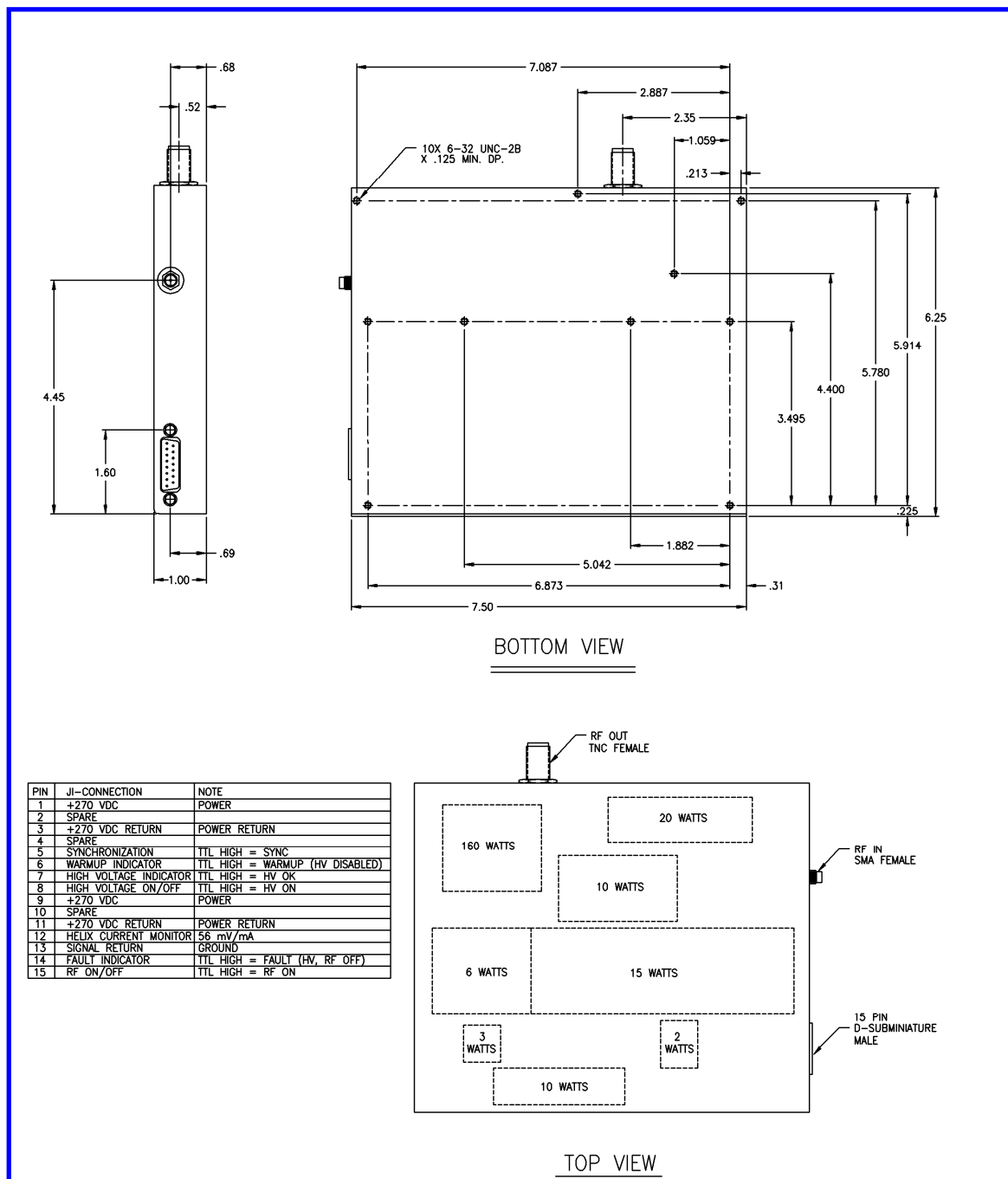
Temperature.....	-54 °C to +85 °C
Underneath TWT Collector.....	+95 °C max
Cooling	Conduction
Altitude	70,000 ft.
Humidity	Up to 100%, with condensation
Shock	20 g, 11 msec
Acceleration.....	10 g
Vibration	0.04 g ² /Hz from 80 Hz to 350 Hz
	-3dB/octave 20 Hz to 80 Hz
	-3dB/octave 350 to 2000 Hz

Mechanical Description

Dimensions.....	7.5 in. L x 6.25 in. W x 1.0 in. H
Weight	3.75 lb. max
RF Input Connector	SMA
RF Output Connector	TNC
DC Input	15-Pin D-Subminiature

This document consists of basic marketing information that is not defined as technical data under EAR Part 772.

M1220 Outline Drawing



Current detailed outline drawings are available on request. Specifications and features are subject to change without notice.



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