L3’s M1225 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 a power supply within a single conduction-cooled package.

**KEY FEATURES**
- 6.0 GHz to 18.0 GHz
- 100 W to 125 W output power
- Less than 87 cubic inches

**PERFORMANCE**

<table>
<thead>
<tr>
<th>Frequency (GHz)</th>
<th>RF Output Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.0 GHz to 7.9 GHz</td>
<td>100 W min</td>
</tr>
<tr>
<td>7.9 GHz to 15.5 GHz</td>
<td>125 W min</td>
</tr>
<tr>
<td>15.5 GHz to 18.0 GHz</td>
<td>100 W min</td>
</tr>
<tr>
<td>RF Input Power</td>
<td>0 ± 1 dBm</td>
</tr>
<tr>
<td>Small Signal Gain</td>
<td>55 dB min</td>
</tr>
<tr>
<td>PRF</td>
<td>30 kHz max</td>
</tr>
<tr>
<td>Harmonics @ 6 GHz</td>
<td>-4 dBC max</td>
</tr>
<tr>
<td>AM/PM Conversion</td>
<td>6 °/dB max</td>
</tr>
<tr>
<td>Spurious</td>
<td>-45 dBC max</td>
</tr>
<tr>
<td>Noise Power Density</td>
<td>-37 dBM/MHz max</td>
</tr>
</tbody>
</table>

**INTERFACE**
- Prime Power, operating: +28 VDC ± 3 VDC
- Prime Power, standby: 50 W max
- Controls: High-voltage on/off
- RF on/off
- Battle override
- Synchronization
- Digital Indicators: Warm-up complete indicator, Fault indicator, High-voltage indicator
- Analog Monitor: Helix current

**ENVIRONMENT**
- Temperature: -54 °C to +85 °C
- Cooling: Conduction
- Altitude: Up to 50,000 ft.
- Humidity: Up to 100%, with condensation
- Shock: 20 g, 11 ms
- Acceleration: 10 g
- Vibration: +3 dB/octave from 20 Hz to 80 Hz
- 0.04 g2/Hz from 80 Hz to 350 Hz
- -3 dB/octave from 350 Hz to 2,000 Hz

**MECHANICAL DESCRIPTION**
- Dimensions: See outline
- Weight: 6.5 lb. max
- RF Input Connector: SMA female
- RF Output Connector: TNC female
- Control Input Connector: 15-pin D-Sub female
- Power Input Connector: 15-pin D-Sub male
M1225
MICROWAVE POWER MODULE

OUTLINE DRAWING
(measurements in inches)

This document consists of basic marketing information that is not defined as technical data under EAR Part 772. Data, including specifications, contained within this document are summary in nature and subject to change at any time without notice at L3's discretion. Call for latest revision.

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L3 Electron Devices
3100 West Lomita Blvd.
Torrance, CA 90505
Tel: 310.517.6000
EDD.sales@L3T.com
www.L3T.com/edd