TYPICAL CHARACTERISTICS ON
LM-0518-10-1W-SHS-2-F

DESIGNED BY:
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REPORTED BY:
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TYPICAL CHARACTERISTICS
ON
LM-0518-10-1W-SHS-2-F

DESCRIPTION:
PLANAR MONOLITHICS INDUSTRIES MODEL NUMBER
LM-0518-10-1W-SHS-2-F IS A HIGH POWER LIMITER THAT
OPERATES FROM 500 MHz TO 18 GHz THAT HANDLES 100 WATTS
PEAK POWER WITH A PULSE WIDTH OF 1 µS.

SPECIFICATIONS:
- FREQUENCY: 500 MHz to 18 GHz
- INSERTION LOSS:
  VSWR: 20 dB (Max)
  OMINUM: +14 dBm (Max)
  PEAK: +10 dBm (Typ)
- LEAKAGE:
  I @ 1 WATT
- PIN INHIBIT:
  SMA FEMALE
- CONNECTOR (OUTPUT):
  SMA FEMALE
- SIZE:
  1.00 x 1.00 x 0.40 (H)
- WEIGHT:
  1.5 OZ. MAXIMUM
- FINISH:
  PAINTED BLUE

ENVIRONMENTAL RATING:
- TEMPERATURE:
  +5°C TO +60°C (OPERATING)
  +65°C TO +125°C (STORAGE)
- HUMIDITY:
  MIL-STD-202F, METHOD 103B, CORRO. B
- SHOCK:
  MIL-STD-202F, METHOD 213B, CORRO. B
- VIBRATION:
  MIL-STD-202F, METHOD 204F, CORRO. B
- ALTITUDE:
  MIL-STD-202F, METHOD 105C, CORRO. B
- TEMPERATURE CYCLE:
  MIL-STD-202F, METHOD 107D, CORRO. A

NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISED.
SPECIFICATIONS MAY VARY OVER TEMPERATURE.

7311-F Grove Road, Frederick, MD 21704 USA Phone: (301)662-5019 Fax: (301)662-1731
email: sales@pmi-rf.com
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<table>
<thead>
<tr>
<th>TEST ITEM NO.</th>
<th>PARAMETERS</th>
<th>SPECIFIED VALUE</th>
<th>MEASURED VALUE</th>
<th>REMARKS QA/QC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Frequency Range:</td>
<td>500 MHz to 18 GHz</td>
<td>500 MHz to 18 GHz</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Insertion Loss @ -20dBm:</td>
<td>2.0dB Max.</td>
<td>1.5dB</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Peak Power:</td>
<td>100 Watts, 1 uSec. Pulse, 0.1% Duty Cycle</td>
<td>Pass by Design</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Leakage @ 1 Watt CW:</td>
<td>+14dBm Max.</td>
<td>+12dBm Max.</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>VSWR @ -20dBm:</td>
<td>2.0:1 Max.</td>
<td>1.96:1</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Recovery Time:</td>
<td>50ns Typ.</td>
<td>40ns</td>
<td></td>
</tr>
</tbody>
</table>

**Insertion Loss and Return Loss @ -20dB**
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Limiter Response with Frequency

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ON Recovery – 10ns per Div.
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OFF Recovery – 10ns per Div.

Purple Trace: RF Pulse @ 1W
Yellow Trace: Limiter output