**LP-BTR Series**

- DC Blocked for Maximum Surge Protection
- Multi-Strike Capability
- Broadband Performance from 20MHz up to 1000MHz
- Exceptional RF Characteristics
- Solid Brass Construction for Durability and Long Life
- Universal Grounding Bracket for Flange or Bulkhead Installations

The Times Protect® LP-BTR high performance surge arrester series addresses applications in the 20MHz-1000MHz spectrum. Our unique DC blocking technology employed in this design provides optimum isolation of the antenna port from the protected equipment port for maximum surge protection. LP-BTR surge protectors have exceptional RF performance and are constructed from the highest quality materials for unsurpassed durability and longevity. These units meet and surpass all applicable industry standards.

The LP-BTR product family is available with N connector configurations to satisfy various installation requirements.

**LP-BTR Series:**

- LP-BTR-NFF
  N Female connectors on surge and protected sides

- LP-BTR-NMP
  N Male connector on protected side with N Female connector on surge side

- LP-BTR-NMS
  N Male connector on surge side with N Female connector on protected side
**Times-Protect®**

**Electrical Specifications**

- **Impedance**: 50 Ω
- **Frequency Range**: 20-1000 MHz
- **VSWR/Return Loss**: <1.1:1 / <-26dB
- **Insertion Loss**: < 0.1dB
- **Impulse Discharge Current**: 10KA multiple (8x20µs wave-form)
- **Turn-on Voltage**: 600V ± 20%
- **Turn-on Time**: 2.5ns for 2kJ/ns
- **Energy Throughput Rating**: <200µJ (4kJ/2kA 1.25x50/8x20µs wave-form)
- **Power Handling at Frequency**
  - 375W (20-220MHz)
  - 125W (220-700MHz)
  - 50W (700-1000MHz)
- **Protection Circuit**: DC Blocked

**Mechanical / Environmental Specifications**

- **Temp Range Storage/Operating**: -40°C - +85°C / -40ºC - +50ºC
- **Weatherization**: Required for external use
- **Thermal Shock**: US MIL-STD 202, Meth.107, Cond.B
- **Vibration**: US MIL-STD 202, Meth.204, Cond.B
- **Shock**: US MIL-STD 202, Meth.213, Cond.I
- **RoHS Compliant**: Yes
- **Mating Life Cycle**: > 500
- **Recommended Coupling Nut Torque**: 7 to 10 lb-in
- **Unit Weight**: 0.25kg/pc / 0.55lb

**Material Specifications**

<table>
<thead>
<tr>
<th>Component</th>
<th>Material</th>
<th>Plating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body</td>
<td>Brass</td>
<td>White Bronze</td>
</tr>
<tr>
<td>Inner Conductor Male</td>
<td>Brass</td>
<td>Silver</td>
</tr>
<tr>
<td>Inner Conductor Female</td>
<td>Phosphor Bronze</td>
<td>Silver</td>
</tr>
<tr>
<td>Outer Conductor</td>
<td>Brass</td>
<td>White Bronze</td>
</tr>
<tr>
<td>Coupling Nut</td>
<td>Brass</td>
<td>White Bronze</td>
</tr>
<tr>
<td>Insulator</td>
<td>PTFE</td>
<td>--</td>
</tr>
</tbody>
</table>

*All dimensions shown in inches*

**Typical Return Loss** (dB) vs Frequency

**Typical Insertion Loss** (dB) vs Frequency

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