**197 Series High Frequency Reactors**

**197M5**

**Features:**
- High permeability core ideal for applications <50Khz
- High self-resonant frequency values
- Rugged construction with aluminum base and stainless steel band
- Open-style terminal for maximum versatility
- Weight: 16.0 lbs

**ELECTRICAL SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Typical</th>
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</thead>
<tbody>
<tr>
<td>Inductance with bias</td>
<td>25mH ±15% @ 5ADC</td>
</tr>
<tr>
<td>Operating Frequency</td>
<td>60Hz – 10KHz</td>
</tr>
<tr>
<td>Self-Resonant Frequency</td>
<td>72.4 KHz</td>
</tr>
<tr>
<td>Impedance @ SRF</td>
<td>201K Ohms</td>
</tr>
<tr>
<td>Ripple Current</td>
<td>20% peak-to-peak</td>
</tr>
<tr>
<td>DCR</td>
<td>403mΩ ±15% @20°C</td>
</tr>
<tr>
<td>Dielectric Strength</td>
<td>2500V RMS</td>
</tr>
<tr>
<td>Temperature Range</td>
<td>-40 To 105°C</td>
</tr>
<tr>
<td>Core material</td>
<td>Carbonyl Iron Powder</td>
</tr>
</tbody>
</table>

**DIMENSIONAL DETAILS:**

![Diagram of 197M5 Reactor Dimensions]
**PERFORMANCE GRAPHS:**

**Inductance Vs DC Bias Current**

- **Voltech DC1000A** Precision DC Bias Current Source
- **Wayne Kerr 3255B** with a 3265B Inductance Analyzer
- **Agilent E4980A** Precision LCR Meter
- **HP 4192A LF Impedance Analyzer**
- **Keithley 2010 DVM**

1. Performance graphs @2.0 volt AC drive.
2. Power loss computation from core manufacturer’s data.
3. The results are typical and are subject to normal manufacturing and electrical tolerances.
4. Dimensional tolerance ±0.063".

**Quality Factor**

**Impedance Vs DC Bias Current**

**Power Loss @ 10KHz 5ADC**

Release 1: 31/07/2020