Features
- Low Ripple
- High Rejection
- Low Loss

Description
Surface mount, silver (Ag) coated ceramic filter. Developed for use in GSM repeater and base station applications, CTS Monoblock LR Series Filters are designed to minimize ripple and maximize rejection.

Weight: 12.25 grams typical

Material: Filter is composed of a ceramic block coated with Ag and a shield made of nickel silver plated steel.

Filter complies with RoHS standards.

Electrical Specifications

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Frequency (MHz)</th>
<th>Typical @ 25°C</th>
<th>Spec. @ 25°C</th>
<th>Spec. Over -40°C to +85°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical Response</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Passband Insertion Loss</td>
<td>935 - 960</td>
<td>2.0 dB</td>
<td>2.3 dB</td>
<td>2.5 dB</td>
</tr>
<tr>
<td>Passband Return Loss</td>
<td>935 - 960</td>
<td>13.0 dB</td>
<td>10.0 dB</td>
<td>10.0 dB</td>
</tr>
<tr>
<td>Attenuation:</td>
<td>890 - 915</td>
<td>53.0 dB</td>
<td>50.0 dB</td>
<td>50.0 dB</td>
</tr>
<tr>
<td>Power into any port</td>
<td>980</td>
<td>33.0 dB</td>
<td>30.0 dB</td>
<td>30.0 dB</td>
</tr>
</tbody>
</table>

Note: Supplier shall test each filter to the critical electrical specifications of the above table. Any subsequent audits may deviate from in value due to measurement repeatability among different test systems. Such deviations shall not exceed the following limits:

**Specification Allowance**

- Insertion Loss: 0.1 dB
- Return Loss: 1.0 dB
- Stopbands: 1.0 dB

<This product is covered by one or more of the following U.S. and foreign patents including: US 4,692,726; US 4,742,562; US 4,800,348; US 4,829,274; US 5,146,193; EP 0573597; DE 0573597; FR 0573597; JP 0573597; US 5,162,760; US 5,218,329; US 5,250,916; US 5,327,100; US 5,488,338; CA 2114099; FR 0906207; GB 2723393; JP 3205337; KR 115113; CN 9310628; 4; US 5,512,866; EP 0706719; DE 0706719; FR 0706719; GB 0706719; CN 94910369.4; US 5,602,518; US 5,721,520; US 5,745,018; EP 0910875; DE 0910875; KR 0910875; IE 0910875; JP 0910875; DK 0910875; FR 0910875; GB 0910875; IE 0910875; JP 0910875; CA 323813; US 5,984,578; US 6,462,629; CN 0010420; 4; US 6,550,202; US 6,558,735; US 6,650,202; US 6,630,402. Other US and foreign patents pending.>

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CER0233A
947.5 MHz Monoblock LR Series BPF

Rev 0 – Origin Date: July 11, 2005 – Revision Date: July 11, 2005

**Mechanical Drawing**

**Electrical response**

**Packaging and Marking**

<table>
<thead>
<tr>
<th>DIMENSION</th>
<th>UNITS</th>
<th>SPECIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>REEL DIAMETER</td>
<td>mm</td>
<td>330</td>
</tr>
<tr>
<td>REEL WEIGHT</td>
<td>kg</td>
<td>3.7</td>
</tr>
<tr>
<td>REEL QUANTITY</td>
<td>ea.</td>
<td>250</td>
</tr>
</tbody>
</table>

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**Board Layout**

- Filter Outline
- Exposed Conductor
- Solder Resist Over Dielectric
- Solder Resist Over Conductor

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**Customer Feed Direction**

- CTS
- 233
- YMW