Features
- Low Ripple
- High Rejection
- Low Loss

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

Weight: 4.7 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>Specification @ 25°C</th>
<th>Spec. over -40°C to +85°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passband Insertion Loss</td>
<td>1710-1785</td>
<td>1.7 dB</td>
<td>2.0 dB</td>
<td>2.3 dB</td>
</tr>
<tr>
<td>Passband Ripple</td>
<td>1710-1785</td>
<td>0.6 dB</td>
<td>0.8 dB</td>
<td>1.0 dB</td>
</tr>
<tr>
<td>Passband Return Loss</td>
<td>1710-1785</td>
<td>12.5 dB</td>
<td>10.0 dB</td>
<td>10.0 dB</td>
</tr>
<tr>
<td>Attenuation</td>
<td>1805-1880</td>
<td>18 dB</td>
<td>15.0 dB</td>
<td>15.0 dB</td>
</tr>
<tr>
<td></td>
<td>1690</td>
<td>18 dB</td>
<td>15.0 dB</td>
<td>15.0 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 5,146,103; EP 0573597; DE 0573597; FR 0573597; JP 508149/02; KR 142171; US 5,162,760; US 5,162,760; US 5,218,325; US 5,250,916; US 5,327,100; US 5,488,335; CA 2114029; FR 5006257; GB 2273393; JP 5010373; KR 115113; CN 93106228.4; US 5,512,896; EP 0706719; DE 0706719; FR 0706719; GB 0706719; CN 95190359.4; US 5,602,518; US 5,721,520; US 5,745,018; EP 0910875; DE 0910875; DK 0910875; FR 0910875; GB 0910875; IE 0910875; JP 0910875; TA 10-323013; US 5,944,978; US 6,462,829; CN 00810420.4; US 6,559,735; US 6,650,202; US 6,825,450; Other US and foreign patents pending.

<CTS Corporation 2006 reserves all copyrights in the layout, design and configuration of the patterns on this product.>
**Mechanical Drawing**

- **Input**
- **Output**

**Electrical response**

- Graph showing electrical response against frequency.

**PCB Layout**

- Diagram showing PCB layout with various layers and designations.

**Packaging and Marking**

- Diagram showing packaging and marking details.

**Mechanical Drawing**

- Diagram showing mechanical components and dimensions.

**Table**

<table>
<thead>
<tr>
<th>Dim</th>
<th>Nominal (mm)</th>
<th>Tolerance (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>16.42</td>
<td>+/- max</td>
</tr>
<tr>
<td>B</td>
<td>4.2</td>
<td>0.13</td>
</tr>
<tr>
<td>C</td>
<td>5.3</td>
<td>0.13</td>
</tr>
<tr>
<td>D</td>
<td>4.85</td>
<td>max</td>
</tr>
<tr>
<td>E</td>
<td>6.3</td>
<td>max</td>
</tr>
<tr>
<td>F</td>
<td>0.51</td>
<td>0.13</td>
</tr>
<tr>
<td>G</td>
<td>0.51</td>
<td>0.13</td>
</tr>
<tr>
<td>H</td>
<td>1.02</td>
<td>0.13</td>
</tr>
<tr>
<td>I</td>
<td>1.02</td>
<td>0.13</td>
</tr>
<tr>
<td>J</td>
<td>7.4</td>
<td>max</td>
</tr>
</tbody>
</table>

**Customer Feed Direction**

- Diagram showing customer feed direction.

**Packaging and Marking**

- Diagram showing packaging and marking details.

**Dimensions**

- | DIMENSION  | UNITS | SPECIFICATION |
-|------------|-------|---------------|
-| REEL DIAMETER | mm    | 330           |
-| REEL WEIGHT   | kg    | 3.1           |
-| REEL QUANTITY  | ea.   | 500           |

**Technical Specifications**

- Reel Diameter: 330 mm
- Reel Weight: 3.1 kg
- Reel Quantity: 500 ea.

- **Model No.**
  - CER0242A

- **Dimensions**
  - W₀: 12.0 (1.260) mm
  - A₀: 7.45 (0.299) mm
  - B₀: 16.7 (0.657) mm
  - K₀: 5.10 (0.201) mm
  - P₀: 12.0 (-0.472) mm