

### Features

- Low Loss
- High Rejection
- Low Ripple

### Description

Surface mount, Silver (Ag) coated barium ceramic filter. Developed for use in 800 MHz infrastructure applications.

Weight: 4.7 grams typical

Material: Filter is composed of a ceramic block plated with Ag.

Filter complies with RoHS standards.



### Electrical Specifications

| Parameter            | Frequency (MHz) | Typical @ 25°C | Spec. Over 0°C to +70°C |
|----------------------|-----------------|----------------|-------------------------|
| Insertion Loss       | 869 - 894       | 1.1 dB         | 1.6 dB max              |
| Return Loss @ Port 1 | 869 - 894       | 12.0 dB        | 10.0 dB min             |
| Return Loss @ Port 2 | 869 - 894       | 12.0 dB        | 10.0 dB min             |
| Passband Ripple      | 869 - 894       | 0.2 dB         | 0.5 dB max / 3.75 MHz   |
| Attenuation:         | 729 - 754       | 40.0 dB        | 35.0 dB min             |
|                      | 824 - 849       | 17.0 dB        | 14.0 dB min             |
| Power into any port  |                 | 2 Watt max     |                         |

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:

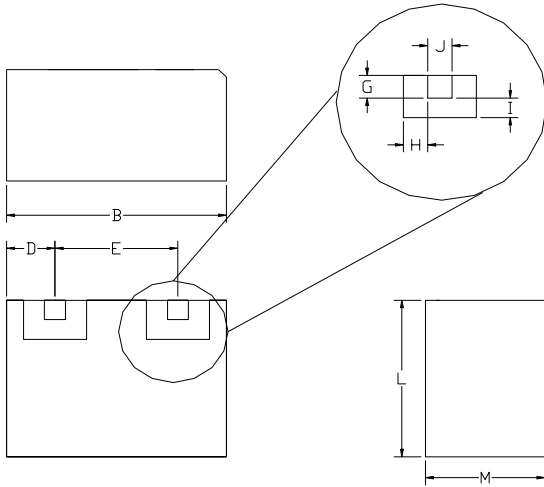
| Specification Allowance |        |
|-------------------------|--------|
| Insertion Loss          | 0.1 dB |
| Return Loss             | 1.0 dB |
| Stopbands               | 1.0 dB |

\*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 508149/92;KR 142171;US 5,162,760;US 5,218,329;US 5,250,916;US 5,327,109;US 5,488,335;CA 2114029;FR 9306297;GB 2273393;JP 3205337;KR 115113;CN 93106228.4;US 5,512,866;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 505182/98;KR 10-323013;US 5,994,978;US 6,462,629;CN 00810420.4;US 6,559,735;US 6,650,202;US 6,834,429. Other US and foreign patents pending.

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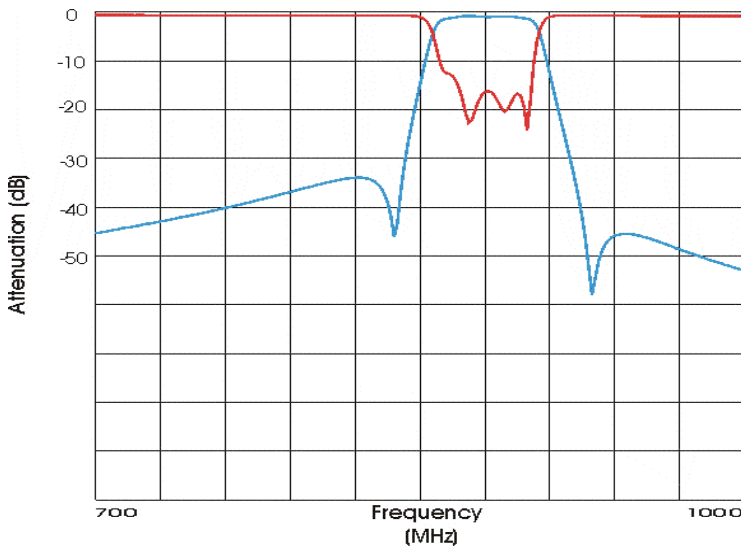
### Mechanical Drawing

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

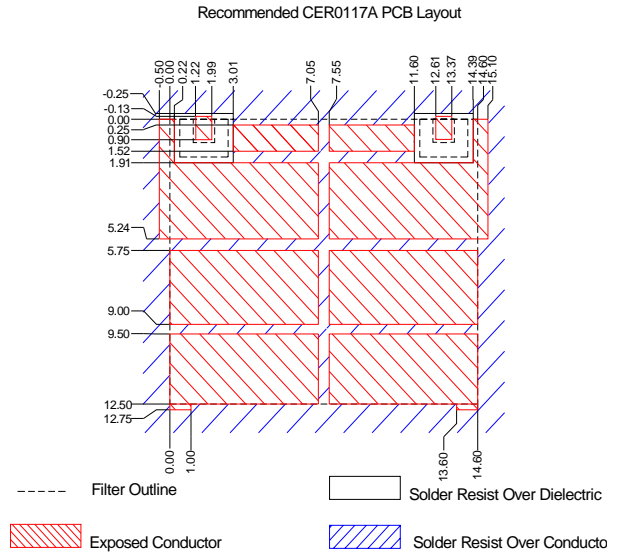


| Dim | Nominal (mm) | Tolerance (mm)<br>+/- or max |
|-----|--------------|------------------------------|
| A   |              |                              |
| B   | 14.74        | max                          |
| C   |              |                              |
| D   | 1.61         | 0.13                         |
| E   | 11.38        | 0.13                         |
| F   |              |                              |
| G   | 1.02         | 0.13                         |
| H   | 0.64         | 0.13                         |
| I   | 0.64         | 0.13                         |
| J   | 1.02         | 0.13                         |
| K   |              |                              |
| L   | 12.32        | max                          |
| M   | 6.00         | max                          |

### Electrical response

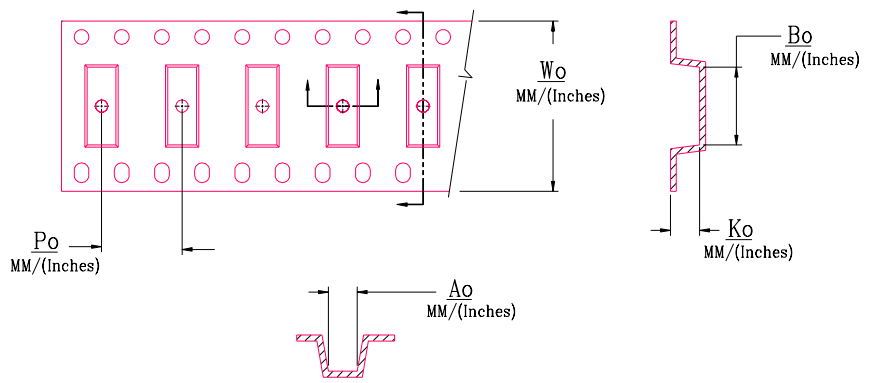


### PCB Layout

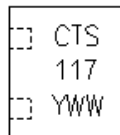


### Packaging and Marking

| DIMENSION     | UNITS | SPECIFICATION |
|---------------|-------|---------------|
| REEL DIAMETER | mm    | 330           |
| REEL WEIGHT   | kg    | 1.7           |
| REEL QUANTITY | ea.   | 250           |



Customer Feed Direction



| MODEL NO. | W <sub>0</sub> | A <sub>0</sub> | B <sub>0</sub> | K <sub>0</sub> | P <sub>0</sub> |
|-----------|----------------|----------------|----------------|----------------|----------------|
| CER0117   | 0.945/24       | 0.496/12.6     | 0.591/15.0     | 0.248/6.30     | 0.630/16.0     |