

### Features

- Low Insertion Loss
- Low Ripple
- Excellent Rejection and Isolation

### Description

Surface mount, silver (Ag) coated ceramic duplexer. Developed for use in 1770 MHz Infrastructure Applications.

Weight: TBD grams typical

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

Filter complies with RoHS standards.

### Electrical Specifications



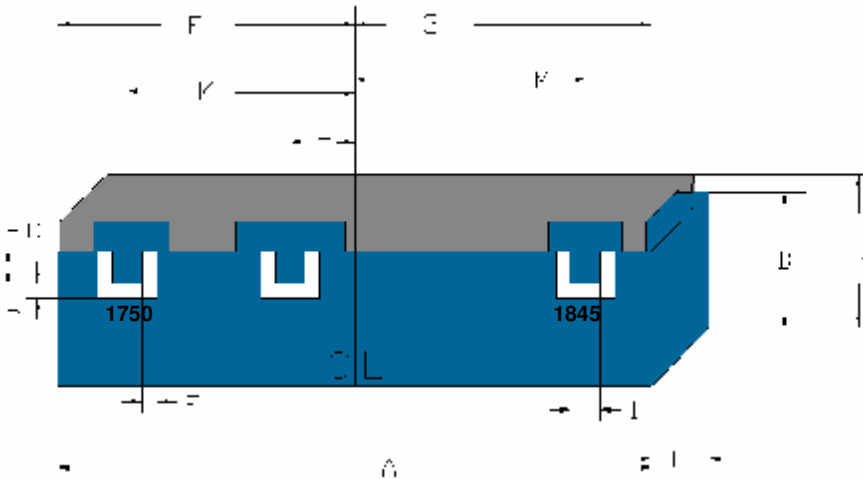
| Parameter                        | Frequency MHz | Typical @ 25°C | Specification @ 25°C | Spec over -40°C to +85°C |
|----------------------------------|---------------|----------------|----------------------|--------------------------|
| <b>Low Band Response</b>         |               |                |                      |                          |
| Passband Iloss                   | 1745 - 1755   | -2.30          | -2.40                | -2.50                    |
| Passband Ripple                  | 1745 - 1755   | 0.90           | 1.40                 | 1.50                     |
| Passband Return Loss @ Ant       | 1745 - 1755   | -13.00         | -12.00               | -12.00                   |
| Passband Return Loss @ Low Band  | 1745 - 1755   | -13.00         | -12.00               | -12.00                   |
| Attenuation                      | 1840 - 1850   | -60.00         | -55.00               | -55.00                   |
|                                  | 3490 - 3510   | -11.00         | -10.00               | -10.00                   |
| <b>High Band Response</b>        |               |                |                      |                          |
| Passband Iloss                   | 1840 - 1850   | -2.30          | -2.40                | -2.50                    |
| Passband Ripple                  | 1840 - 1850   | 1.00           | 1.40                 | 1.50                     |
| Passband Return Loss @ Ant       | 1840 - 1850   | -13.00         | -12.00               | -12.00                   |
| Passband Return Loss @ High Band | 1840 - 1850   | -13.00         | -12.00               | -12.00                   |
| Attenuation                      | 1745 - 1755   | -60.00         | -55.00               | -55.00                   |
|                                  | 3680 - 3700   | -19.00         | -15.00               | -15.00                   |
| <b>Isolation</b>                 |               |                |                      |                          |
| Rejection @ Low Band             | 1745 - 1755   | -61.00         | -60.00               | -60.00                   |
| Rejection @ midpoint             | 1755 - 1840   | -51.00         | -50.00               | -50.00                   |
| Rejection @ High Band            | 1840 - 1850   | -61.00         | -60.00               | -60.00                   |
| Power into any port              |               | 3 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 |

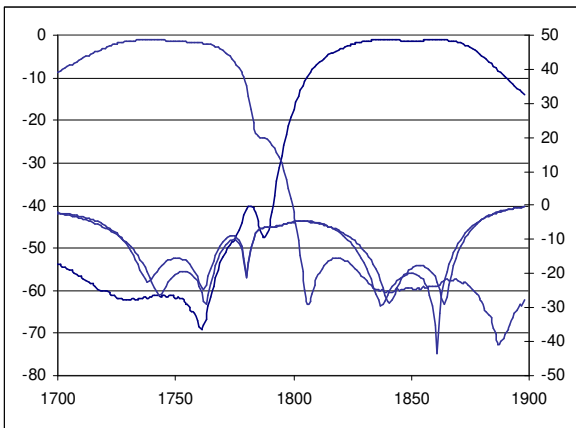
\*This product is covered by one or more of the following U.S. and foreign patents including: US 4,692,726;US 4,742,562; US 4,800,348;US 4,829,274;US 5,146,193;EP 0573597;DE 0573597;FR 0573597;JP 508149/92;KR 142171;US 5,162,760;US 5,218,329;US 5,250,916;US 5,327,109;US 5,488,335;CA 2114029;FR 9306297;GB 2273393;JP 3205337;KR 115113;CN 93106228.4;US 5,512,866;EP 0706719;DE 0706719;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.

### Mechanical Drawing

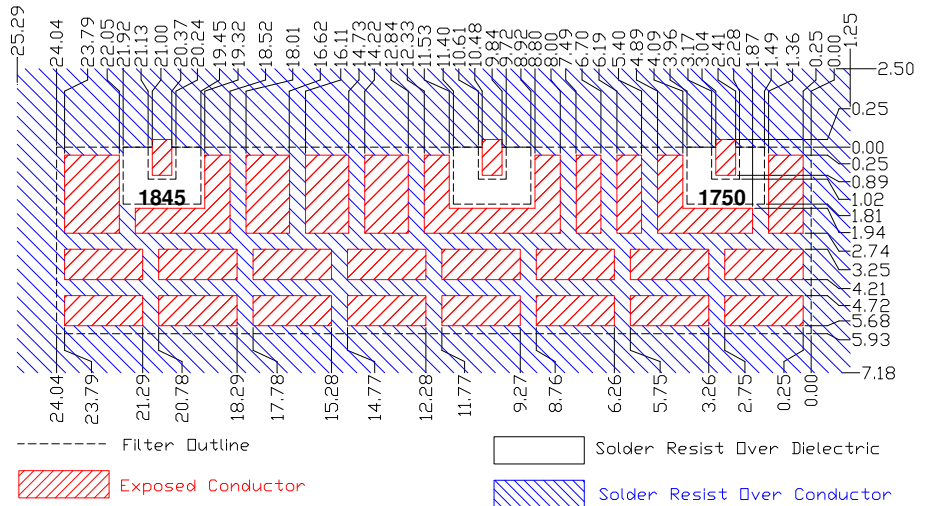


|          |       |      |
|----------|-------|------|
| <b>A</b> | 24.04 | 0.27 |
| <b>B</b> | 5.93  | max  |
| <b>C</b> | 1.02  | 0.13 |
| <b>D</b> | 0.79  | 0.13 |
| <b>E</b> | 0.79  | 0.13 |
| <b>F</b> | 12.02 | 0.13 |
| <b>G</b> | 12.02 | 0.13 |
| <b>H</b> | 4.60  | max  |
| <b>I</b> | 0.89  | 0.13 |
| <b>J</b> | 7.04  | max  |
| <b>K</b> | 9.30  | 0.13 |
| <b>M</b> | 8.66  | 0.13 |
| <b>L</b> | 1.86  | 0.13 |

### Electrical Response

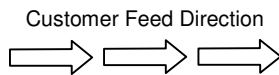


### PCB Layout



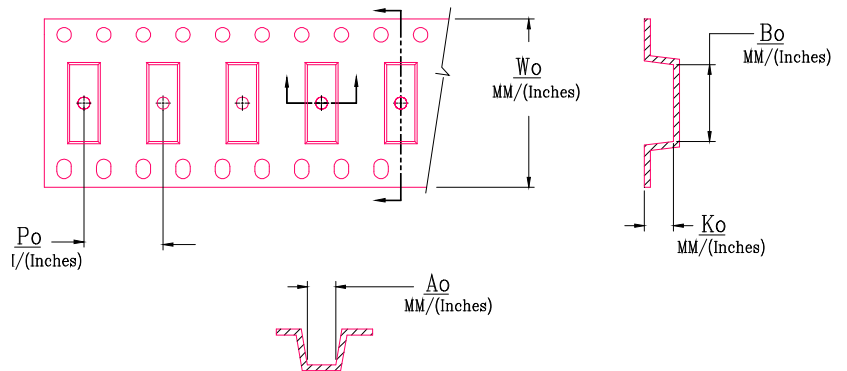
### Packaging and Marking

| DIMENSION     | UNITS | SPECIFICATION |
|---------------|-------|---------------|
| REEL DIAMETER | mm    | 330           |
| REEL WEIGHT   | kg    | 2.3           |
| REEL QUANTITY | ea.   | 500           |



#### Product Marking

CTS  
644  
YWW



| Wo          | Ao           | Bo           | Ko          | Po        |
|-------------|--------------|--------------|-------------|-----------|
| Inches/mm   | Inches/mm    | Inches/mm    | Inches/mm   | Inches/mm |
| 1.732"/44.0 | 0.2823"/7.17 | 0.974"/24.74 | 0.195"/4.95 | 0.472"/12 |