

Features

- Low Loss
- Low Ripple
- High Tx Isolation

Description

Surface mount, silver (Ag) coated ceramic PCS duplexer. Developed for use in PCS infrastructure applications.

Weight: 2.63 grams typical

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

Filter complies with RoHS standards.



Electrical Specifications

| Parameter | Frequency (MHz) | Typical | Spec. Over -40°C to +85°C |
|-------------------------------|-----------------|---------|------------------------------|
| TX to Antenna Response | | | |
| Passband Insertion Loss | 1850 – 1910 | 2.6 dB | 3.2 dB max |
| Passband Return Loss @ TX | 1850 – 1910 | 13.5 dB | 10.0 dB min |
| Passband Return Loss @ ANT | 1850 – 1910 | 13.5 dB | 10.0 dB min |
| Passband Ripple | 1850 – 1910 | 2.1 dB | 2.6 dB max |
| Attenuation: | 1930 – 1990 | 43.0 dB | 40.0dB min |
| Antenna to RX Response | | | |
| Passband Insertion Loss | 1930 – 1990 | 2.9 dB | 3.55 dB max |
| Passband Return Loss @ RX | 1930 – 1990 | 13.5 dB | 10.0 dB min |
| Passband Return Loss @ ANT | 1930 – 1990 | 13.5 dB | 10.0 dB min |
| Passband Ripple | 1930 – 1990 | 2.1 dB | 2.6 dB max |
| Attenuation: | 1850 – 1910 | 51.0 dB | 48.0 dB min |
| TX to RX Response | | | |
| Rejection @ TX band | 1850 – 1910 | 52.5 dB | 50.0 dB min |
| Rejection @ RX band | 1930 – 1990 | 45.0 dB | 42.5dB min |
| Power rating | | | 2 Watts max |

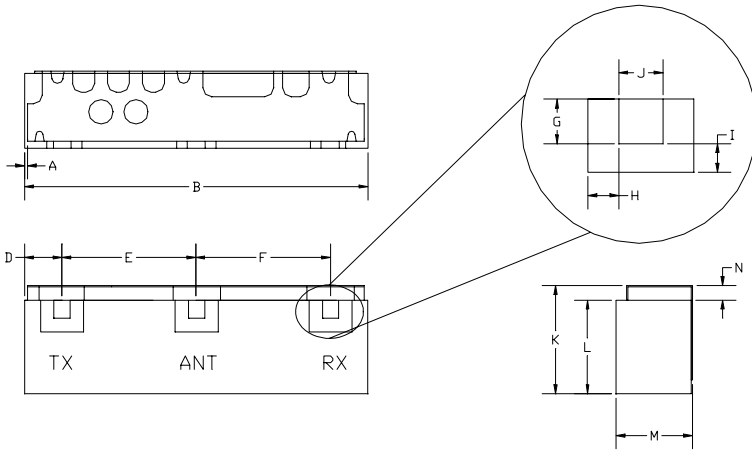
Note: Supplier shall test each filter to the critical electrical specifications of the above table. Any subsequent audits may deviate from in value due to measurement repeatability among different test systems. Such deviations shall not exceed the following limits:

| 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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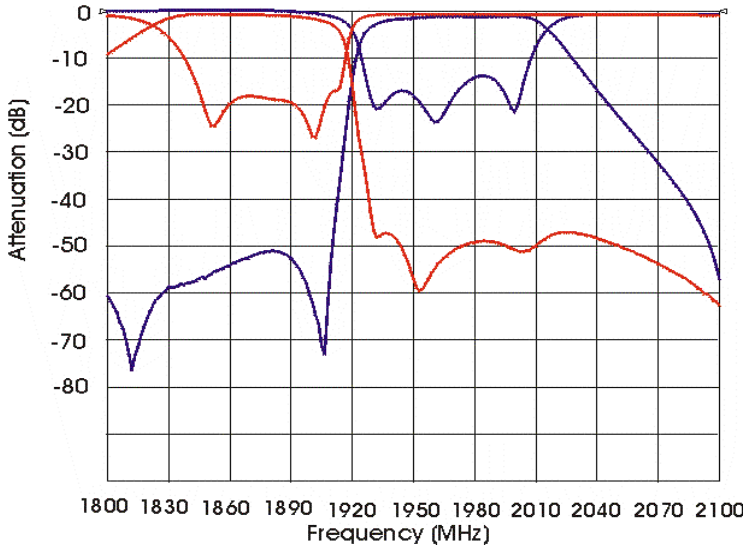
Mechanical Drawing



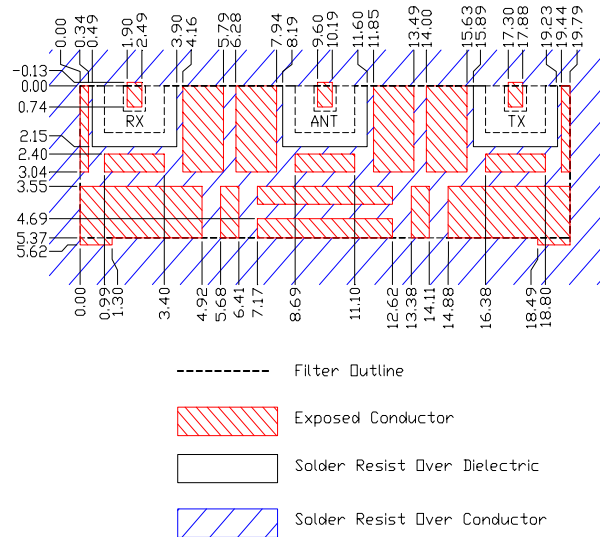
| Dim | Nominal (mm) | Tolerance (mm) +/- or max |
|-----|--------------|---------------------------|
| *A | 0.13 | 0.13 |
| B | 19.92 | max |
| D | 2.20 | 0.25 |
| E | 7.70 | 0.13 |
| F | 7.70 | 0.13 |
| G | 0.89 | 0.13 |
| H | 0.76 | 0.13 |
| I | 0.76 | 0.13 |
| J | 0.89 | 0.13 |
| K | 6.45 | max |
| L | 5.37 | 0.2 |
| M | 4.60 | max |
| N | 0.76 | 0.13 |

***Indicates Reference Only**

Electrical response



PCB Layout



Packaging and Marking

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

