

Features

- Low Loss
- High Rejection
- High Isolation

Description

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

Weight: 3.1 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

| Parameter | Frequency (MHz) | Typical @ 25°C | Spec. over -40°C to +85°C |
|-------------------------------|-----------------|----------------|---------------------------|
| TX to Antenna Response | | | |
| Passband Insertion Loss | 1850 – 1910 | 2.6 dB | 3.1 dB max |
| Passband Return Loss @ TX | 1850 – 1910 | 15.0 dB | 10.0 dB min |
| Passband Return Loss @ ANT | 1850 – 1910 | 14.0 dB | 10.0 dB min |
| Passband Ripple | 1850 – 1910 | 1.8 dB | 2.6 dB max |
| Attenuation: | 1930 – 1990 | 47.0 dB | 41.5 dB min |
| Antenna to RX Response | | | |
| Passband Insertion Loss | 1930 – 1990 | 3.0 dB | 3.6 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 | 1.9 dB | 2.6 dB max |
| Attenuation: | 1850 – 1910 | 52.0 dB | 48.0 dB min |
| TX to RX Response | | | |
| Rejection @ TX band | 1850 – 1910 | 53.0 dB | 50.0 dB min |
| Rejection @ RX band | 1930 – 1990 | 50.0 dB | 44.5 dB min |
| Power rating | | | 2 Watts max |
| ESD voltage | | | 1KV max |

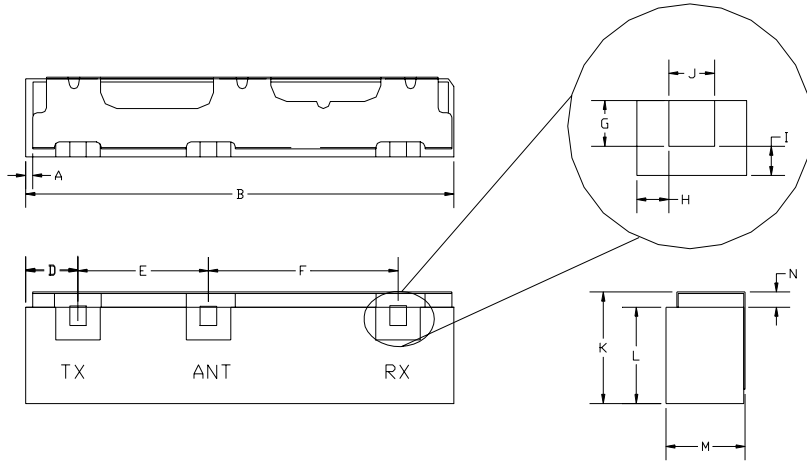
Note: Supplier shall test each filter to the critical electrical specifications of the above table. Any subsequent audits may deviate from in value due to measurement repeatability among different test systems. Such deviations shall not exceed the following limits:

| 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.

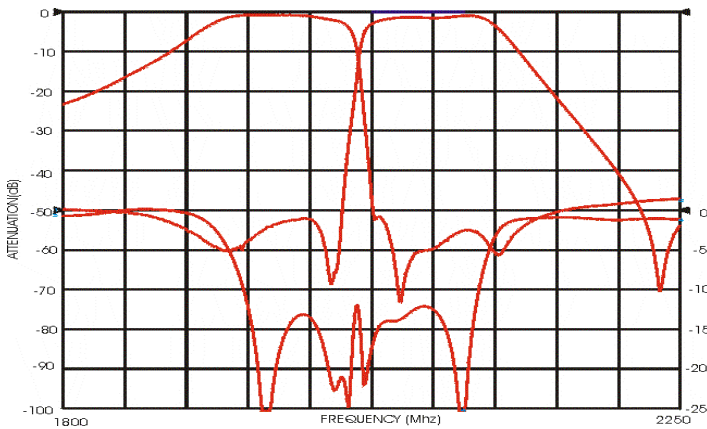
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Mechanical Drawing

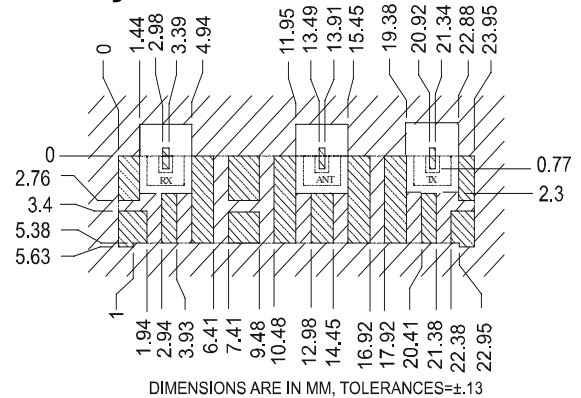


| Dim | Nominal (mm) | Tolerance (mm) +/- or max |
|-----|--------------|------------------------------|
| A | 0.25 | 0.25 |
| B | 23.93 | max |
| D | 2.72 | 0.25 |
| E | 7.44 | 0.13 |
| F | 10.52 | 0.13 |
| G | 1.02 | 0.13 |
| H | 0.79 | 0.13 |
| I | 0.79 | 0.13 |
| J | 0.89 | 0.13 |
| K | 6.55 | max |
| L | 5.64 | max |
| M | 4.60 | max |
| N | 0.84 | 0.13 |

Electrical response



PCB Layout



- FILTER OUTLINE
- SOLDER RESIST OVER DIELECTRIC
- SOLDER RESIST OVER CONDUCTOR
- EXPOSED CONDUCTOR

Packaging and Marking

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

