

Features

- High Rejection
- Low Ripple
- Low Loss

Description

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

Weight: 3.2 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 @ 25°C | Spec. @ 25°C | Spec. Over -40°C to +85°C |
|---------------------------------|-----------------|----------------|--------------|---------------------------|
| High Band Response (S21) | | | | |
| Passband Insertion Loss | 1805-1880 | 2.50 dB | 3.9 dB max | 4.2 dB max |
| Passband Return Loss @ Port 2 | 1805-1880 | 12.6dB | 10.5 dB min | 10.0 dB min |
| Passband Return Loss @ Port 1 | 1805-1880 | 12.5dB | 10.5 dB min | 10.0 dB min |
| Passband Ripple | 1805-1880 | 2.48 dB | 2.8 dB max | 3.1 dB max |
| Attenuation: | 902.5-940 | 58.5 dB | 30.5 min | 30 dB |
| Low Band Response (S13) | | | | |
| Passband Insertion Loss | 1710-1785 | 3.00 dB | 3.95 dB max | 4.2 dB max |
| Passband Return Loss @ Port 1 | 1710-1785 | 12.1dB | 10.5 dB min | 10.0 dB min |
| Passband Return Loss @ Port 3 | 1710-1785 | 13.0 dB | 10.5 dB min | 10.0 dB min |
| Passband Ripple | 1710-1785 | 1.94 dB | 2.8 dB max | 3.1 dB max |
| Attenuation: | 1370-1445 | 52.7 dB | 50.5 dB min | 50 dB min |
| Isolation (S23) | | | | |
| Rejection @ High band | 1805-1880 | 46.5 dB | 40.5 dB | 40 dB min |
| Rejection @ Low band | 1710-1785 | 33.5 dB | 30.5 dB | 30 dB min |
| Power into any port | | | 2 Watts max | |

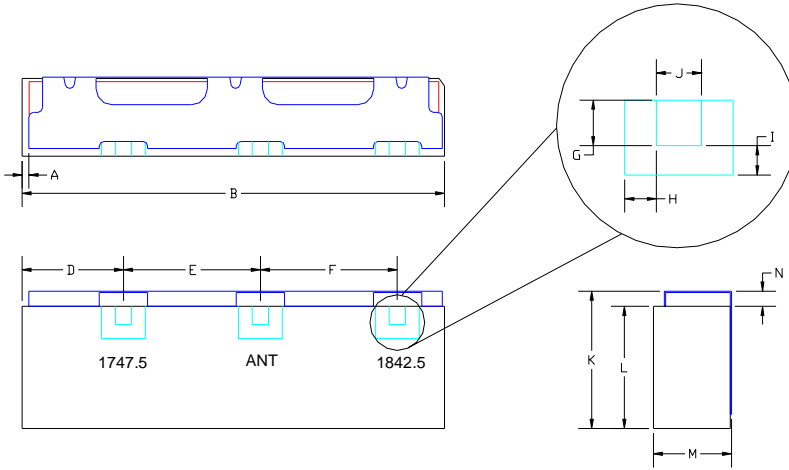
Note: Supplier shall test each filter to the critical electrical specifications of the above table. Any subsequent audits may deviate from in value due to measurement repeatability among different test systems. Such deviations shall not exceed the following limits:

| 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.

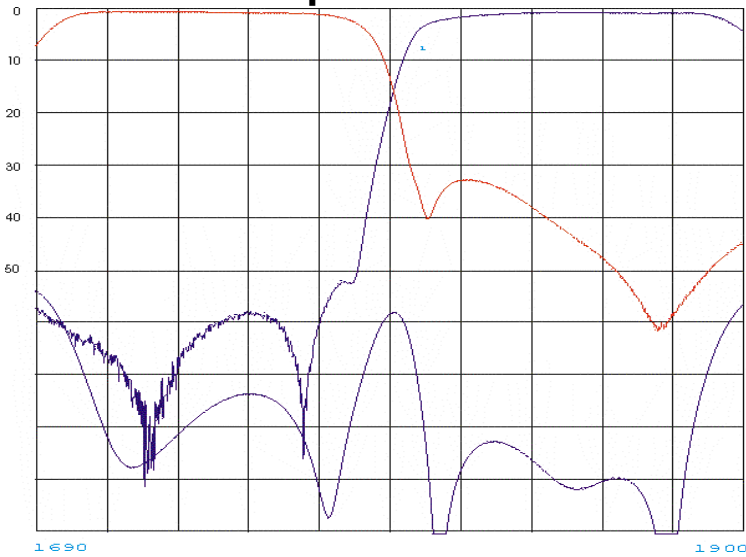
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Mechanical Drawing

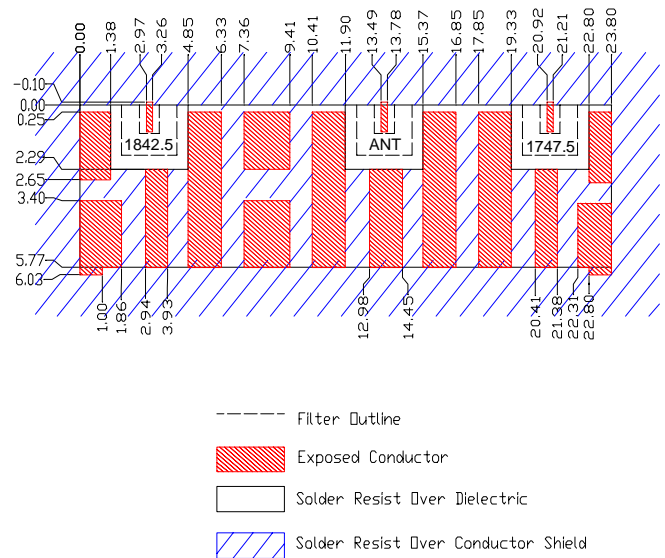


| Dim | Nominal (mm) | Tolerance (mm) +/- or max |
|-----|--------------|------------------------------|
| A | 0.25 | 0.25 |
| B | 24.04 | max |
| C | | |
| D | 2.72 | 0.25 |
| E | 7.44 | 0.13 |
| F | 10.52 | 0.13 |
| G | 1.02 | 0.13 |
| H | 0.79 | 0.13 |
| I | 0.79 | 0.13 |
| J | 0.89 | 0.13 |
| K | 7.14 | max |
| L | 6.03 | max |
| M | 4.60 | max |
| N | 0.84 | 0.13 |

Electrical response



PCB Layout



Packaging and Marking

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

