

CER0694A

1795 MHz DCS Duplexer

Revision B - Origin Date: April 28, 2009- Revision Date: July 28, 2011

Features

- Extended pass band
- Low loss
- High rejection

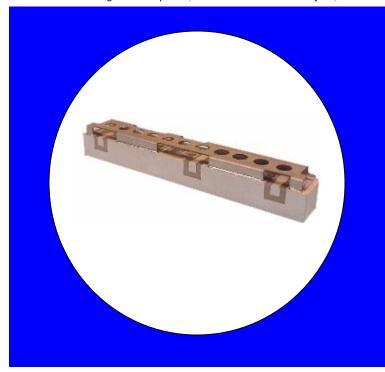
Description

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

Weight: Approximately 30.0 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 (Preliminary)

| <u>Parameter</u> | Frequency MHz | Typical @ 25ºC | Specification @ 25°C | Spec over -40°C to +85°C |
|-------------------------------|------------------|-------------------|-------------------------|-----------------------------|
| Passband Iloss | 1710 - 1785 | -2.10 | -2.25 | -2.40 |
| Passband Ripple | 1710 - 1785 | 1.2 | 1.30 | 1.40 |
| Passband Return Loss @ Port 1 | 1710 - 1785 | -13.5 | -12.0 | -12.0 |
| Passband Return Loss @ Port 2 | 1710 - 1785 | -13.5 | -12.0 | -12.0 |
| Attenuation | 1805 - 1880 | -29.0 | -28.0 | -28.0 |
| | | | | |
| Low Band Response (S21) | | | | |
| Passband Iloss | 1805 - 1880 | -2.0 | -2.2 | -2.3 |
| Passband Ripple | 1805 - 1880 | 1.2 | 1.3 | 1.4 |
| Passband Return Loss @ Port 1 | 1805 - 1880 | -13.5 | -12.0 | -12.0 |
| Passband Return Loss @ Port 2 | 1805 - 1880 | -13.5 | -12.0 | -12.0 |
| Attenuation | 1710 - 1785 | -29.0 | -28.0 | -28.0 |
| | | | | |
| | | | | |
| Power Into any Port | | | | 5 W 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

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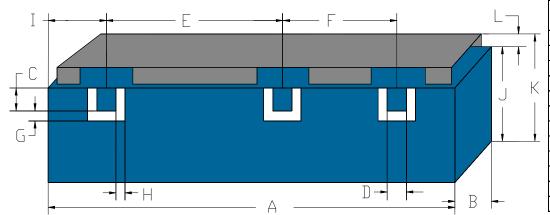


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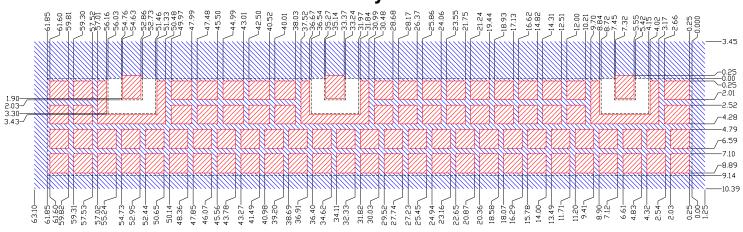
Mechanical Drawing

Revision B - Origin Date: April 28, 2009- Revision Date: July 11, 2011



| Dim | Nominal | Tolerance (mm) | |
|-----|---------|----------------|--|
| | (mm) | +/- or max | |
| Α | 61.85 | max | |
| В | 8.00 | max | |
| ပ | 2.03 | 0.13 | |
| D | 2.03 | 0.13 | |
| Е | 27.82 | 0.25 | |
| F | 19.49 | 0.25 | |
| G | 1.27 | 0.13 | |
| Н | 1.27 | 0.13 | |
| ı | 6.43 | 0.25 | |
| J | 9.14 | max | |
| K | 11.34 | max | |
| L | 2.20 | Max | |

PCB Layout



Exposed

Filter

□utline

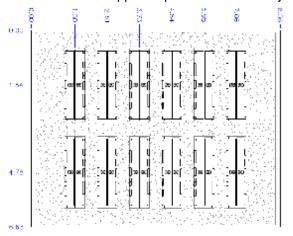
Solder Resist Over Dielectric



Solder Resist
Over Conductor

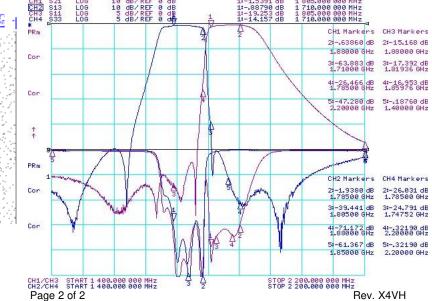
Packaging and Marking

Product is shipped in preformed foam trays



5 Trays containing 12 slots with 2 filters per slot. 5 Trays per box. Total 120 filters per box Part Marking: CTS YWW CER0694A

Electrical response



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