

## Features

- Low Loss
- Low Ripple
- High Rejection

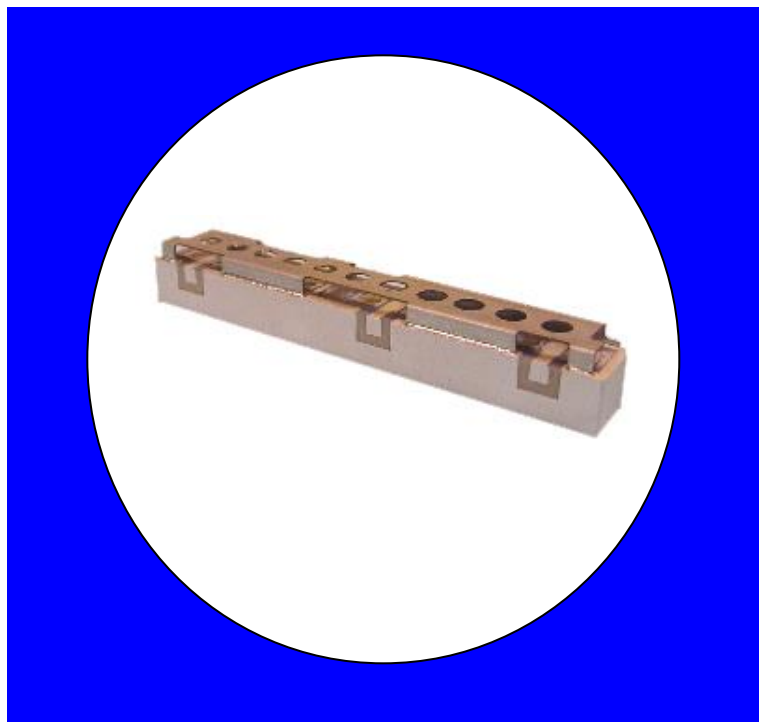
## Description

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

Weight: 22.1 grams typical

Material: Filter is composed of a ceramic block plated with Ag and a shield made of tin-plated brass.

Filter complies with RoHS standards.



## Electrical Specifications

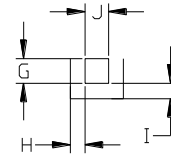
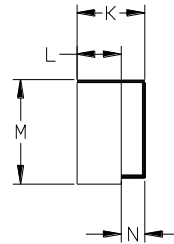
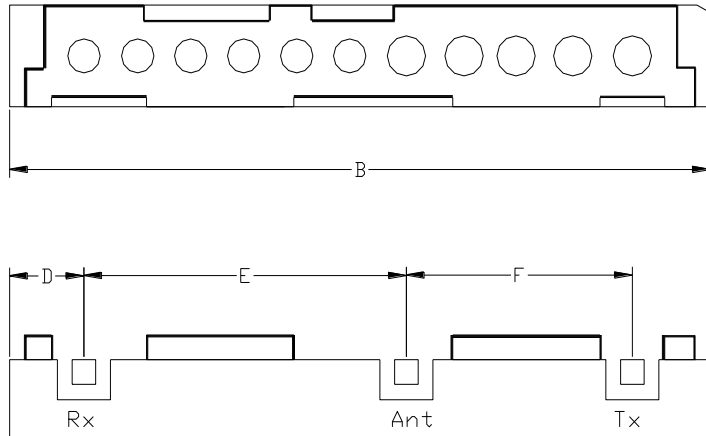
| Parameter                     | Frequency (MHz) | Typical @ 25°C | Spec. @ 25°C | Spec. over -40°C to +85°C |
|-------------------------------|-----------------|----------------|--------------|---------------------------|
| <b>TX to Antenna Response</b> |                 |                |              |                           |
| Passband Insertion Loss       | 1626.5-1675     | 1.4 dB         | 1.6 dB max   | 1.7 dB max                |
| Passband Ripple               | 1626.5-1675     | 0.8 dB         | 1.0 dB max   | 1.1 dB max                |
| Passband Return Loss @ TX     | 1626.5-1675     | 13 dB          | 12.0 dB min  | 12.0 dB min               |
| Attenuation:                  | 1518-1559       | 62 dB          | 60.0 dB min  | 60.0 dB min               |
|                               | 1590            | 55 dB          | 45.0 dB min  | 45.0 dB min               |
|                               | 1600            | 30 dB          | 25.0 dB min  | 25.0 dB min               |
|                               | 1605            | 23 dB          | 20.0 dB min  | 20.0 dB min               |
|                               | 1610            | 13 dB          | 10.0 dB min  | 10.0 dB min               |
| <b>Antenna to RX Response</b> |                 |                |              |                           |
| Passband Insertion Loss       | 1518-1559       | 1.0 dB         | 1.2 dB max   | 1.3 dB max                |
| Passband Ripple               | 1518-1559       | 0.3 dB         | 0.5 dB max   | 0.5 dB max                |
| Passband Return Loss @ ANT    | 1518-1559       | 14 dB          | 12.0 dB min  | 12.0 dB min               |
| Attenuation:                  | 1626.5-1675     | 66 dB          | 65.0 dB min  | 65.0 dB min               |
| <b>TX to RX Response</b>      |                 |                |              |                           |
| Rejection @ TX                | 1626.5-1675     | 66 dB          | 65.0 dB min  | 65.0 dB min               |
| Rerejection @ transition band | 1559-1626       | 40 dB          | 35.0 dB min  | 35.0 dB min               |
| Rejection @ RX                | 1518-1559       | 62 dB          | 60.0 dB min  | 60.0 dB min               |
| <b>Power into any port</b>    |                 | 10 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

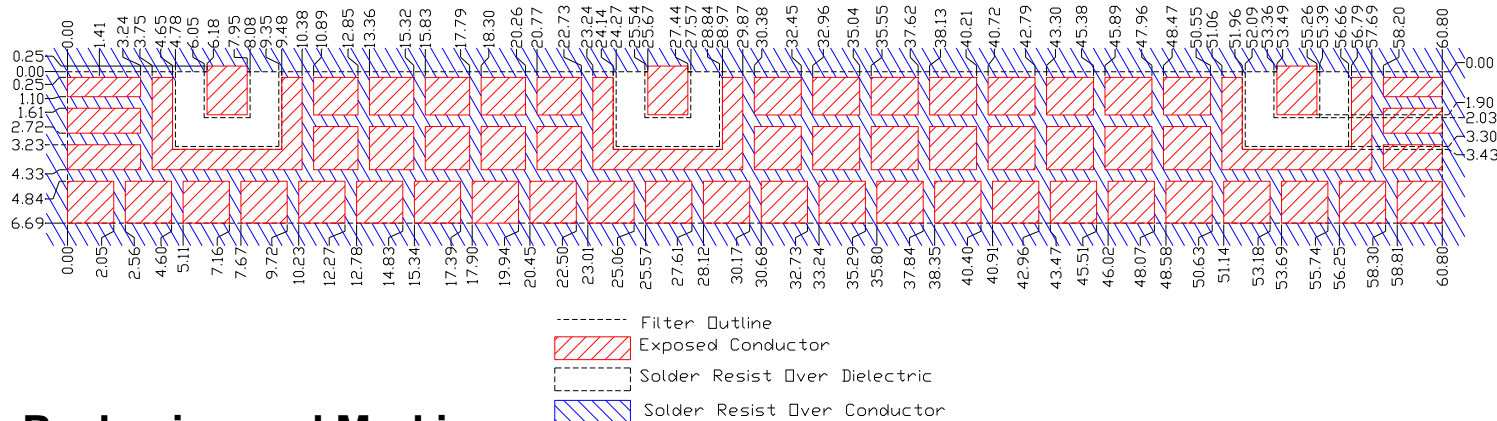
|                |        |
|----------------|--------|
| Insertion Loss | 0.1 dB |
| Return Loss    | 1.0 dB |
| Stopbands      | 1.0 dB |

## Mechanical Drawing

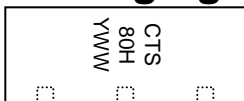


| Dim | Nominal (mm) | Tolerance (mm) +/- or max |
|-----|--------------|---------------------------|
| A   |              |                           |
| B   | 60.8         | max                       |
| C   |              |                           |
| D   | 6.43         | 0.25                      |
| E   | 27.82        | 0.13                      |
| F   | 19.49        | 0.13                      |
| G   | 2.03         | 0.13                      |
| H   | 1.27         | 0.13                      |
| I   | 1.27         | 0.13                      |
| J   | 2.03         | 0.13                      |
| K   | 9.25         | max                       |
| L   | 6.69         | 0.25                      |
| M   | 10.59        | max                       |
| N   | 2.29         | 0.13                      |

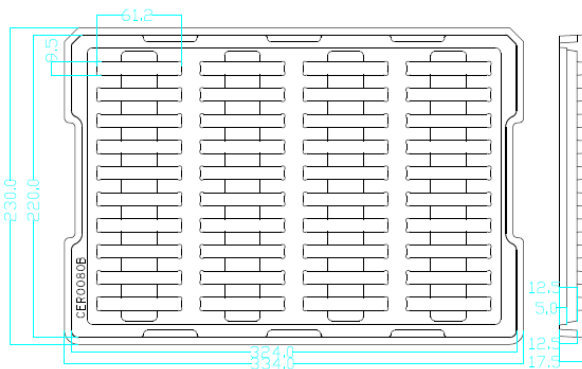
## PCB Layout



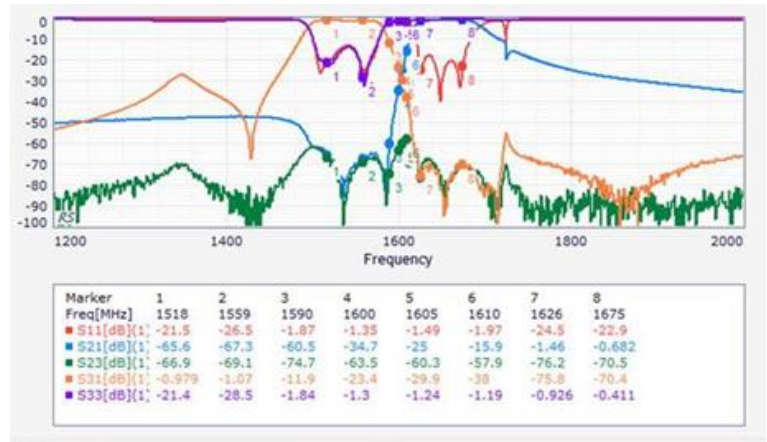
## Packaging and Marking



Product is shipped in thermo-formed plastic trays



## Electrical response



The trays have 40 slots each with one filter per slot. Boxes are packed with 4 Trays per box for a total of 160 filters per box.