
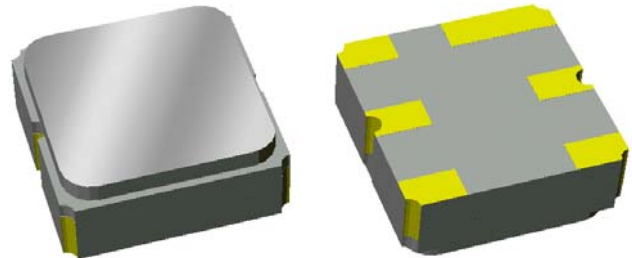


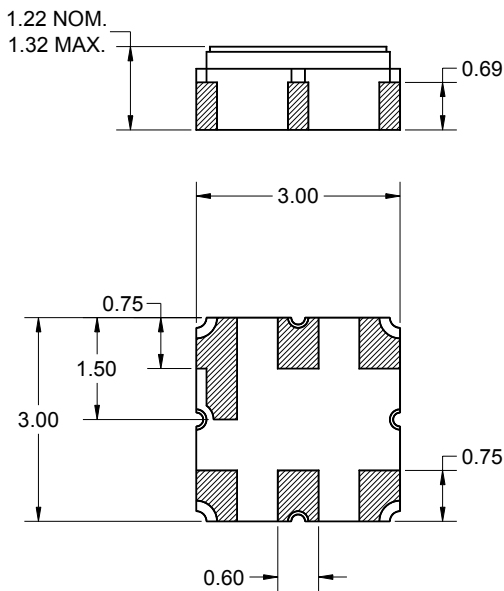
Features

- For Globalstar L-Band applications
- Usable bandwidth 16.5 MHz
- High attenuation
- No impedance matching required for operation at 50 Ω
- Single-ended operation
- Ceramic Surface Mount Package (SMP)
- Hermetic
- RoHS compliant (2002/95/EC), Pb-free 



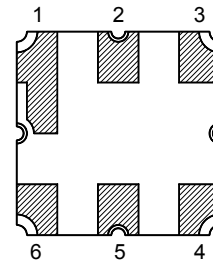
Package

Surface Mount 3.00 x 3.00 x 1.22 mm



Pin Configuration

Bottom View



| Pin No. | Description |
|---------|-------------|
| 2 | Input |
| 5 | Output |
| 1,3,4,6 | Case ground |

Dimensions shown are nominal in millimeters
All tolerances are ±0.15mm except overall
length and width ±0.10mm

Body: Al_2O_3 ceramic
Lid: Kovar, Ni plated
Terminations: Au plating 0.5 - 1.0µm,
over a 2 - 6µm Ni plating

Electrical Specifications ⁽¹⁾

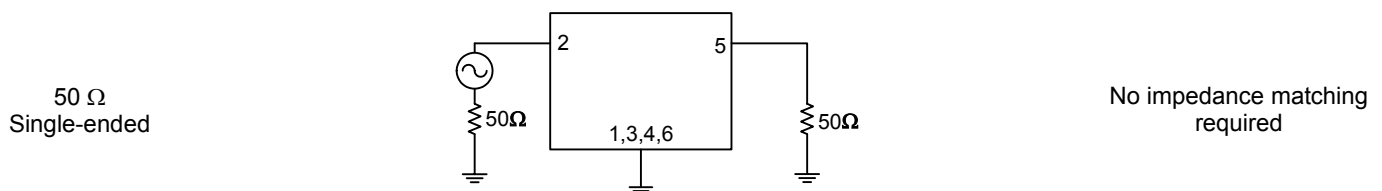
Operating Temperature Range: ⁽²⁾ -30 to +80 °C

| Parameter ⁽³⁾ | Minimum | Typical | Maximum | Unit |
|--|---------|---------|---------|----------|
| Center Frequency | - | 2491.75 | - | MHz |
| Maximum Insertion Loss 2483.5 - 2500 MHz | - | 3.4 | 4.25 | dB |
| Amplitude Variation 2483.5 - 2500 MHz (over any 1.23 MHz span) | - | 0.1 | 1.0 | dB |
| Phase Linearity 2483.5 - 2500 MHz (over any 1.23 MHz span) | - | 0.08 | 2.5 | deg(rms) |
| Lower 12 dB Bandedge ⁽⁴⁾ | 2450 | 2456 | - | MHz |
| Absolute Attenuation | | | | |
| 1610 - 1626.5 MHz | 33 | 44 | - | dB |
| 2033 - 2051MHz | 28 | 45 | - | dB |
| 2259 - 2275 MHz | 23 | 39 | - | dB |
| 2400 - 2440 MHz | 13 | 23 | - | dB |
| 2440 - 2450 MHz | 12 | 18 | - | dB |
| 2570 - 2600 MHz | 15 | 29 | - | dB |
| Input/Output VSWR | - | 2:1 | - | - |
| RF Power 10,000 hours at +55°C CW | - | - | +7 | dBm |
| Source Impedance ⁽⁵⁾ | - | 50 | - | Ω |
| Load Impedance ⁽⁵⁾ | - | 50 | - | Ω |

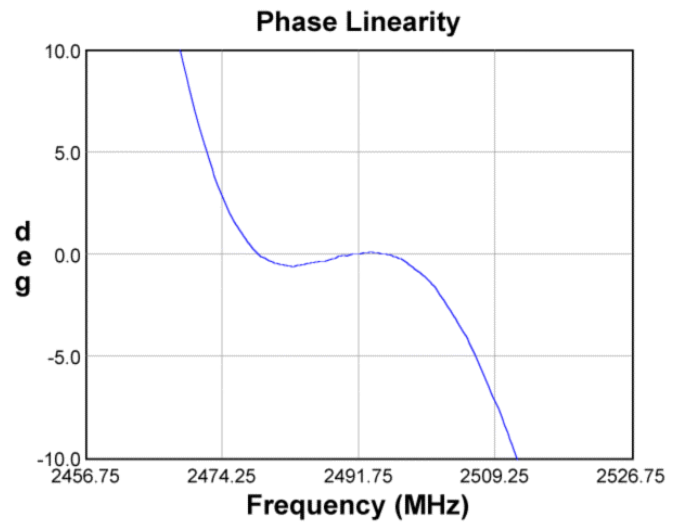
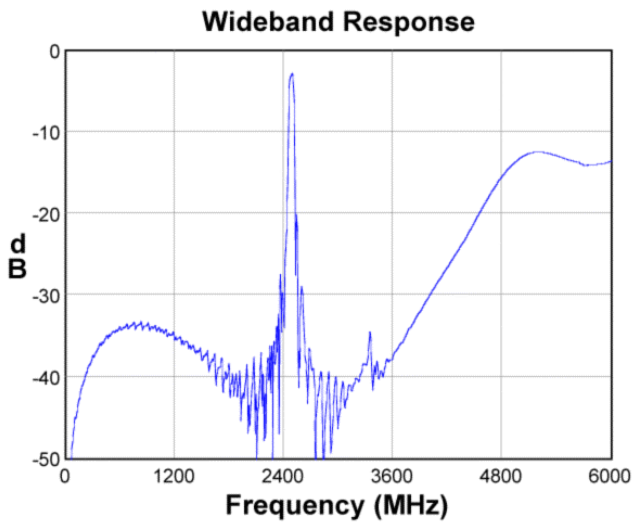
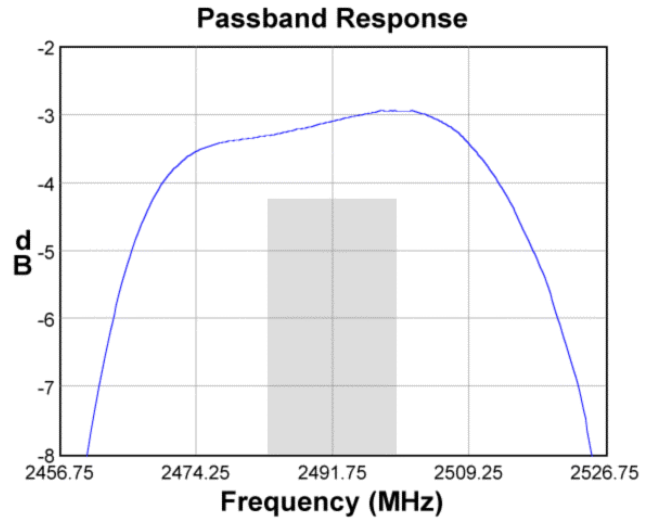
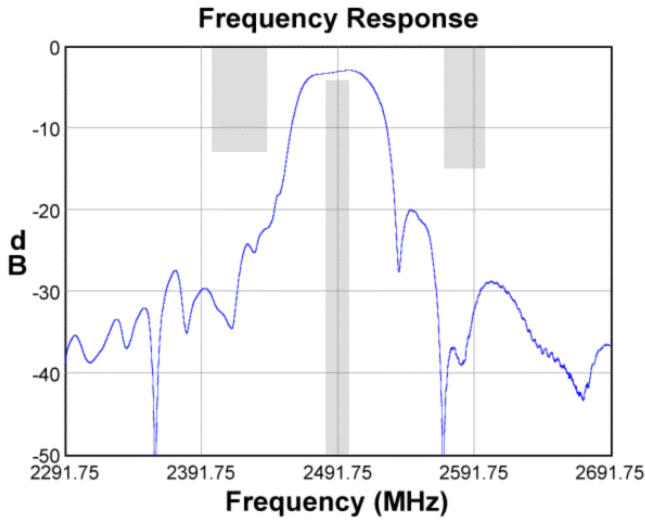
Notes:

1. All specifications are based on the test circuit shown below
2. In production, devices will be tested at room temperature to a guardbanded specification to ensure electrical compliance over temperature
3. Electrical margin has been built into the design to account for the variations due to temperature drift and manufacturing tolerances
4. Referenced to 0dB
5. This is the optimum impedance in order to achieve the performance shown

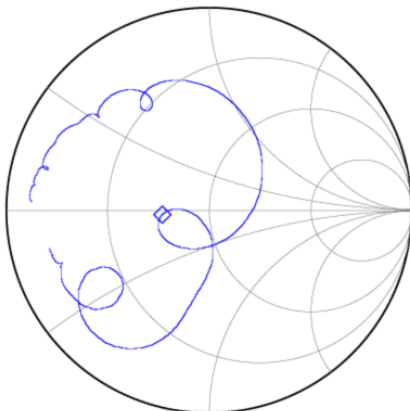
Test Circuit:



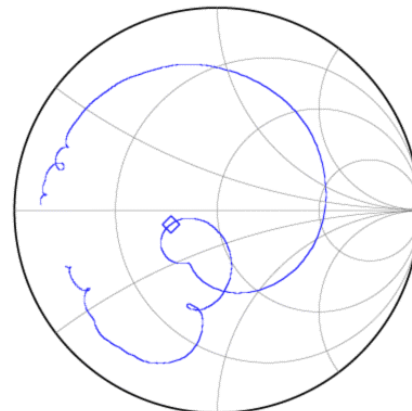
Typical Performance (at +25°C)



Input Smith Chart

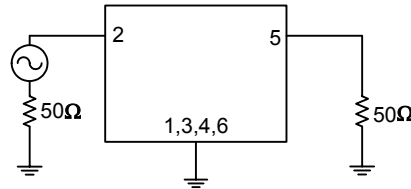


Output Smith Chart



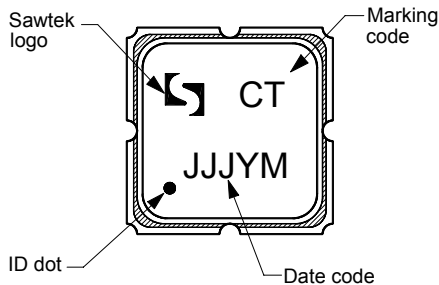
Matching Schematics

50 Ω
Single-ended



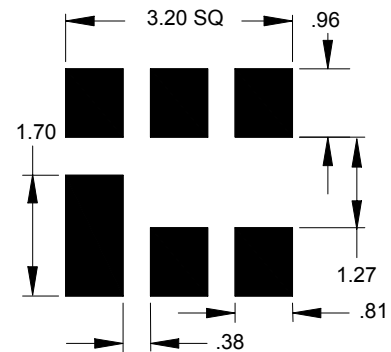
No impedance matching required

Marking



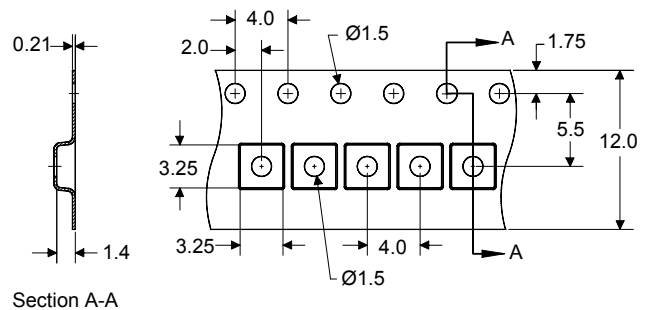
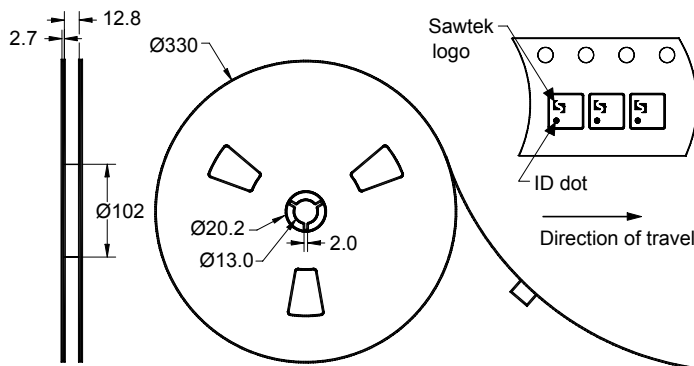
The date code consists of: JJJ = Julian day,
Y = last digit of year, M = manufacturing site code

PCB Footprint



This footprint represents a recommendation only
Dimensions shown are nominal in millimeters

Tape and Reel




Dimensions shown are nominal in millimeters
Packaging quantity: 5000 units/reel

Maximum Ratings


| Parameter | Symbol | Minimum | Maximum | Unit |
|-----------------------------|------------------|---------|---------|------|
| Operating Temperature Range | T | -30 | +80 | °C |
| Storage Temperature Range | T _{stg} | -40 | +85 | °C |

Important Notes

Warnings

- Electrostatic Sensitive Device (ESD) 
- Avoid ultrasonic exposure

RoHS Compliance

- This product complies with EU directive 2002/95/EC (RoHS) 

Solderability

- Compatible with JEDEC J-STD-020C **Pb-free** process, **260°C** peak reflow temperature ([see soldering profile](#))

Links to Additional Technical Information

[PCB Layout Tips](#)

[Qualification Flowchart](#)

[Soldering Profile](#)

[S-Parameters](#)

[RoHS Information](#)

[Other Technical Information](#)

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