DATA SHEET

915 MHz Ceramic Band-Pass Filter

Applications

- Cellular
- RFID
- Datacom/Telemetry
- SMT
- AMR

Features

- Temperature-stable ceramic
- PW handling up to *2 W CW
- Surface-mount technology (SMT) or connectorized

Benefits

- Light weight
- Package dimensions: 0.531 x 0.260 x 0.158 inch
- Superior performance

Description

Skyworks, through its wholly owned subsidiary, Trans-Tech, offers the 915 MHz Ceramic Band-Pass Filter, which can be customized to your specific needs in either a connectorized or SMT option.

Table 1 lists the electrical specifications of the 915 MHz Ceramic Band-Pass Filter. Table 2 shows the RoHS compliance specifications. Figure 1 shows the package dimensions. Figure 2 shows the standard land pattern.

Table 1. Electrical Specifications

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Performance Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center frequency (Fo)</td>
<td>915 MHz</td>
</tr>
<tr>
<td>Poles</td>
<td>2</td>
</tr>
<tr>
<td>Bandwidth (BW)</td>
<td>26 MHz min</td>
</tr>
<tr>
<td>Insertion loss @ BW</td>
<td>0.9 dB max</td>
</tr>
<tr>
<td>Ripple @ BW</td>
<td>0.5 dB</td>
</tr>
<tr>
<td>VSWR @ BW</td>
<td>2.0 max</td>
</tr>
<tr>
<td>Input power</td>
<td>1.0 W max</td>
</tr>
<tr>
<td>Passband return loss</td>
<td>10 dB min</td>
</tr>
<tr>
<td>Attenuation</td>
<td>24 dB @ 850 MHz</td>
</tr>
<tr>
<td></td>
<td>15 dB @ 1800 to 1900 MHz</td>
</tr>
<tr>
<td>Power rating</td>
<td>+33 dBm</td>
</tr>
<tr>
<td>Impedance</td>
<td>50 Ω</td>
</tr>
</tbody>
</table>

Table 2. RoHS Compliance Specifications

<table>
<thead>
<tr>
<th>Reflow Profile Feature</th>
<th>RoHS Compliant, Lead (Pb)-Free</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solder reflow profile (unless otherwise stated)</td>
<td>Reference solder paste manufacturer’s recommendations and your component and design requirements</td>
</tr>
<tr>
<td>Maximum ramp-up rate</td>
<td>3 °C/sec</td>
</tr>
<tr>
<td>Maximum time above liquidus</td>
<td>90 seconds max</td>
</tr>
<tr>
<td>Maximum reflow temperature</td>
<td>260 °C</td>
</tr>
<tr>
<td>Maximum time above</td>
<td>Max time above 240 °C = 30 seconds</td>
</tr>
<tr>
<td>Maximum ramp-down rate</td>
<td>3 °C/sec</td>
</tr>
<tr>
<td>Termination</td>
<td>Au</td>
</tr>
</tbody>
</table>
Figure 1. Band-Pass Filter Package Dimensions
(All Dimensions Are in Inches)

Figure 2. Band-Pass Filter Standard Land Pattern

Ordering Information

<table>
<thead>
<tr>
<th>Part Order Number</th>
<th>Product Description</th>
<th>Tape and Reel Order Number</th>
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</thead>
<tbody>
<tr>
<td>49720E</td>
<td>915 MHz Ceramic Band-Pass Filter</td>
<td>49720E-TR</td>
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