DESCRIPTION

- 1227 MHz SAW bandpass filter with 20 MHz bandwidth.
- 3 x 3 mm ceramic LCC package, 6 pads.
- RoHS compliant.

TYPICAL PERFORMANCE

Center = 1227 MHz, 40 MHz/div (500 kHz incr)

S11 (1027-1427 MHz)  S22 (1027-1427 MHz)
1227 MHz SAW Filter
20 MHz Bandwidth
Part Number: SF1227BA02649S

SPECIFICATION

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center Frequency, ( F_c )</td>
<td>-</td>
<td>1227</td>
<td>-</td>
<td>MHz</td>
</tr>
<tr>
<td>Insertion Loss (1217 to 1237 MHz), IL</td>
<td>-</td>
<td>1.3</td>
<td>2.2</td>
<td>dB</td>
</tr>
<tr>
<td>Amplitude Ripple (1217 to 1237 MHz)</td>
<td>-</td>
<td>0.4</td>
<td>2.0</td>
<td>dB</td>
</tr>
<tr>
<td>Attenuation (D.C. to 450 MHz)</td>
<td>28</td>
<td>32</td>
<td>-</td>
<td>dB</td>
</tr>
<tr>
<td>Attenuation (450 to 1150 MHz)</td>
<td>24</td>
<td>27</td>
<td>-</td>
<td>dB</td>
</tr>
<tr>
<td>Attenuation (1150 to 1177 MHz)</td>
<td>20</td>
<td>37</td>
<td>-</td>
<td>dB</td>
</tr>
<tr>
<td>Attenuation (1277 to 1300 MHz)</td>
<td>20</td>
<td>35</td>
<td>-</td>
<td>dB</td>
</tr>
<tr>
<td>Attenuation (1300 to 2000 MHz)</td>
<td>27</td>
<td>31</td>
<td>-</td>
<td>dB</td>
</tr>
<tr>
<td>VSWR (1217 to 1237 MHz)</td>
<td>-</td>
<td>1.3</td>
<td>2.0</td>
<td>:1</td>
</tr>
<tr>
<td>Source Impedance, ( Z_S )</td>
<td>-</td>
<td>50</td>
<td>-</td>
<td>ohm</td>
</tr>
<tr>
<td>Load Impedance, ( Z_L )</td>
<td>-</td>
<td>50</td>
<td>-</td>
<td>ohm</td>
</tr>
</tbody>
</table>

Notes:  1. Fixed reference point.
        2. Reference level from 0 dB.

MAXIMUM RATINGS

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Min</th>
<th>Max</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage Temperature Range</td>
<td>-30</td>
<td>85</td>
<td>°C</td>
</tr>
<tr>
<td>Operating Temperature Range</td>
<td>-20</td>
<td>70</td>
<td>°C</td>
</tr>
<tr>
<td>Input Power Level</td>
<td>-</td>
<td>+20</td>
<td>dBm</td>
</tr>
<tr>
<td>DC Voltage</td>
<td>-</td>
<td>3</td>
<td>Volts</td>
</tr>
</tbody>
</table>

MATCHING CIRCUIT

Input
50 Ω
Single-ended

B

E

All other pads

GND

Output
50 Ω
Single-ended

Notes:

1. External matching components are not required.

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1227 MHz SAW Filter
20 MHz Bandwidth
Part Number: SF1227BA02649S

PACKAGE OUTLINE

Units: mm
Typical tolerances are ±0.15 mm except where indicated.

Pad Configuration:
Input/Output: B
Output/Input: E
Ground: A,C,D,F

Package Material:
Body: Al₂O₃ ceramic
Lid: Kovar, Ni plated
Terminations: Au plating 1 μm min, over a 1.3-8.9 μm Ni plating

SUGGESTED FOOTPRINT

MARKING

DATE CODE (YEAR, WEEK)
ROUND PAD LOCATION ON BOTTOM SIDE

All specifications are believed to be accurate and reliable. However, Spectrum Microwave reserves the right to make changes without notice.
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