DESCRIPTION

- 1732.5 MHz SAW bandpass filter with 45 MHz bandwidth.
- 3 x 3 mm ceramic LCC package with 6 pads.
- RoHS compliant.

TYPICAL PERFORMANCE

Center = 1732.5 MHz, 20 MHz/div (250 kHz incr)

S11 (1632.5-1832.5 MHz)  
S22 (1632.5-1832.5 MHz)
### 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, $F_c$ $^1$</td>
<td>-</td>
<td>1732.5</td>
<td>-</td>
<td>MHz</td>
</tr>
<tr>
<td>Insertion Loss (1710 – 1755 MHz)</td>
<td>-</td>
<td>2.5</td>
<td>3.5</td>
<td>dB</td>
</tr>
<tr>
<td>Amplitude Ripple (1710 - 1755 MHz) $^2$</td>
<td>-</td>
<td>1.1</td>
<td>2</td>
<td>dB p-p</td>
</tr>
<tr>
<td>Relative Attenuation (1500 - 1670 MHz) $^2$</td>
<td>25</td>
<td>31</td>
<td>-</td>
<td>dB</td>
</tr>
<tr>
<td>Relative Attenuation (1795 - 2000 MHz) $^2$</td>
<td>25</td>
<td>33</td>
<td>-</td>
<td>dB</td>
</tr>
<tr>
<td>VSWR (1710 – 1755 MHz)</td>
<td>-</td>
<td>1.6</td>
<td>2.5</td>
<td>:1</td>
</tr>
<tr>
<td>Source and Load Impedance</td>
<td>50</td>
<td></td>
<td></td>
<td>ohms</td>
</tr>
<tr>
<td>Ambient Temperature</td>
<td>25</td>
<td></td>
<td></td>
<td>°C</td>
</tr>
</tbody>
</table>

Notes:  
1. Reference frequency. Computed as mean of the 3 dB frequencies.  
2. All dB values are referenced to 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>-40</td>
<td>95</td>
<td>°C</td>
</tr>
<tr>
<td>Operating Temperature Range</td>
<td>-30</td>
<td>85</td>
<td>°C</td>
</tr>
<tr>
<td>Input Power Level</td>
<td>-</td>
<td>+13</td>
<td>dBm</td>
</tr>
</tbody>
</table>

### MATCHING CIRCUIT

![Matching Circuit Diagram]

Notes:
- External matching components are not required.
- Device is intended to operate in a 50 Ω single ended system.
1732.5 MHz SAW Filter
45 MHz Bandwidth
Part Number SF1733BA02660S

PACKAGE OUTLINE

SUGGESTED FOOTPRINT

Units: mm
Tolerances are ±0.15 mm except where indicated.

Pad Configuration:
Input: 2
Output: 5
Ground: All other pads

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

MARKING

All specifications are believed to be accurate and reliable. However, Spectrum Microwave reserves the right to make changes without notice.
© 2011 All rights reserved.

Spectrum Microwave, Inc.
400 Nickerson Road, Marlborough, MA 01752, USA • Phone 508-251-6400 • Fax 508-251-6401
www.SpectrumMicrowave.com

DSSF1733BA02660S Rev - 14-Feb-11
ECN 611-MAR Page 3 of 3