DESCRIPTION

- 850 MHz SAW delay line with 80 MHz minimum bandwidth.
- 22.1 x 12.7 mm DIP package.
- RoHS compliant.

TYPICAL PERFORMANCE

Horizontal: Frequency: 60 MHz/div
Vertical from Top: Relative Magnitude: 10 dB/div
Relative magnitude: 1 dB/div
Phase Linearity: 10 deg/div
Group Delay: 25 ns/div

S11 (550 to 1150 MHz) S22 (550 to 1150 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 (Fc) ¹</td>
<td>-</td>
<td>850</td>
<td>-</td>
<td>MHz</td>
</tr>
<tr>
<td>Insertion Loss</td>
<td>-</td>
<td>24</td>
<td>27</td>
<td>dB</td>
</tr>
<tr>
<td>3 dB Bandwidth (Passband) ²</td>
<td>80</td>
<td>240</td>
<td>-</td>
<td>MHz</td>
</tr>
<tr>
<td>Passband Amplitude Ripple</td>
<td>-</td>
<td>1.1</td>
<td>2</td>
<td>dB p-p</td>
</tr>
<tr>
<td>Device Delay</td>
<td>2.45</td>
<td>2.50</td>
<td>2.55</td>
<td>us</td>
</tr>
<tr>
<td>RF Feedthrough Suppression ³</td>
<td>35</td>
<td>48</td>
<td>-</td>
<td>deg p-p</td>
</tr>
<tr>
<td>Triple Transit Suppression ³</td>
<td>35</td>
<td>42</td>
<td>-</td>
<td>dB p-p</td>
</tr>
<tr>
<td>Temperature Coefficient of Delay</td>
<td>-</td>
<td>94</td>
<td>100</td>
<td>ppm/°C</td>
</tr>
<tr>
<td>Source and Load Impedance</td>
<td>-</td>
<td>50</td>
<td>-</td>
<td>ohms</td>
</tr>
<tr>
<td>Ambient Temperature</td>
<td>-</td>
<td>25</td>
<td>-</td>
<td>°C</td>
</tr>
</tbody>
</table>

Notes:  
1. Fixed reference. All specified bandwidths are centered at or referenced to this frequency.  
2. To be satisfied across Fc +/- 40 MHz.  
3. This parameter is guaranteed by design.

MAXIMUM RATINGS

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage Temperature Range</td>
<td>-40</td>
<td>25</td>
<td>85</td>
<td>°C</td>
</tr>
<tr>
<td>Input Power Level</td>
<td>-</td>
<td>10</td>
<td>13</td>
<td>dBm</td>
</tr>
</tbody>
</table>

MATCHING CIRCUIT

Note: Tuning components are not required.
850 MHz SAW delay Line
80 MHz Bandwidth
Part Number: SF0850DL01825T

PACKAGE OUTLINE

Units: mm

Tolerances are ±0.15 mm except where indicated.

Pin Configuration:
Input: 1
Input return: 14
Output: 8
Output return: 7
Ground: 2, 9

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

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