**SE Series**  
*Elliptical Function*

**Frequency Range from 5 MHz to 100 MHz**  
*Application-Specific Designs*

<table>
<thead>
<tr>
<th>SERIES NUMBER</th>
<th>NUMBER OF POLES</th>
<th>INSERTION LOSS at 0.1 x f_{-3dBc} dB MAXIMUM</th>
<th>ATTENUATION dBc MINIMUM</th>
<th>STOPBAND FREQUENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td>SE24</td>
<td>5</td>
<td>0.5</td>
<td>-40</td>
<td>1.50 x f_{-3dBc}</td>
</tr>
<tr>
<td>SE26</td>
<td>5</td>
<td>0.5</td>
<td>-60</td>
<td>2.20 x f_{-3dBc}</td>
</tr>
<tr>
<td>SE34</td>
<td>7</td>
<td>0.5</td>
<td>-40</td>
<td>1.15 x f_{-3dBc}</td>
</tr>
<tr>
<td>SE36</td>
<td>7</td>
<td>0.5</td>
<td>-60</td>
<td>1.35 x f_{-3dBc}</td>
</tr>
</tbody>
</table>

**FREQUENCY** -3dBc: 5 MHz to 100 MHz – specify any f within that range

Note: TTE’s products are made in the USA. Application-specific designs are made to order. Typical delivery is 2 weeks. Expedited lead time of 3-5 days is available on many products.

**For RoHS compliant, add “R” to part number. Example: SE36-80M-50-585**

TTE designates a component RoHS-compliant by adding “R” (RoHS) within the part number. These RoHS components meet the ≤ 0.1% lead requirement and they are compatible with 260°C soldering processes.

**NOTES:**
- Operating Temperature Range: 0°C to +70°C
- Number of Poles: 5 or 7
- VSWR: 1.5:1 Typical
- Input Power: 20 mW
- Case Type: Refer to Case Selection Guide
- Case Options: PCB or SMT
- Normalized Response: Refer to Graphs
- Product Info: Refer to J Series

**TERMINATIONS:**
- 50 Ω or 75 Ω
- 5 MHz - 100 MHz

**STOPBAND FREQUENCY CALCULATIONS:**
Using part number SE36-80M-50-585, we know that the filter is a 7 pole Elliptical Function lowpass filter. Scroll down to series number SE36. Moving to the right we find the stopband specification listed as -60dBc minimum at 1.35 x f_{-3dBc}. Thus, the -60dBc frequency is at 108 MHz (1.35 x 80 MHz).

**PART NUMBER DERIVATION:**
- SE36 *(R) -80M -50 -585
- 1 2 3 4 5
- 1) Series, SE36 (which has 7 poles)
- 2) “R” RoHS compliant. Allow for longer lead time.
- 3) f_{-3dBc}
- 4) Terminations
- 5) Case selection from the case selection guide.