SAW Filter 61.380MHz  
Part No: MP02237

A. MAXIMUM RATING:
1. Input Power Level: 10 dBm
2. Operating Temperature: -20°C to +80°C
3. Storage Temperature: -40°C to +85°C

B. CHARACTERISTICS:
Ambient Temperature: 25°C

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit</th>
<th>Min.</th>
<th>Typ.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center frequency, Fc</td>
<td>MHz</td>
<td>-</td>
<td>61.38</td>
<td>-</td>
</tr>
<tr>
<td>Insertion Loss, IL</td>
<td>dB</td>
<td>-</td>
<td>8.8</td>
<td>10.0</td>
</tr>
<tr>
<td>-1 dB Bandwidth</td>
<td>MHz</td>
<td>1.8</td>
<td>2.53</td>
<td>-</td>
</tr>
<tr>
<td>-3 dB Bandwidth</td>
<td>MHz</td>
<td>2.8</td>
<td>2.98</td>
<td>-</td>
</tr>
<tr>
<td>-40 dB Bandwidth</td>
<td>MHz</td>
<td>-</td>
<td>4.92</td>
<td>5.2</td>
</tr>
<tr>
<td>Amplitude Ripple Fc±0.75MHz</td>
<td>dB</td>
<td>-</td>
<td>0.5</td>
<td>1.0</td>
</tr>
<tr>
<td>Group-delay Ripple Fc±0.75MHz</td>
<td>dB</td>
<td>-</td>
<td>110</td>
<td>150</td>
</tr>
<tr>
<td>Relative Attenuation 1.0 ~ 57.38MHz</td>
<td>dB</td>
<td>45</td>
<td>52</td>
<td>-</td>
</tr>
<tr>
<td>Relative Attenuation 65.38 ~150MHz</td>
<td>dB</td>
<td>45</td>
<td>48</td>
<td>-</td>
</tr>
<tr>
<td>Temp Coefficient</td>
<td>ppm/K</td>
<td>-23</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
C. FREQUENCY CHARACTERISTICS:

(1) wide band Response:(span 50MHz)

(2) Pass band Response and Group Delay Variation: (span 5MHz)
(3) S11 Smith-Chart: (span 50MHz)

(4) S22 Smith-Chart: (span 50MHz)
SAW Filter 61.380MHz
Part No: MP02237
Model: TB0728A

(5) wide band Response: (span 150MHz)

D. OUTLINE DRAWING:

Pin K: RF Input
Pin E: RF Output
Pin A, B, C, D, F, G, H, I, J, L: Ground
Unit: mm
SAW Filter 61.380MHz  
Model: TB0728A  
Part No: MP02237  
REV NO.: 1

E. PCB FOOTPRINT:

F. MATCHING CIRCUIT:

Zin = Zout = 50 ohm  
L1 = 180nH, C1 = 110pF, L2 = 82nH, L3 = 220nH
SAW Filter 61.380MHz
Part No: MP02237

G. PACKING:

(1). REEL DIMENSION:

(2). TYPE DIMENSION:
SAW Filter 61.380MHz
Part No: MP02237

H. RECOMMENDED REFLOW PROFILE: