



PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

| Ordering Code / Part Number | Product Description |
|-----------------------------|--|
| 813-SL140.0M-10 | Low-Loss 140MHz IF SAW Filter 9.4MHz Bandwidth |

Specification Contents

- o Mechanical Dimensions
- o Test Circuit
- o Maximum Ratings
- o Electrical Specification
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Notes

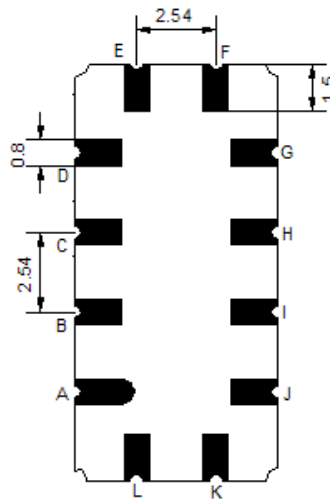
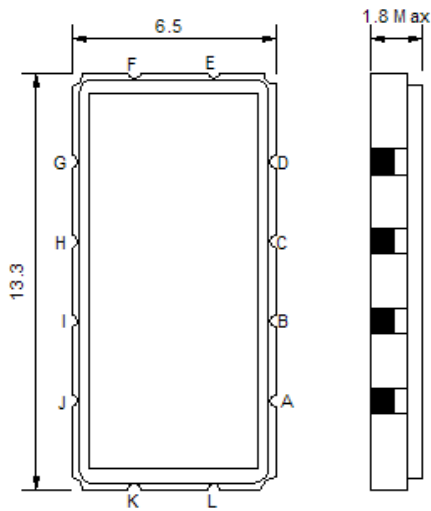
- o Electrostatic Sensitive Device (ESD) 
- o Avoid excessive ultrasonic exposure
- o Solderability compatible with JEDEC J-STD-020C Pb-free process, 260°C peak reflow temperature
- o This product complies with EU directive 2002/95/EC (RoHS compliance)



Oscilent Corporation
Telephone: 1.949.252.0522
Fax: 1.949.252.0522
Email: sales@oscilent.com

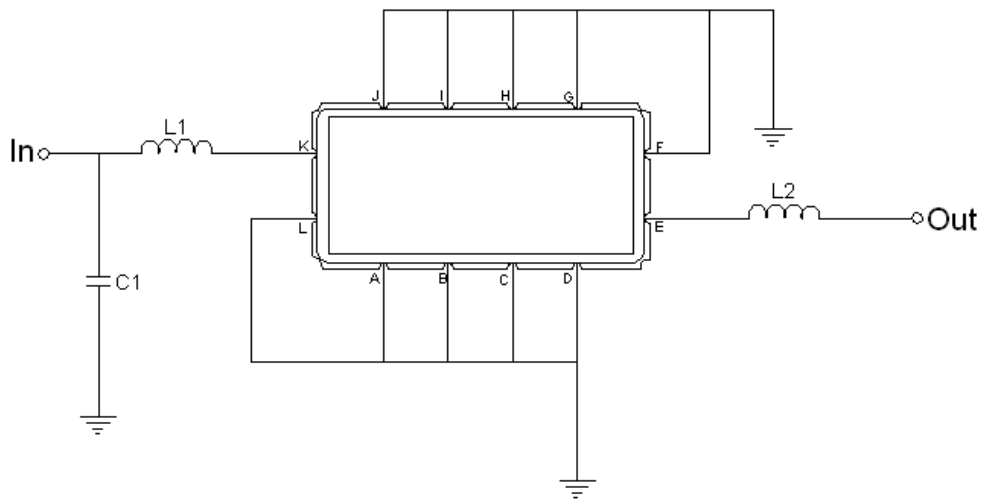


Mechanical Dimensions (mm)



| Pin Description | |
|------------------------------|--------|
| A, B, C, D, F, G, H, I, J, L | Ground |
| K | Input |
| E | Output |

Test Circuit



| Test Fixture & Values | |
|-----------------------|-------------------------|
| Input | L1=82nH Q > 40, C1=30pF |
| Output | L2=56nH Q > 40 |
| Source/Load Impedance | 50 Ω |



Maximum Ratings

| Parameters Description | Unit | Minimum | Typical | Maximum |
|--|------|---------|---------|---------|
| Operating Temperature Range | °C | -30 | - | +80 |
| Storage Temperature Range | °C | -40 | - | +85 |
| Maximum DC Voltage | V | - | - | 10 |
| Maximum Input Power | dBm | - | - | 10 |
| Source Impedance (single ended) ⁽¹⁾ | Ω | - | 50 | - |
| Load Impedance (single ended) ⁽¹⁾ | Ω | - | 50 | - |

Notes: With Matching Network (Ref. Testing Environment Circuit as shown above).

Those impedances could be modified with different impedance values and/or structures, if necessary.

Electrical Specification

| Parameters Description | Unit | Minimum | Typical | Maximum |
|--|-------------------|---------|---------|---------|
| Center Frequency (Fo) | MHz | 139.6 | 140.0 | 140.4 |
| Insertion Loss at Fo | dB | - | 10.5 | 11.5 |
| Temperature Coefficient | ppm/°C | - | -86 | - |
| Amplitude Ripple within fo ±3.6 MHz | dB _{p-p} | - | 0.7 | 1.0 |
| Group Delay Variation within fo ±3.6 MHz | nsec | - | 100 | 150 |
| Absolute Delay at Fo | µsec | - | 1.03 | - |
| Bandwidth at -1.5 dB | MHz | 8.9 | 9.3 | - |
| Bandwidth at -3.0 dB | MHz | 9.4 | 9.9 | - |
| Bandwidth at -35.0 dB | MHz | - | 13.5 | 14.5 |
| Relative Attenuation: | | | | |
| from 10 to 132 MHz | dB | 40 | 48 | - |
| from 149 to 260 MHz | dB | 40 | 45 | - |



Frequency Response

