



REV A January 2011

Oscilent Controlled Document

| Ordering Code / Part Number | Product Description |
|-----------------------------|---|
| 813-SL140.0M-28 | Low-Loss 140MHz IF SAW Filter 28.0MHz Bandwidth |

Specification Contents

- o Mechanical Dimensions
- o Test Circuit
- o Maximum Ratings
- o Electrical Specification
- o Frequency Response

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)



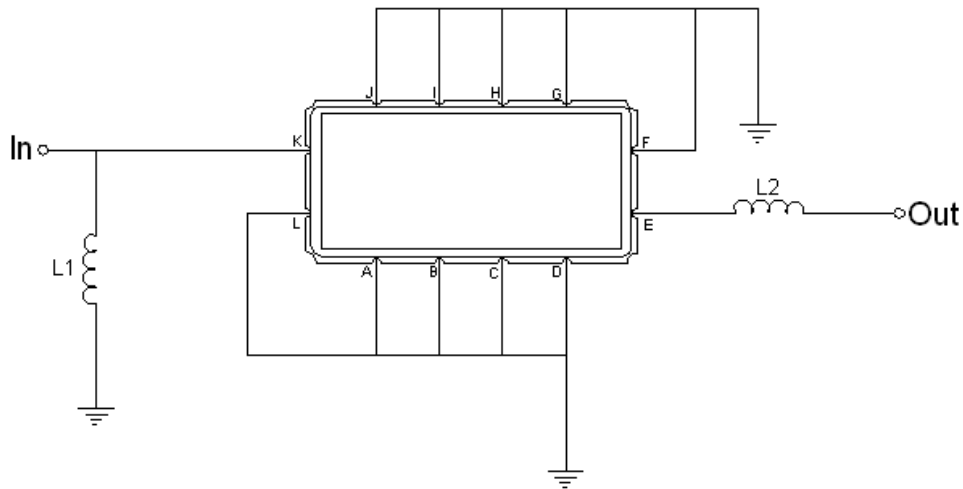


Mechanical Dimensions (mm)



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

Test Circuit



| Test Fixture & Values | |
|-----------------------|----------------|
| Input | L1=22nH Q > 40 |
| Output | L2=27nH 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 | - | 140.0 | - |
| Insertion Loss at Fo | dB | - | 14.5 | 16.0 |
| Temperature Coefficient | ppm/°C | - | -86 | - |
| Amplitude Ripple within fo ±13.0 MHz | dB _{p-p} | - | 0.45 | 1.0 |
| Group Delay Variation within fo ±13.0 MHz | nsec | - | 50 | 80 |
| Absolute Delay at Fo | µsec | - | 0.91 | - |
| Bandwidth at -1.0 dB | MHz | 27.5 | 28.0 | - |
| Bandwidth at -3.0 dB | MHz | 28.5 | 29.0 | - |
| Bandwidth at -40.0 dB | MHz | - | 32.8 | 33.5 |
| Relative Attenuation: | | | | |
| Lower sidelobe | dB | 45 | 50 | - |
| Upper sidelobe | dB | 45 | 50 | - |



Frequency Response

