

## Maximum Ratings

| Parameters Description                         | Unit            | Minimum | Typical    | Maximum |
|--|-----------------|---------|------------|---------|
| Operation 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) <sup>(1)</sup> | Ω               | -       | 50         | -       |
| Load Impedance (single ended) <sup>(1)</sup>   | Ω               | -       | 50         | -       |
| Package type & size                            | V               |         |            |         |
| Length x Width                                 | mm <sup>2</sup> | -       | 13.3 x 6.5 | -       |
| Height   | mm              | -       | -          | 1.8     |

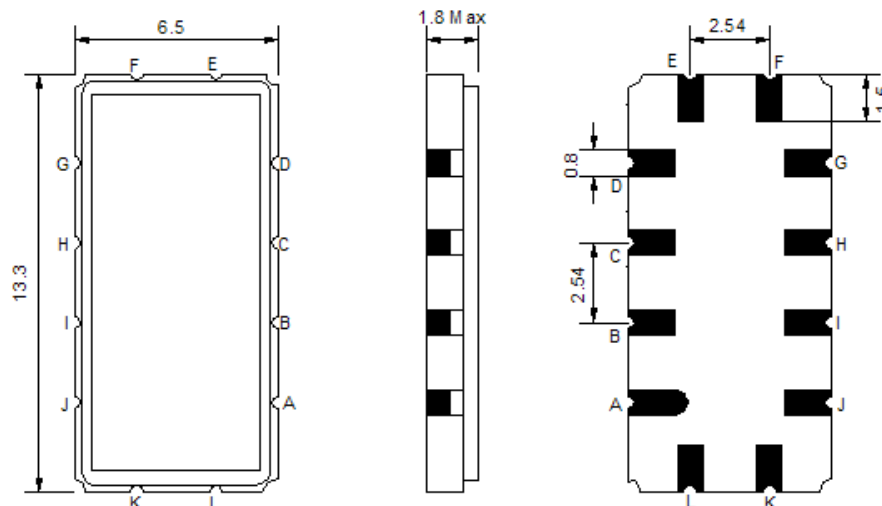
## Electrical Specification

| Parameters Description     | Unit              | Minimum | Typical | Maximum |
|----------------------------|-------------------|---------|---------|---------|
| Center Frequency (Fo)      | MHz               | 69.85   | 70.0    | 70.15   |
| Insertion Loss at Fo       | dB                | -       | 7.7     | 8.2     |
| Amplitude Ripple Variation | dB <sub>p-p</sub> | -       | 0.65    | 1.0     |
| Group Delay Variation      | nsec              | -       | 145     | 190     |
| Absolute Delay at Fo       | µsec              | -       | 1.07    | -       |
| Temperature Coefficient    | ppm/°C            | -       | -84     | -       |
| Bandwidth at -1.0 dB       | MHz               | 2.4     | 2.85    | -       |
| Bandwidth at -3.0 dB       | MHz               | 3.0     | 3.55    | -       |
| Bandwidth at -40.0 dB      | MHz               | -       | 6.18    | 6.8     |
| Ultimate Rejection         | dB                | 40      | 45      | -       |

**Notes :** (1) With Matching Network (Ref. Testing Environment Circuit as shown below).

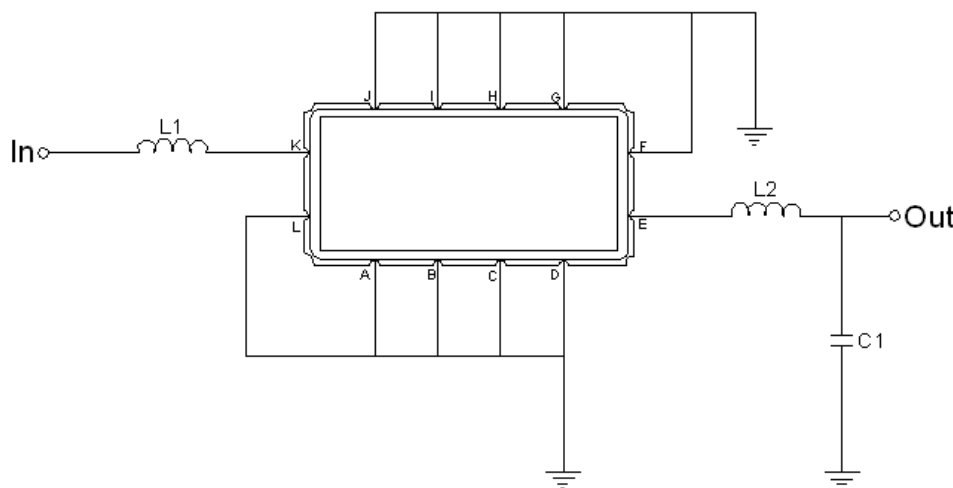
Those impedances could be modified with different impedance values and/or structures, if necessary.

## Package Dimensions



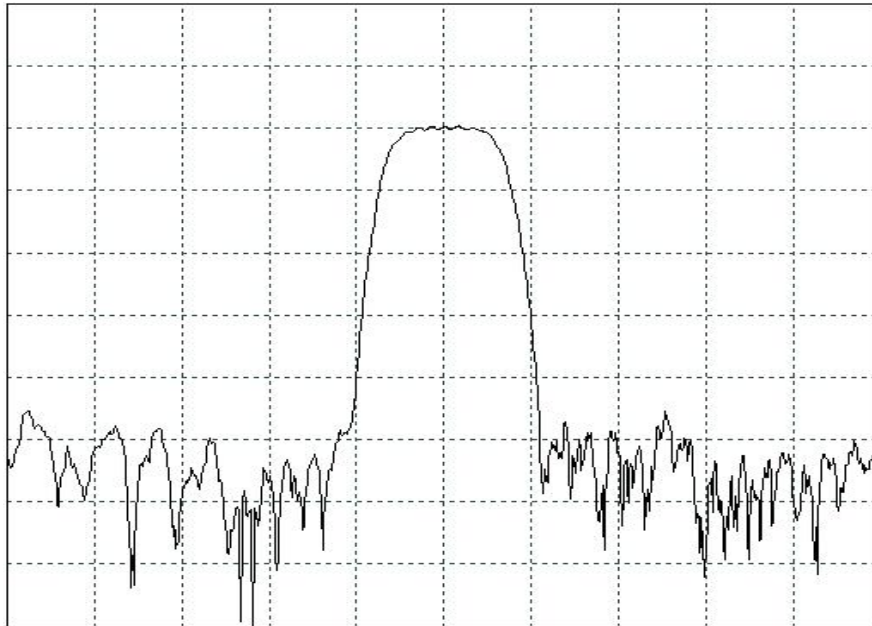
| Pin Description              |        |
|------------------------------|--------|
| A, B, C, D, F, G, H, I, J, L | Ground |
| K                            | Input  |
| E                            | Output |

## Testing Environment



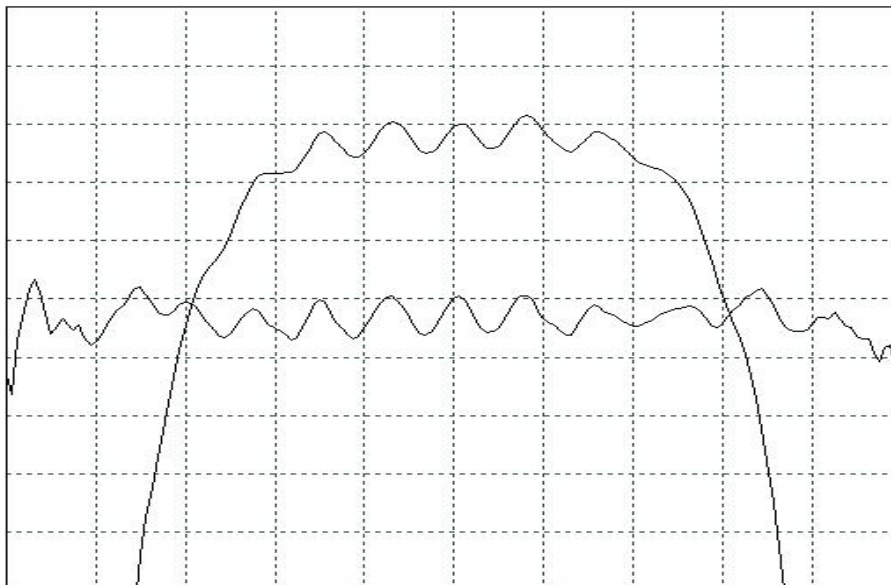
| Test Fixture & Values |                          |
|-----------------------|--------------------------|
| Input                 | L1=270 nH , Q>40         |
| Output                | L2=56 nH , Q>40 C = 22pF |
| Source/Load Impedance | 50 $\Omega$              |

## Frequency Response



Horizontal : 3.0 MHz/Div

Vertical : 10 dB/Div



Horizontal : 0.6 MHz/Div

Vertical : 1.0 dB/Div

Vertical : 200 ns/Div

