



Features


- ◇ For IF SAW filter
- ◇ High attenuation
- ◇ Single-ended operation
- ◇ Dual In-line Package
- ◇ No matching required for operation at 50Ω
- ◇ RoHS compliant (2002/95/EC), Pb-free

Specifications

| Parameter | Unit | Minimum | Typical | Maximum | |
|---|----------------------------------|---------|---------|---------|---|
| Center Frequency | MHz | 69.99 | 71 | 70.016 | |
| Insertion Loss | dB | - | 17.7 | 21 | |
| 2.3 dB Bandwidth | MHz | 0.2 | 0.21 | - | |
| 2.5 dB Bandwidth | MHz | - | 0.22 | - | |
| 3 dB Bandwidth | MHz | - | 0.24 | - | |
| 45 dB Bandwidth | MHz | - | 0.74 | 0.8 | |
| Passband Variation | dB | - | 0.1 | 0.5 | |
| Group Delay Variation($f_0 \pm 0.1$ MHz) | nsec | - | 150 | 500 | |
| Absolute Delay | usec | - | 3.72 | 4 | |
| Ultimate Rejection | $f_0 \pm 0.4$ MHz | dB | 45 | 54 | - |
| | $f_0 \pm 0.6$ MHz | dB | 55 | 58 | - |
| | $f_0 \pm 1$ MHz~ $f_0 \pm 5$ MHz | dB | 60 | 61 | - |
| Material Temperature coefficient | KHz/°C | 0.07 | | | |
| Substrate Material | - | Qz | | | |
| Ambient Temperature | °C | 25 | | | |
| Operating Temperature Range | °C | -40 | - | +85 | |
| Storage Temperature Range | °C | -45 | - | +105 | |
| DC Voltage | V | 0 | | | |
| Input Power | dBm | - | - | 10 | |
| ESD Class | - | 1C | | | |
| Package Size | DIP3616 (36.0x16.0x5.0mm3) | | | | |

Notes:

1. All specifications are based on the test circuit shown;
2. In production, all specifications are measured by Agilent Network analyzer and full 2 port calibration at room temperature;
3. Electrical margin has been built into the design to account for the variations due to temperature drift and manufacturing tolerances;
4. This is the optimum impedance in order to achieve the performance show.

| | | | | |
|--|--|-------------|------------|------|
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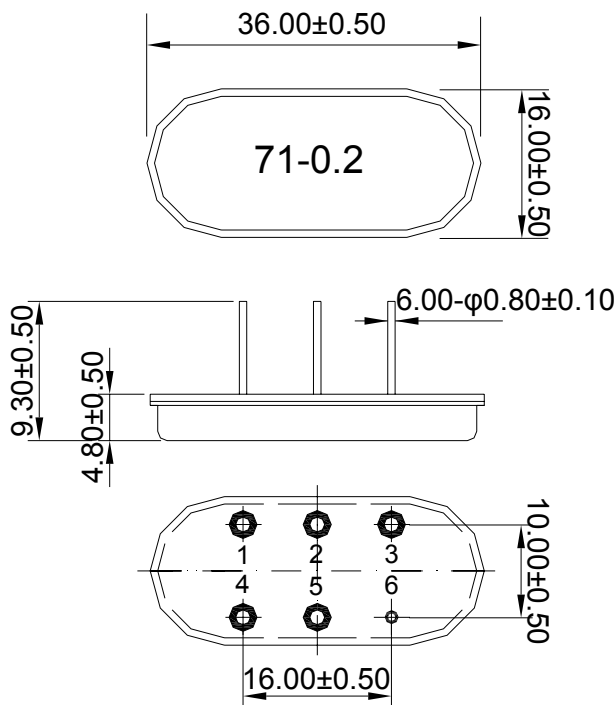
Matching Configuration



Source/Load Impedance=50 ohm

Notes - Component values may change depending on board layout.

Package Dimension



Pad Configuration:

Input 3
Output 4
Ground All Others

Marking Configuration:

1) 71-0.2: Part Number

Package: DIP3616

Unit: mm



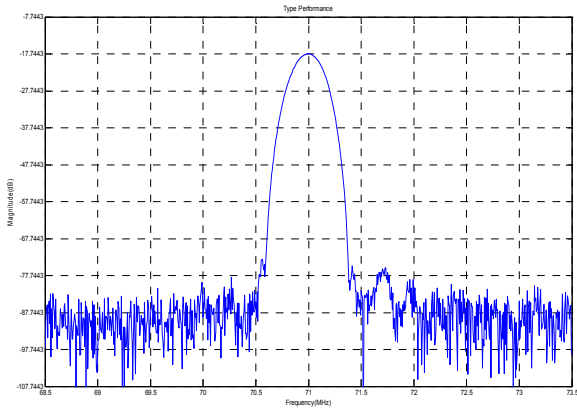
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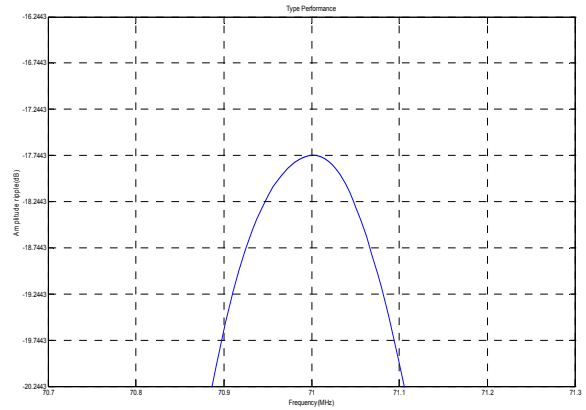
Typical Performance

Frequency Response



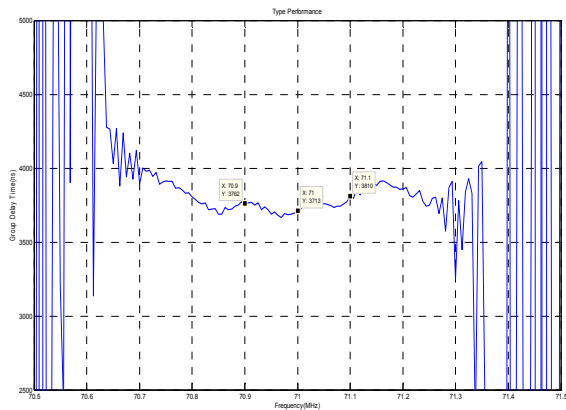
Horizontal: 0.5MHz/Div Vertical: 10dB/Div

Passband Response



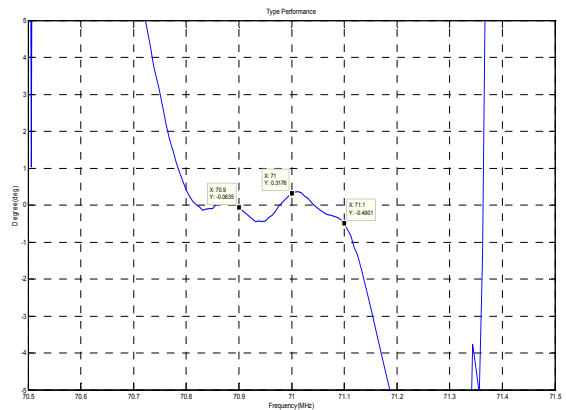
Horizontal: 0.1MHz/Div Vertical: 0.5dB/Div

Group Delay Variation(f0±0.1MHz)



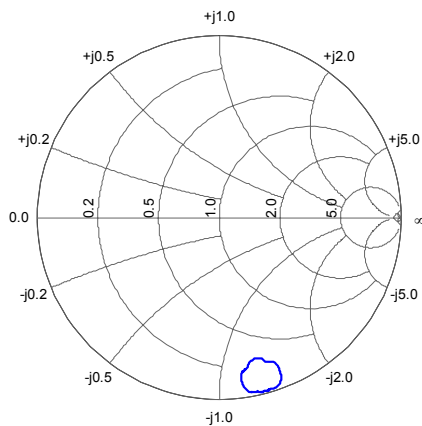
Horizontal: 0.1MHz/Div Vertical: 500ns/Div

Phase Linearity(f0±0.1MHz)

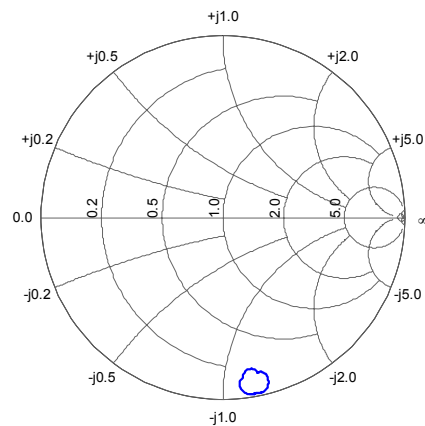


Horizontal: 0.1MHz/Div Vertical: 1deg/Div

Smith Chart S11



Smith Chart S22



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