

## 1. Features

- Typical 1dB bandwidth of 19.75 MHz
- Low-Loss Filter
- Single Ended Operation
- Surface Mounted Package (SMD)

**RoHS Compliant**

Tested by SGS Testing Korea

## 2. Electrical Specifications

Source and Load Impedance = 50Ω

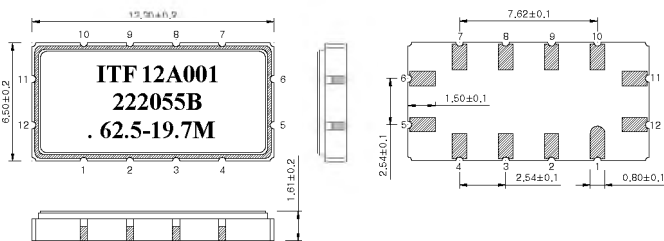
Operating Temperature : -10°C ~ +40°C

|                                       |        | Minimum | Typical | Maximum |
|---------------------------------------|--------|---------|---------|---------|
| Center Frequency (fo)                 | MHz    | -       | 62.5    | -       |
| Insertion Loss                        | dB     | -       | 15.6    | 18.0    |
| 1dB Bandwidth                         | MHz    | 19.3    | 19.75   | -       |
| 3dB Bandwidth                         | MHz    | -       | 20.5    | -       |
| 40dB Bandwidth                        | MHz    | -       | 24.0    | 24.5    |
| Amplitude Ripple (fo ± 9.22 MHz)      | dB     | -       | 0.4     | 1.0     |
| Group Delay Variation (fo ± 9.22 MHz) | nsec   | -       | 30      | 60      |
| Absolute Delay                        | usec   | -       | 0.98    | 1.0     |
| Ultimate Rejection                    | dB     | 40      | 45      | -       |
| Temperature Coefficient of Frequency  | ppm/°C | -       | -86     | -       |

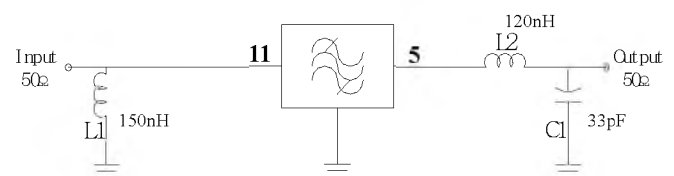
Room Temperature : +25°C

|                                       |      | Minimum | Typical | Maximum |
|---------------------------------------|------|---------|---------|---------|
| Insertion Loss                        | dB   | -       | 15.6    | 17.5    |
| Amplitude Ripple (fo ± 9.36 MHz)      | dB   | -       | 0.4     | 1.0     |
| Group Delay Variation (fo ± 9.36 MHz) | nsec | -       | 30      | 60      |

### S1365 Package Dimension



### Matching Schematic



Dimensions shown are nominal in millimeters

Body : Al<sub>2</sub>O<sub>3</sub>

Lid : Kovar, Ni Plated

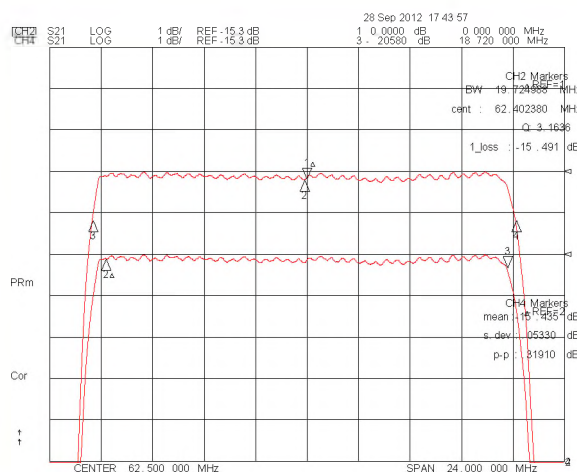
Termination : Au plating 0.3 ~ 1.0um, over a 1.27 ~ 8.89um Ni Plating

### Pin Configuration

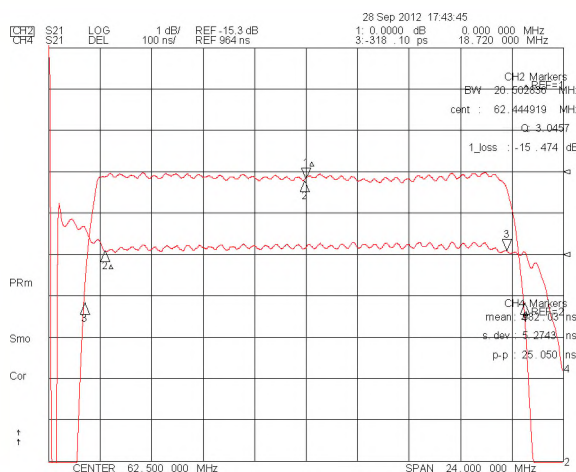
| Input  | 11 | Ground | 6, 12  |
|--------|----|--------|--------|
| Output | 5  | Others | Ground |

### 3. Typical Performance ( at +25°C )

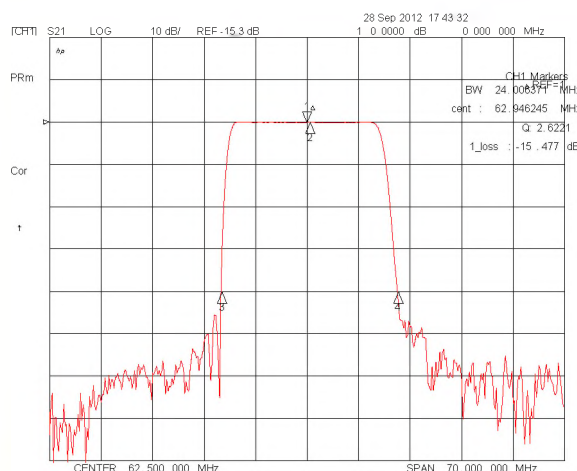
#### 1dB Bandwidth & Ripple



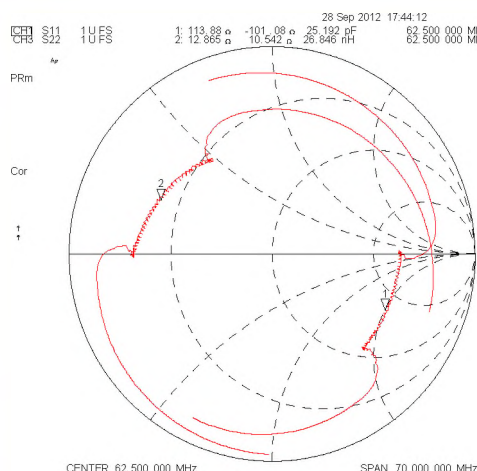
#### 3dB Bandwidth & Group Delay



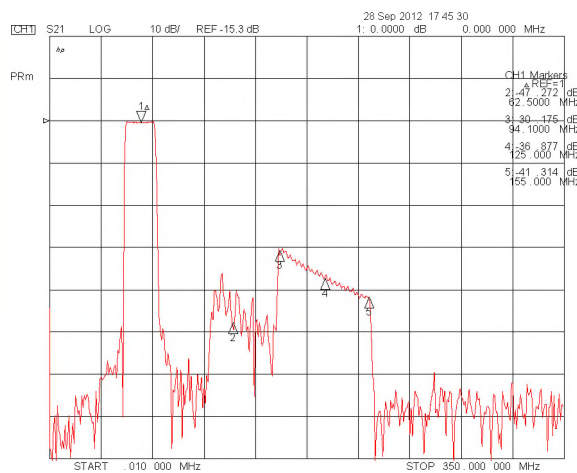
#### 40dB Bandwidth



#### Smith Chart(S11 & S22)



#### Wide band Properties



#### SWR(S11 & S22)

