

### 1. Features

- Typical 1dB bandwidth of 10.7 MHz
- High attenuation
- Single Ended Operation
- Surface Mounted Package (SMD)

**RoHS Compliant**

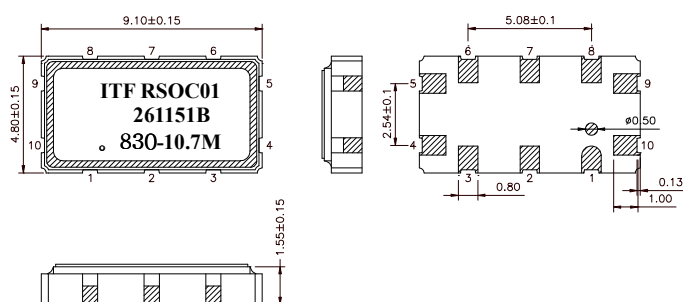
Tested by SGS Testing Korea

### 2. . Electrical Specifications

Source and Load Impedance = 50Ω

| Room Temperature : +25°C             |                     | Minimum | Typical | Maximum |
|--------------------------------------|---------------------|---------|---------|---------|
| Center Frequency (fo)                | MHz                 | 829.5   | 830.0   | 830.5   |
| Insertion Loss                       | dB                  | 21.0    | 23.5    | 25.5    |
| 1dB Bandwidth                        | MHz                 | 10.4    | 10.7    | -       |
| 3dB Bandwidth                        | MHz                 | 11.0    | 11.38   | -       |
| 40dB Bandwidth                       | MHz                 | -       | 14.1    | 14.8    |
| Amplitude Ripple (fo ± 5 MHz)        | dB                  | -       | 0.7     | 1.3     |
| Group Delay Variation (fo ± 5 MHz)   | nsec                | -       | 60      | 110     |
| Absolute Delay                       | usec                | -       | 1.33    | 1.5     |
| Relative Attenuation<br>fo ±7.5MHz   | dB                  | 40      | 48      | -       |
| Temperature Coefficient of Frequency | ppm/°C <sup>2</sup> | -       | -0.03   | -       |

#### S1365 Package Dimension

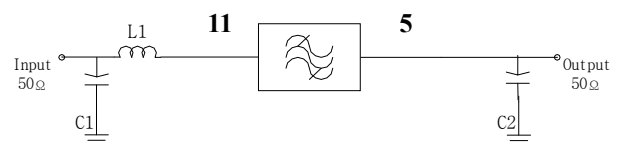


Dimensions shown are nominal in millimeters

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

#### Matching Network Configuration



**L1 = 3.3nH**

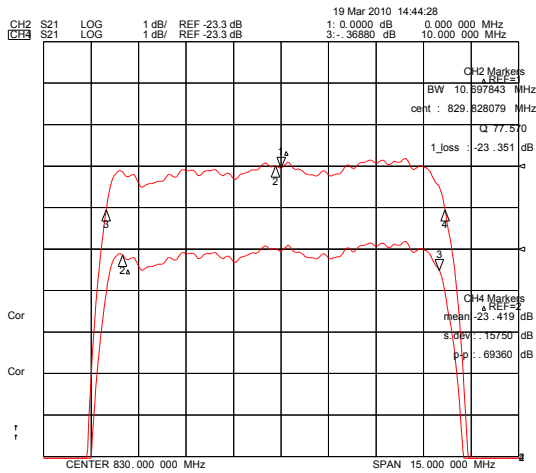
**C1 = 7 pF, C2 = 11 pF**

#### Pin Configuration

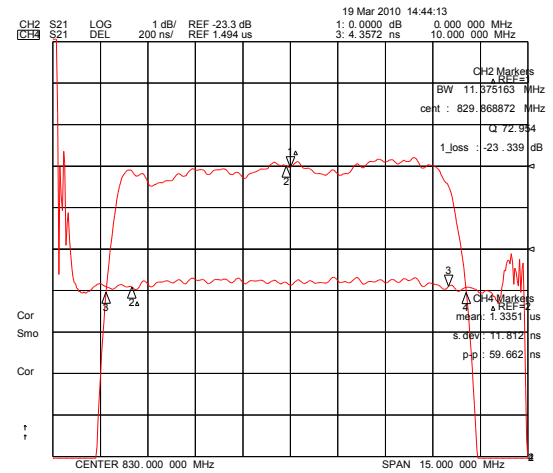
| Pin Configuration |    |        |        |
|-------------------|----|--------|--------|
| Input             | 11 | Ground | 6,12   |
| Output            | 5  | Others | Ground |

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

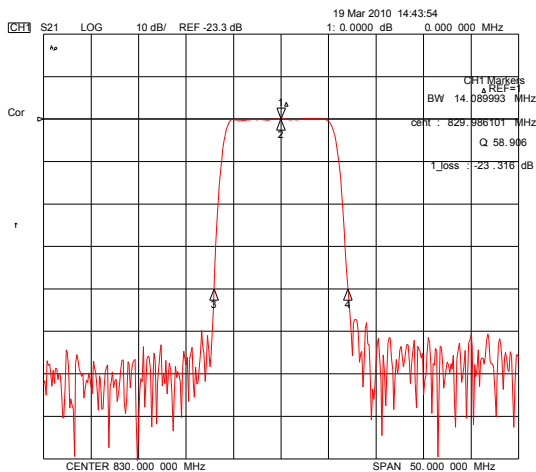
#### 1dB Bandwidth & Ripple( $f_0 \pm 5$ MHz)



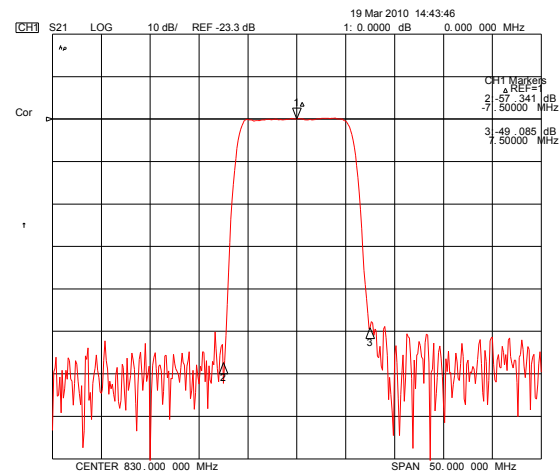
#### 3dB Bandwidth & Group Delay( $f_0 \pm 5$ MHz)



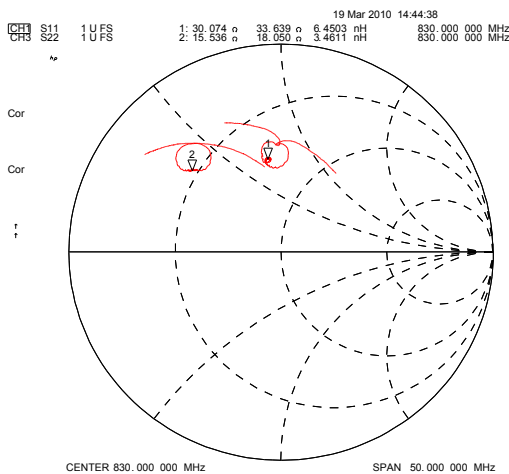
#### 40dB Bandwidth



#### Wideband Properties



#### Smith Chart ( S11 & S22 )



#### SWR ( S11 & S22 )

