

1. Features

- Typical 1dB bandwidth of 20.45 MHz
- Low-Loss Filter
- Single Ended Operation
- Ceramic Surface Mount Device(SMD) Package

RoHS Compliant

Tested by SGS Testing Korea

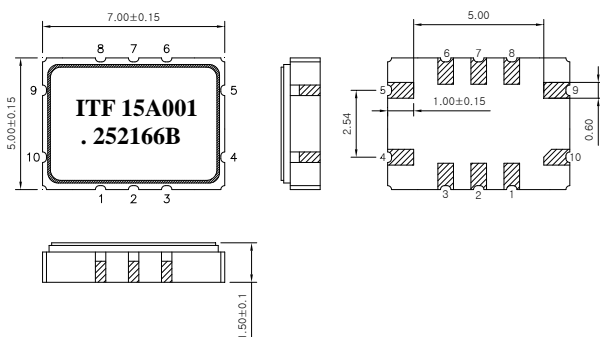
2. Electrical Specifications

Source and Load Impedance = 50

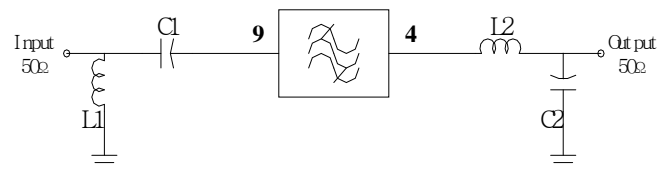
Operating Temperature : -30°C ~ +85°C		Minimum	Typical	Maximum
Center Frequency (fo)	MHz	-	190.0	-
Insertion Loss	dB	-	11.0	13.0
1dB Bandwidth	MHz	19.9	20.45	-
3dB Bandwidth	MHz	-	21.64	-
35dB Bandwidth	MHz	-	25.6	25.9
40dB Bandwidth	MHz	-	25.9	-
Amplitude Ripple (fo ± 8.55 MHz)	dB	-	0.45	1.0
Group Delay Variation (fo ± 8.55 MHz)	nsec	-	40	80
Absolute Delay	usec	-	0.67	-
Temperature Coefficient of Frequency	ppm/°C	-	-86	-

Room Temperature : +25°C		Minimum	Typical	Maximum
Insertion Loss	dB	-	11.0	12.5
Amplitude Ripple (fo ± 9.5 MHz)	dB	-	0.45	1.0
Group Delay Variation (fo ± 9.5 MHz)	nsec	-	40	80
Relative Attenuation				
0.1 MHz ~ 175.0 MHz	dB	40	50	-
209.0 MHz ~ 1.0 GHz	dB	40	50	-

S7050 Package Dimension



Matching Schematic



L1 = 15nH, C1 = 68pF, L2 = 15nH, C2 = 62pF

Dimensions shown are nominal in millimeters

Body : Al₂O₃

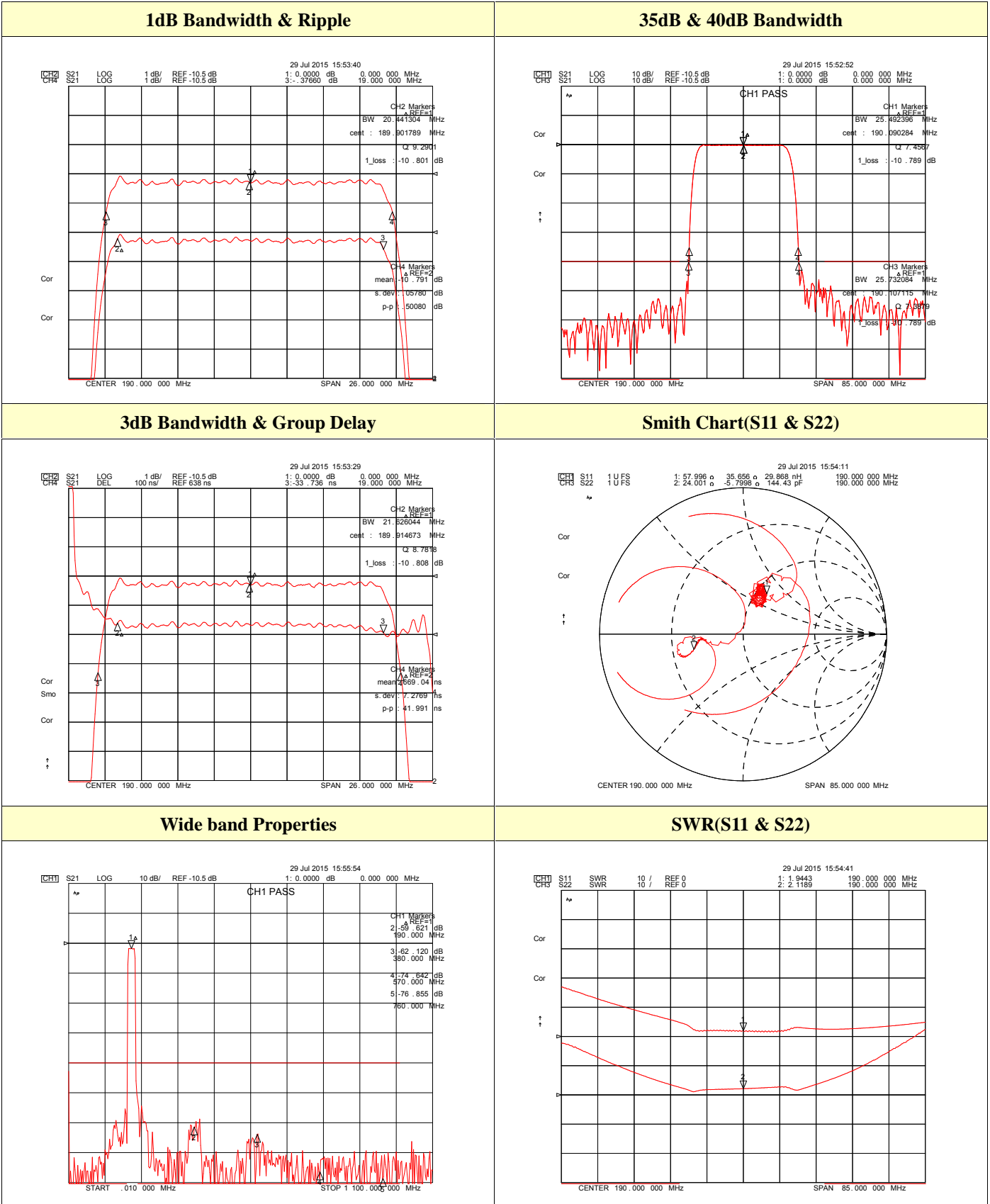
Lid : Kovar, Ni Plated

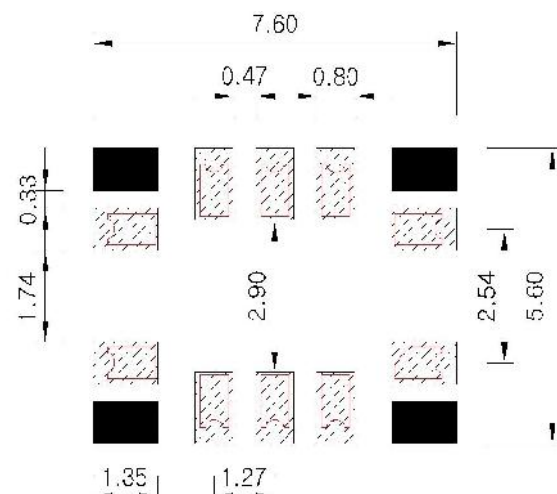
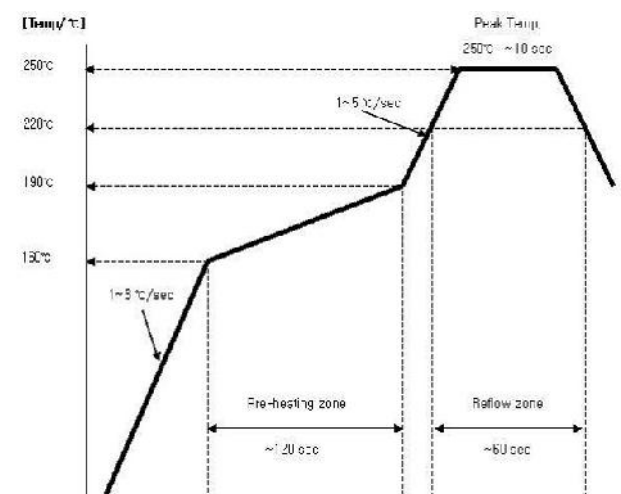
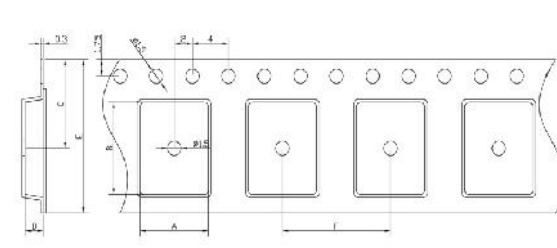
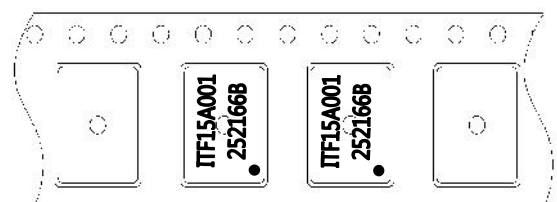
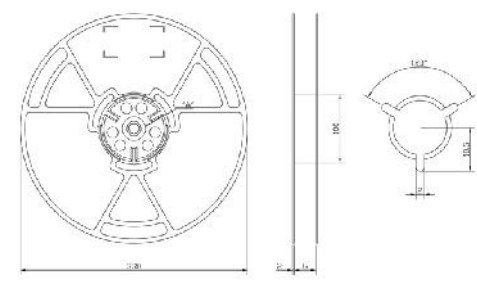
Termination : Au plating 0.3 ~ 1.0um, over a 1.27 ~ 8.89um Ni Plating

Pin Configuration

Pin Configuration			
Input	9	Ground	5, 10
Output	4	Others	Ground

3. Typical Performance (at +25°C)



PCB Footprint	Reflow Profile												
 <p>Diagram showing PCB footprint dimensions: 7.60 (total width), 0.47 (pad width), 0.80 (pad spacing), 1.74 (total height), 0.33 (pad thickness), 2.90 (component width), 2.54 (component height), 5.60 (total length), 1.35 (pad width), and 1.27 (pad spacing).</p>	 <p>Reflow Profile Graph showing temperature (Temp/°C) vs. time. Key points: 130°C, 190°C, 220°C, 250°C (Peak Temp). Heating rates: 1-3 °C/sec, 1-5 °C/sec. Zones: Pre-heating zone (~1.20 sec), Reflow zone (~6.00 sec).</p>												
Tape and Reel													
Carrier Tape Dimension [unit : mm]	Part Direction												
 <table border="1" data-bbox="351 1254 782 1411"> <tr> <td>A</td> <td>5.50 ± 0.1</td> <td>D</td> <td>1.80 ± 0.1</td> </tr> <tr> <td>B</td> <td>7.50 ± 0.1</td> <td>E</td> <td>16.00 ± 0.1</td> </tr> <tr> <td>C</td> <td>9.25 ± 0.1</td> <td>F</td> <td>8.00 ± 0.1</td> </tr> </table>	A	5.50 ± 0.1	D	1.80 ± 0.1	B	7.50 ± 0.1	E	16.00 ± 0.1	C	9.25 ± 0.1	F	8.00 ± 0.1	 <p>Diagram showing the carrier tape with parts labeled ITF15A001 252166B. An arrow indicates the Tape Running Direction.</p>
A	5.50 ± 0.1	D	1.80 ± 0.1										
B	7.50 ± 0.1	E	16.00 ± 0.1										
C	9.25 ± 0.1	F	8.00 ± 0.1										
Reel Dimensions [unit : mm]													
<p>Reeling Quantity : 3000 pcs / reel</p>  <p>G = 16.4 mm</p>													