



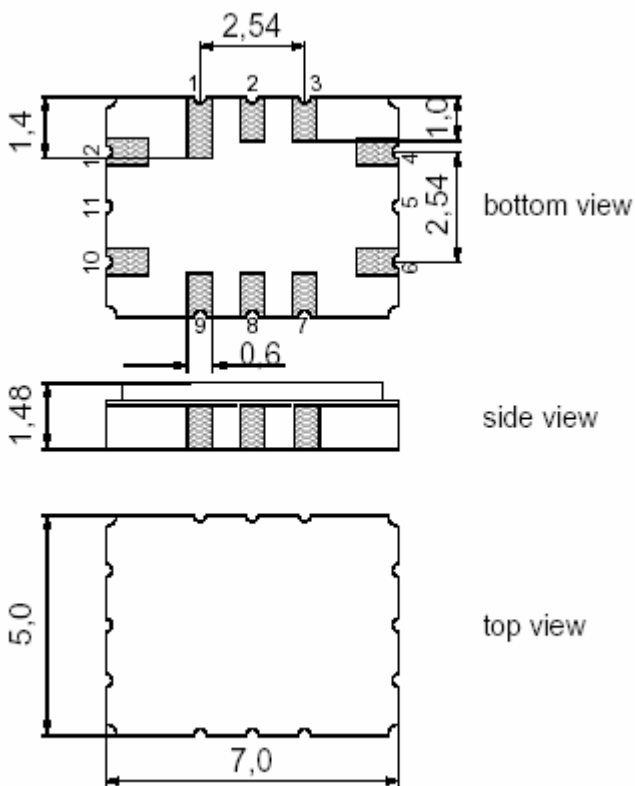
## LBT17201 MHz SAW Filter Electrical Characteristic

### Features

- For IF applications
- Low loss
- High attenuation
- Single-ended or Balanced operation
- Ceramic Surface Mount Package (SMP)
- Small size

### Package

### Pin Configuration



Surface Mount 7.01 x 5.0 x 1.48 mm :

- |         |                                  |
|---------|----------------------------------|
| 12      | Input                            |
| 6       | Output                           |
| 10      | Balanced input or input ground   |
| 4       | Balanced output or output ground |
| 3,9     | Case ground                      |
| 1,2,7,8 | Not connected                    |

Dimensions shown are nominal in millimeters

All tolerances are +/-0.15mm except overall

length and width +/-0.13mm

www.DataSheet4U.com Body:  $Al_2O_3$  eramic

Lid: Kovar, Ni plated

Terminations: Au plating 0.5-1.0 $\mu$ m,  
over a 2-6 $\mu$ m Ni plating



## Electrical Specifications

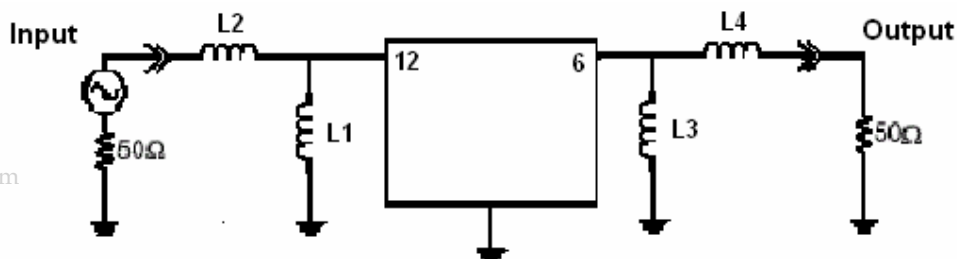
Parameter	Unit	Minimum	Typical	Maximum
<b>Center Frequency, <math>f_0</math></b>	MHz	-	172.8	-
<b>Insertion Loss at 172.8 MHz</b>	dB	-	17.2	20
<b>Amplitude Variation</b> $f_0 \pm 4.42 \text{ MHz}$	dB p-p	-	0.8	1.5
<b>Group Delay Variation</b> $f_0 \pm 4.42 \text{ MHz}$	nsec	-	80	200
<b>VSWR</b> $f_0 \pm 4.42 \text{ MHz}$		-	1.3:1	-
<b>Phase ripple</b> $f_0 \pm 4.42 \text{ MHz}$	degree	-	10	-
<b>1.5dB bandwidth</b>	MHz	8.84	9.31	-
<b>Rejection (relative to IL)</b>				
$f_0 \pm 7.5 \text{ MHz} \dots f_0 \pm 10 \text{ MHz}$	dB	35	40	-
$f_0 \pm 10 \text{ MHz} \dots f_0 \pm 20 \text{ MHz}$	dB	30	35	-
$f_0 \pm 20 \text{ MHz} \dots f_0 \pm 50 \text{ MHz}$	dB	45	48	-
$f_0 \pm 50 \text{ MHz} \dots f_0 \pm 100 \text{ MHz}$	dB	45	50	-
<b>Operating Temperature Range</b>	$^{\circ}\text{C}$	-30 to +85 $^{\circ}\text{C}$		

### Notes:

1. All specifications are based on the test circuit shown below
2. Electrical margin has been built into the design to account for the variations due to manufacturing tolerances
3. Relative to Insertion loss at 172.8 MHz
4. This specification is valid for room temperature only

## Matching Schematic

Actual matching values may vary due to PCB layout and parasitics



L1=56nH L3=33nH  
L2=L4=68nH



**Typical Performance (at +25oC)**

