



### Features

- ◇ For IF SAW filter
- ◇ Balanced operation possible
- ◇ Ceramic Surface Mount Package
- ◇ Small size
- ◇ RoHS compliant (2002/95/EC), Pb-free

### Specifications

Parameter	Unit	Minimum	Typical	Maximum	
Center Frequency	MHz	-	224	-	
Insertion Loss	dB	-	8.2	10	
1 dB Bandwidth	MHz	30	32.4	-	
Passband Variation( $f_0 \pm 15\text{MHz}$ )	dB	-	0.7	1.5	
VSWR( $f_0 \pm 15\text{MHz}$ )	-	-	2.8/2.4	-	
Group Delay Variation( $f_0 \pm 15\text{MHz}$ )	nsec	-	70	150	
Absolute Delay	usec	-	0.6	-	
Ultimate Rejection	$f_0 - 200\text{MHz}$	dB	45	60	-
	$f_0 - 200\text{MHz}$ to $f_0 - 40\text{MHz}$	dB	45	48	-
	$f_0 - 40\text{MHz}$ to $f_0 - 30\text{MHz}$	dB	40	45	-
	$f_0 - 30\text{MHz}$	dB	40	47	-
	$f_0 - 30\text{MHz}$ to $f_0 - 20\text{MHz}$	dB	20	34	-
	$f_0 - 20\text{MHz}$	dB	20	34	-
	$f_0 - 20\text{MHz}$ to $f_0 - 17.5\text{MHz}$	dB	-	8	-
	$f_0 - 17.5\text{MHz}$	dB	-	8	-
	$f_0 + 17.5\text{MHz}$	dB	-	4	-
	$f_0 + 17.5\text{MHz}$ to $f_0 + 20\text{MHz}$	dB	-	4	-
	$f_0 + 20\text{MHz}$	dB	10	36	-
	$f_0 + 20\text{MHz}$ to $f_0 + 30\text{MHz}$	dB	10	35	-
	$f_0 + 30\text{MHz}$	dB	40	46	-
	$f_0 + 30\text{MHz}$ to $f_0 + 40\text{MHz}$	dB	40	44	-
	$f_0 + 40\text{MHz}$ to $f_0 + 200\text{MHz}$	dB	45	48	-
	$f_0 + 200\text{MHz}$	dB	45	78	-
$f_0 + 2\text{GHz}$ to $f_0 + 3.6\text{GHz}$	dB	45	52	-	
Material Temperature coefficient	KHz/°C	-18.4			
Substrate Material	-	128LN			
Ambient Temperature	°C	25			
Operating Temperature Range	°C	-40	-	+85	
Storage Temperature Range	°C	-40	-	+85	
DC Voltage	V	0			



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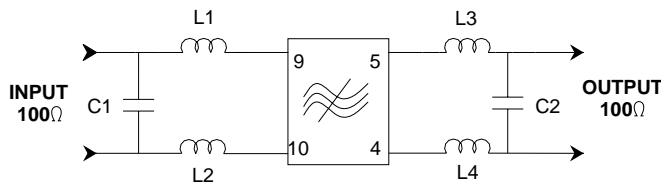
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Input Power	dBm	-	-	10
ESD Class	-	1A		
Package Size	SMD7.0*5.0			

**Notes:**

1. All specifications are based on the test circuit shown;
2. In production, all specifications are measured by Agilent Network analyzer and full 4 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.

**Matching Configuration**



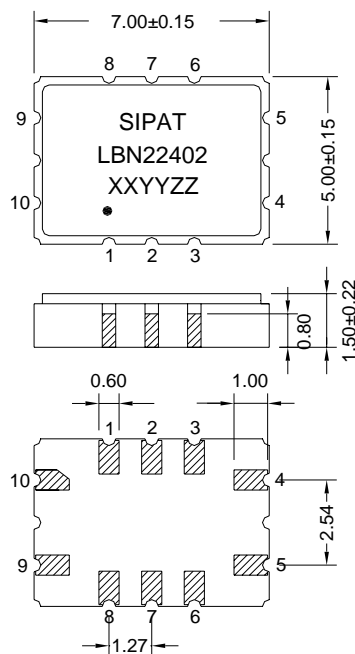
**L1=L2=27nH L3=L4=33nH**

**C1=22pF C2=12pF**

**Source/Load Impedance=100 ohm**

Notes - Component values may change depending on board layout.

**Package Dimension**



**Pad Configuration:**

Input: 9,10

Output: 4,5

Ground: 1,2,3,6,7,8

**Marking Configuration:**

1) •: Pad Number 1 Index

2) SIPAT: Manufacturer Name

3) LBN22402: Part Number

4) XXYY: Date(Year/month)

5) ZZ: Identified Code

**Package: SMD7.0\*5.0**

**Unit: mm**

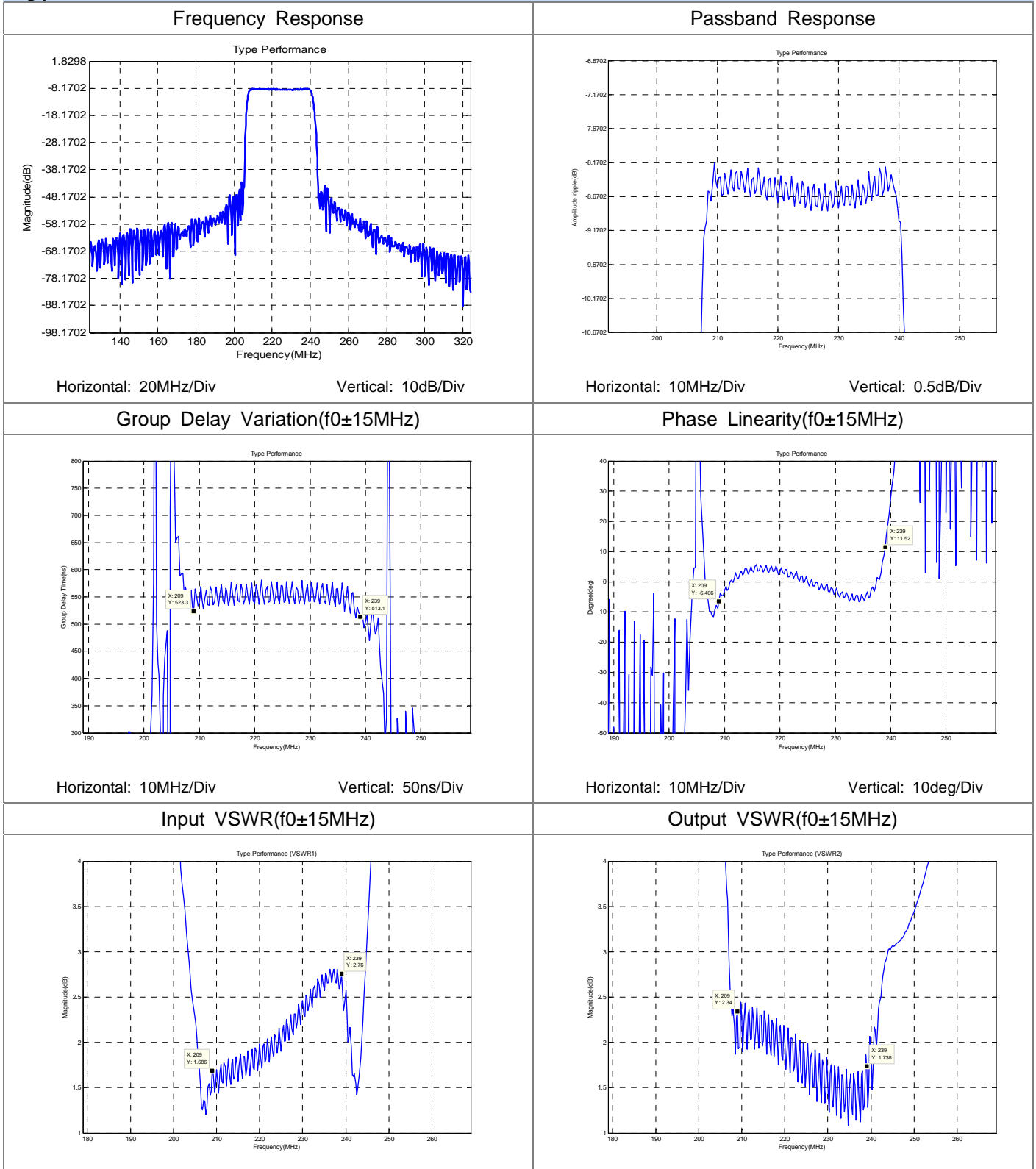


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Typical Performance



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