

### SF869R

## Narrow Band Low Loss RF Filter for ISM Application

This product is lead-free in compliance with RoHs 2002/95/EC.

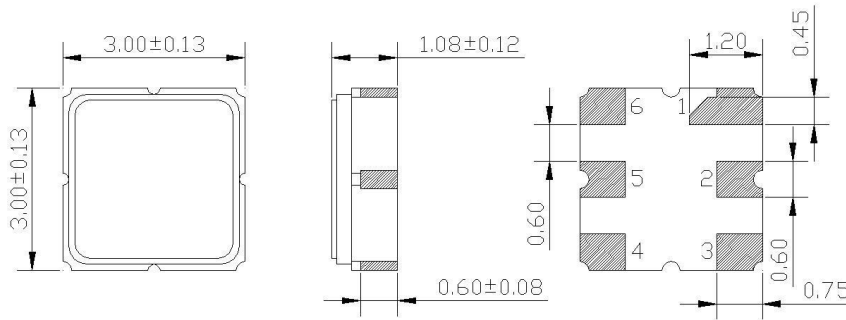
#### Test Conditions:

RF power	-10 dBm	
Temperature	23 °C	
DC Voltage	6 V	
Terminating source impedance ( $Z_S$ ):	50 $\Omega$	<input checked="" type="checkbox"/> Matching Required
Terminating load impedance ( $Z_L$ ):	50 $\Omega$	<input checked="" type="checkbox"/> Matching Required

	minimum	typical	maximum	unit
Centre frequency		868.3		MHz
Insertion Loss in Pass Band 868.1 MHz – 868.5 MHz		2.5	3.8	dB
Ripple in Pass Band 868.1 MHz – 868.5 MHz		0.5	1.3	dB
Rejection				
10 MHz – 600 MHz	55	60		dB
600 MHz – 750 MHz	45	50		dB
750 MHz – 860 MHz	40	45		dB
860 MHz – 863 MHz	32	35		dB
863 MHz – 866 MHz	22	25		dB
866 MHz – 867 MHz	16	22		dB
870 MHz – 872 MHz	16	22		dB
872 MHz – 880 MHz	28	32		dB
880 MHz – 1000 MHz	38	42		dB
1000 MHz – 2500 MHz	50	55		dB
RF Power			10	dBm
Operating temperature range	-40		+125	°C
Storage temperature range	-40		+125	°C
Impedance for matching $Z_{IN}$		260    0.83		$\Omega$    pF
Impedance for matching $Z_{OUT}$		260    0.83		$\Omega$    pF
Temperature coefficient of frequency		-0.032		ppm/K <sup>2</sup>

Electrostatic Sensitive Device

**Package: S25 / 3.0\*3.0mm<sup>2</sup>**



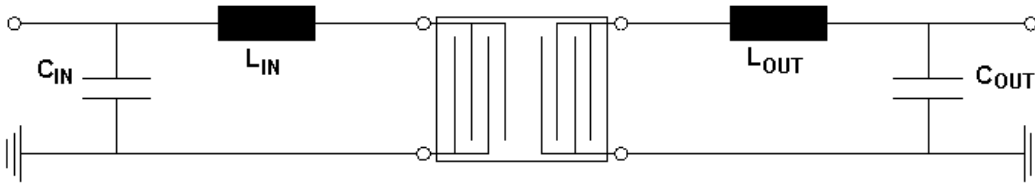
- |       |                       |       |                         |
|-------|-----------------------|-------|-------------------------|
| Pin 1 | Case ground           | Pin 4 | Case ground             |
| Pin 2 | Input or Input Ground | Pin 5 | Output or Output Ground |
| Pin 3 | Input Ground or Input | Pin 6 | Output Ground or Output |

All dimensions in mm

**Matching network to 50 Ω: <sup>1)</sup>**

$L_{IN}$ : 19nH  
 $C_{IN}$ : 2.0pF

$L_{OUT}$ : 19nH  
 $C_{OUT}$ : 2.0pF



<sup>1)</sup> Matching elements are based on circuit with ideal components. Matching values may vary due to PCB layout and real components.

**Typical performance:**

