

SF870B Narrow Band Low Loss RF Filter for ISM Application

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

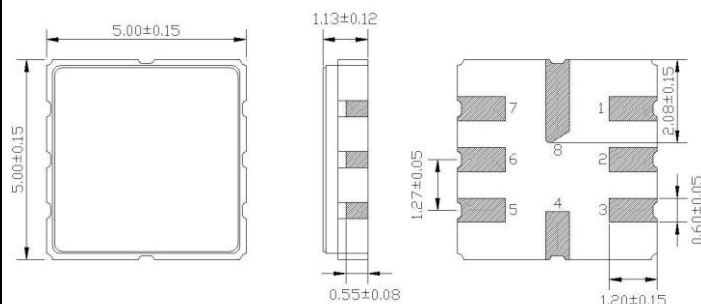
Test conditions:

RF power	0 dBm	
Temperature	23 °C	
Terminating source impedance (Z _S):	50 Ω	<input checked="" type="checkbox"/> Matching Required
Terminating load impedance (Z _L):	50 Ω	<input checked="" type="checkbox"/> Matching Required

	minimum	typical	maximum	unit
Centre frequency		869.6		MHz
Insertion Loss in Pas Band 869.1 – 870.1 MHz		2.1	3.5	dB
Ripple in Pass Band 869.1 – 870.1 MHz		1.0		dB
Rejection				
820 MHz – 850 MHz	35	40		dB
850 MHz – 862 MHz	25	28		dB
862 MHz – 867 MHz	13	15		dB
872 MHz – 877 MHz	15	17		dB
877 MHz – 884 MHz	20	23		dB
884 MHz – 1000 MHz	30	33		dB
RF Power			10	dBm
Operating temperature range	-45		+120	°C
Storage temperature range	-45		+120	°C
Temperature coefficient of frequency		-0.03		ppm/K ²

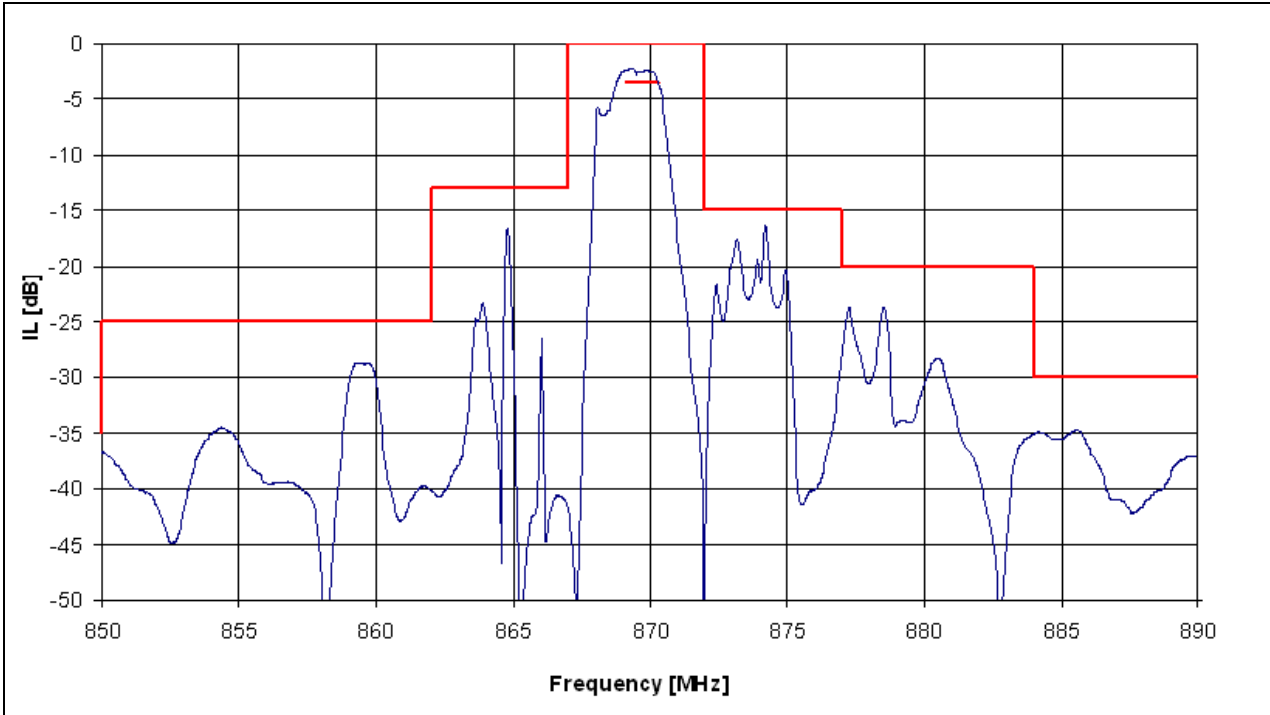
Electrostatic Sensitive Device

Package: S52 / 5*5mm²



Pin 1 Input
Pin 5 Output
Pin 2, 7 Input Ground
Pin 3, 6 Output Ground
Pin 4, 8 Case Ground

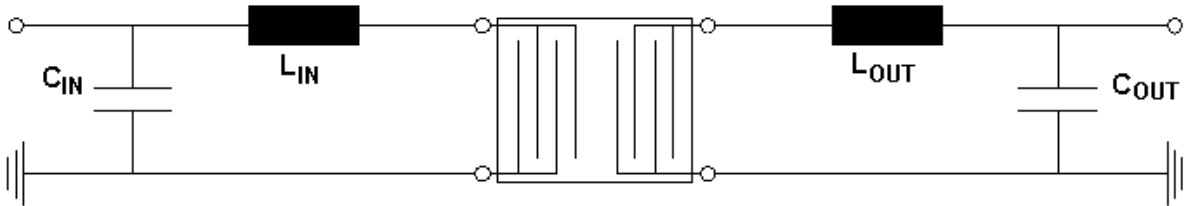
Typical performance:



Matching network to 50 Ω:¹⁾

L_{IN} : 18 nH
 C_{IN} : 2.6 pF

L_{OUT} : 18 nH
 C_{OUT} : 2.6 pF



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