

**SF870A**  
**Narrow Band Low Loss RF Filter for ISM Application**  
 This product is lead-free in compliance with RoHs 2002/95/EC.

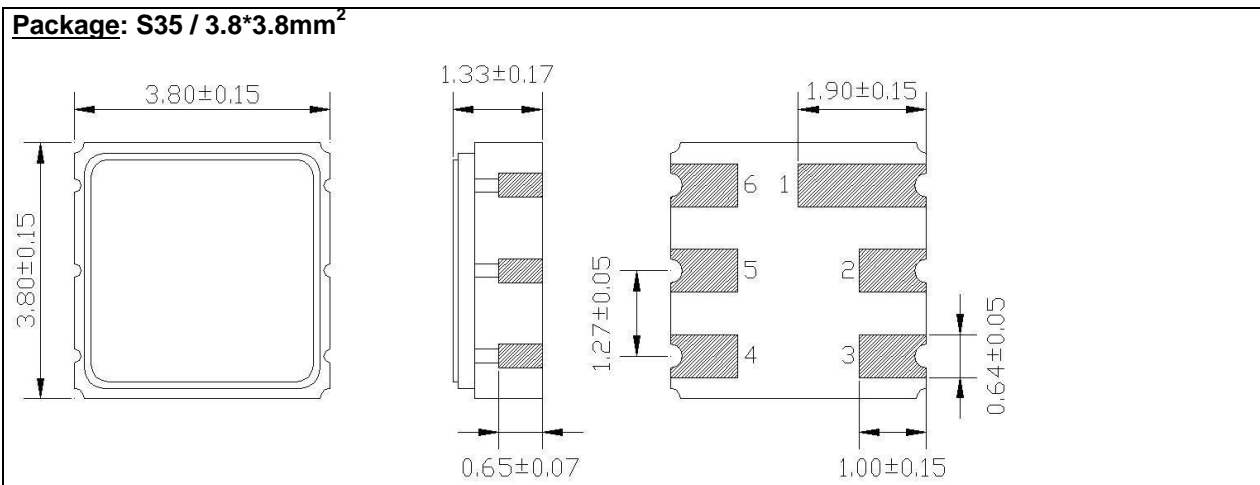
**Test conditions:**

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

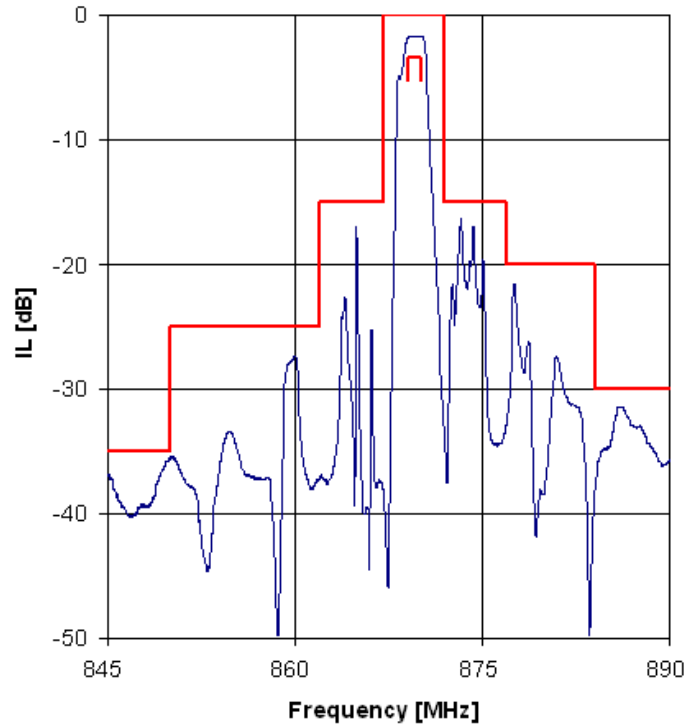
  

	minimum	typical	maximum	unit
Centre frequency		869.6		MHz
Insertion Loss in Pass Band 869.1 – 870.1 MHz		2.1	3.5	dB
Ripple in Pass Band 869.1 – 870.1 MHz		0.7		dB
Rejection				
820 MHz – 850 MHz	35	40		dB
850 MHz – 862 MHz	25	28		dB
862 MHz – 867 MHz	15	17		dB
872 MHz – 877 MHz	15	17		dB
877 MHz – 884 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
Impedance Z <sub>s</sub>		104  2.1		Ω   pF
Impedance Z <sub>L</sub>		104  2.1		Ω   pF
Temperature coefficient of frequency		-0.03		ppm/K <sup>2</sup>

**Electrostatic Sensitive Device**



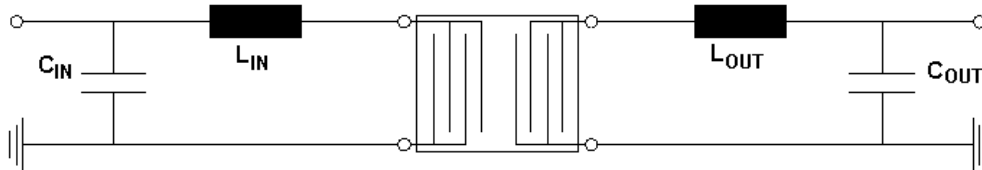
**Typical performance:**



**Matching network to 50  $\Omega$ :** <sup>1)</sup>

$L_{IN}$ : 20nH  
 $C_{IN}$ : 3pF

$L_{OUT}$ : 20nH  
 $C_{OUT}$ : 3pF



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