

SF315B Narrowband RF Low-Loss-Filter for ISM applications

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

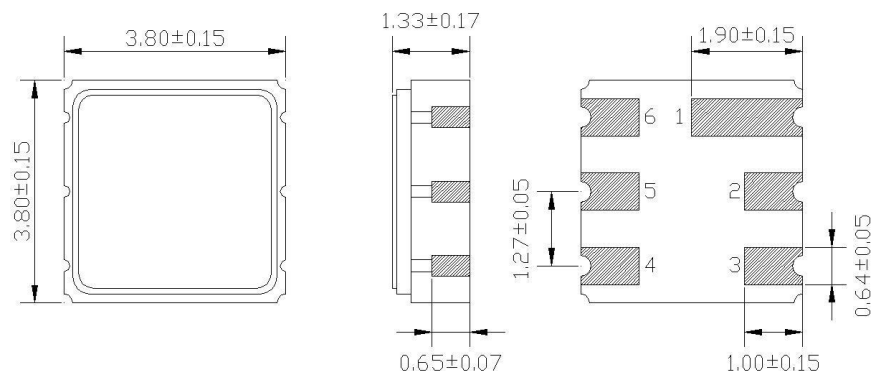
Test Conditions:

RF power	0 dBm	
Temperature	23 °C	
DC Voltage	6 V	
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		315.00		MHz
Insertion Loss in Pass Band 314.75 – 315.25 MHz		1.8	3.0	dB
Ripple in Pass Band 314.75 – 315.25 MHz		0.7	1.0	dB
Rejection				
10.00 MHz – 270.00 MHz	45	50		dB
270.00 MHz – 308.00 MHz	23	26		dB
308.00 MHz – 313.94 MHz	17	19		dB
316.00 MHz – 321.00 MHz	10	12		dB
321.00 MHz – 335.00 MHz	20	23		dB
335.00 MHz – 1000.00 MHz	45	50		dB
RF Power			10	dBm
Operating temperature range	-40		+125	°C
Storage temperature range	-40		+125	°C
Impedance Z_S		180 1.3		Ω pF
Impedance Z_L		180 1.3		Ω pF
Temperature coefficient of frequency		-0.032		ppm/K ²

Electrostatic Sensitive Device

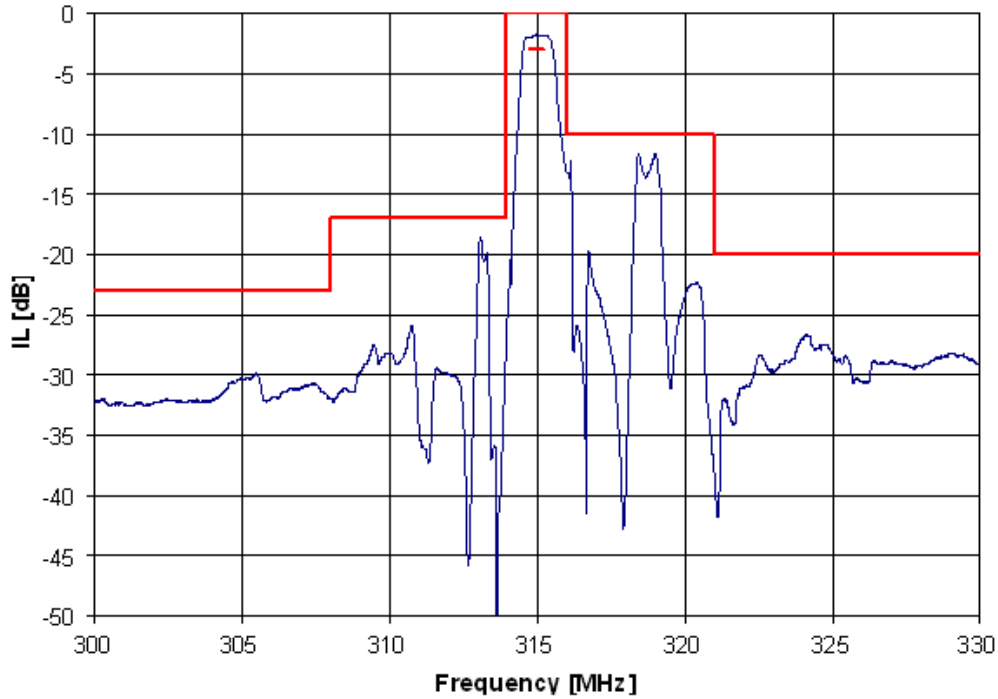
Package: S35 / 3.8*3.8mm²



All dimensions in mm

Pin 2 Input
Pin 5 Output
Pin 1, 3, 4, 6 to be grounded

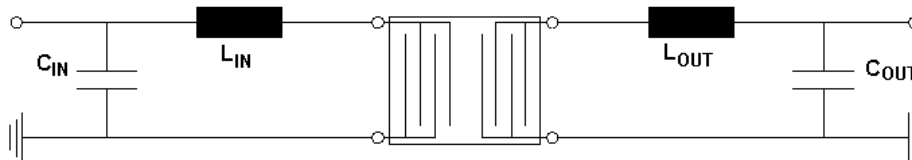
Typical performance:



Matching network to 50 Ω : ¹⁾

L_{IN} : 82nH
 C_{IN} : 10pF

L_{OUT} : 82nH
 C_{OUT} : 10pF



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