

RLF0100A

<960MHz “Rooftop” Lowpass Filter

Features

- Superior power handling and reliability.
- Provides rejection over 1.45-5.95GHz for use with USD/UMD.
- Directly solders to PCB

Applications

- Wireless Infrastructure applications



Part Dimensions: 14 × 9 × 8 mm • <2 g EST

Description

With low IL, provides additional attenuations to assure compatibility with high-frequency bands.

Electrical Specifications

Parameter	Frequency (MHz)	Typical at 25°C	Spec. at 25°C	Spec. over -40°C to +85°C
Nominal Impedance	-	50 ohms	-	-
Average Input Power	-	-	-	20 Watt max
Peak Input Power	-	-	-	200 Watt max

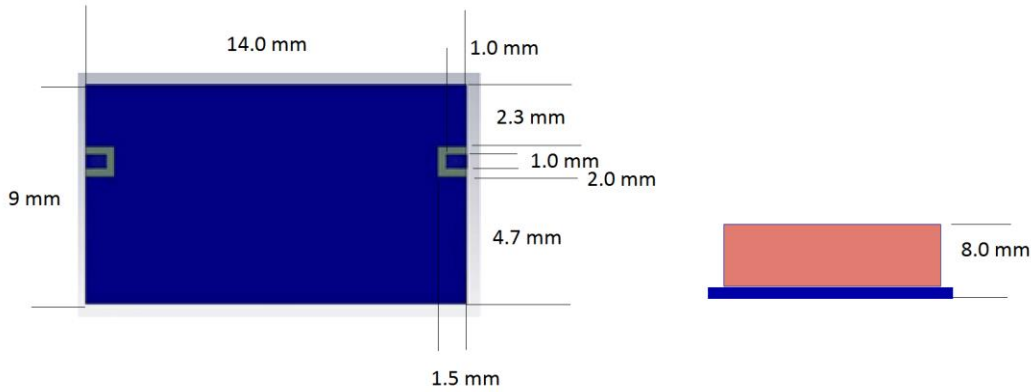
Input-Output Response

Passband Insertion Loss	617 - 960	0.4 dB max
Passband Return Loss	617 - 960	16 dB min
Attenuation:	1450 - 1709	15 dB min
	1710 - 1785	38 dB min
	1786 - 4600	45 dB min
	4601 - 5950	35 dB min

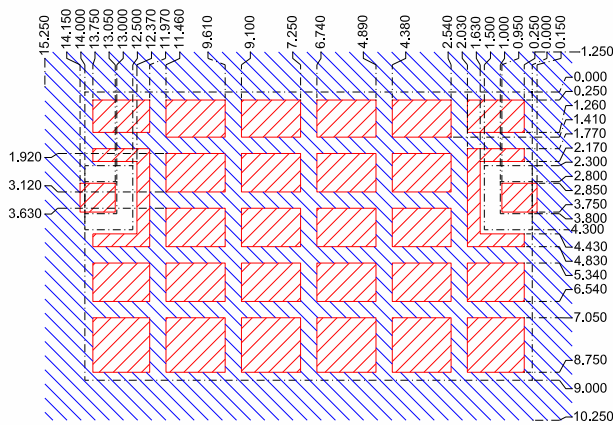
Note: CTS tests each unit to the critical specifications above. Subsequent audits may deviate due to repeatability among different test systems which shall not exceed these allowances.

Specification Allowance	
Insertion Loss	0.1 dB
Return Loss	1.0 dB
Attenuation	1.0 dB

Mechanical Drawing

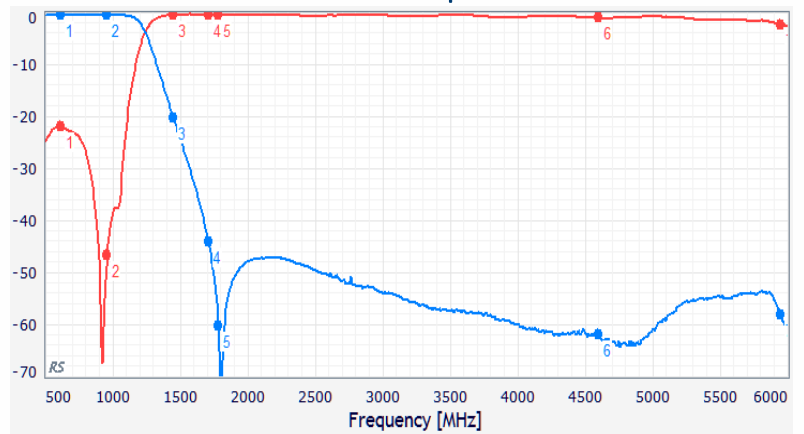


PCB Layout



- Filter Outline
- Exposed Conductor
- Solder Resist Over Dielectric
- Solder Resist Over Conductor (Keep Out)

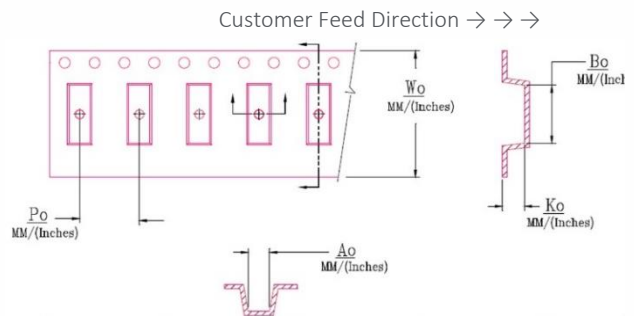
Electrical Response



Marker	1	2	3	4	5	6	7
Freq[MHz]	617	960	1450	1710	1785	4600	5950
S11[dB](1)	-21.8	-46.5	-0.308	-0.351	-0.358	-0.942	-2.31
S21[dB](1)	-0.303	-0.373	-20	-43.8	-60.1	-61.7	-58

Packaging and Marking

Dimension	Units	Spec.
Reel Diameter	mm	330
Reel Weight	kg	5.5
Reel Quantity	ea.	500



Product Marking



W_o	A_o	B_o	K_o	P_o
0.945 in	0.370 in	0.567 in	0.287 in	0.630 in
24.0 mm	9.4 mm	14.4 mm	7.3 mm	16.0 mm