INTRODUCTION

Microwave Dielectric Duplexer filter series is designed to be used RF transmitter and receiving with low insertion loss and higher attenuation and chip design , which could simplify your complex tunning and circuit design..





Dimension(Unit:mm)



Construction and Materials

No.	Part Name	Construction and materials
4.1	Filter	Dielectric materials
4.2	Number of pole	2 pole
4.3	In/output Terminals	Ag Plated
4.4	Ground Base	Ag Plated

Electrical Characteristics

No.	Item	Specifications	Post Environmental orig Reading
5.1	Center frequency (fo)	915–/+1.5MHz	–/+1. 5MHz
5.2	Insertion loss	2. 5 dB	–/+0.5 dB
5.3	Band width	fo-/+13.0MHz	–/+0. 5MHz
5.4	Ripple(in BW)	0.5 dB Max.	–/+0.5 dB
5.5	V.S.W.R(in BW)	2.0 Max.	-/+0. 5
5.6	Attenuation (Absolute value)	17dBmin (fo+77.5MHz) 27dBmin (fo-77.5MHz)	-/+2 dB
5.7	Permissible Input power	1 Watt	
5.8	In/output impedance	50	

Characteristic curve



Environmental specifications

Post Environmental Orig reading see to the table 2

Temperature range	25-/+3 °C			
Humidity range	55~75%RH			
Operating Temperature range	-10 °C \sim +70 °C			
Storage Temperature range	-25 °C ~+85 °C			
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Moisture Proof

The device should satisfy the electrical characteristics specified in paragraph 5.1~5.6 after exposed to the temperature 40-/+2 °C and the humidity 90~95% RH for 96 hours. And leave it in a stationary state for 1 to 2 hours.

Vibration

The device should satisfy the electrical characteristics specified in paragraph 5.1~5.6 after applied to the vibration of 10 to 55Hz with amplitude of 1.5mm for 2 hours each for of X,Y and Z directions.

Drop Shock

The device should satisfy the electrical characteristics specified in paragraph $5.1 \sim 5.6$ after dropped onto the hard wooden board from the height of 30cm for 3 times toward each X.Y and Z directions expect the terminal direction.

Heat Proof

The device should satisfy the electrical characteristics specified in paragraph $5.1 \sim 5.6$ after exposed to temperature $80 - 4.5 \circ C$ for 24 - 4.4 + 2 hours and leave it in a stationary state for 1 to 2 hours.

Temperature impact Resistance

The device should satisfy the electrical characteristics specified in paragraph $5.1 \sim 5.6$ after exposed to the low temperature $-25 \,^{\circ}$ C and high temperature $+85 \,^{\circ}$ C for 30–/+2 min each by 5 cycles and leave it in a stationary state for 1 to 2 hours.

Solder Heat Proof

The device should be satisfied for preheated at $120 \,^{\circ}\text{C} \sim 150 \,^{\circ}\text{C}$ hold for 60 seconds and reflowed at $260 \,^{\circ}\text{C} + 10 \,^{\circ}\text{C}$ for 10 - /+0.5 seconds.

• Tensile Strength of Terminal

The device should not be broken after tensile force of 1.0kg is slowly applied to pull a lead pin of the fixed device in the lead axis direction for 10–/+1 seconds.

