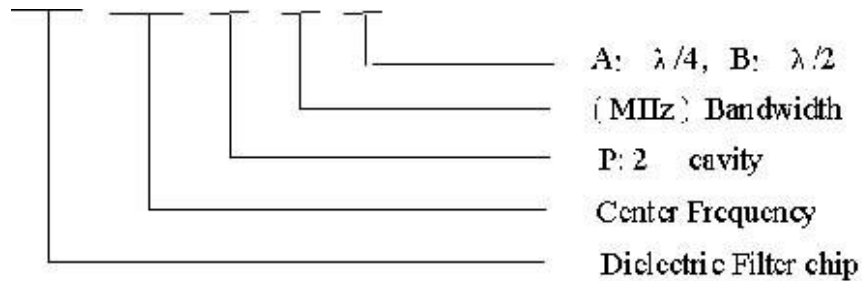


● INTRODUCTION

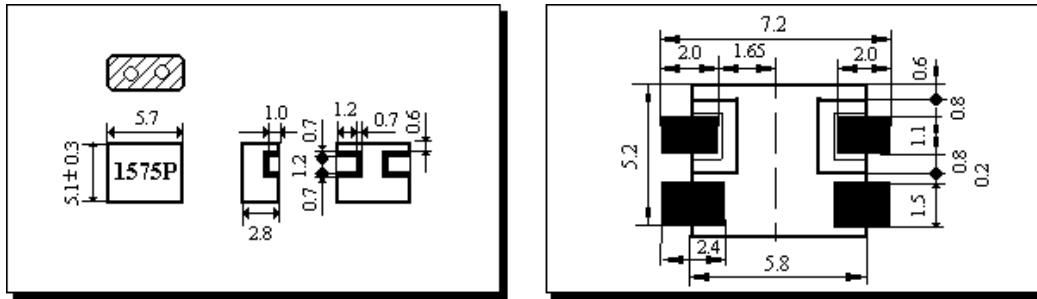
Microwave Dielectric Duplexer filter series are designed to be used in mobile & cordless phones with low insertion loss and high attenuation as well as chip design , which can simplify your complex tuning and circuit design .

● Part Number

DFC 1575 P 10 A



● Dimension Unit mm



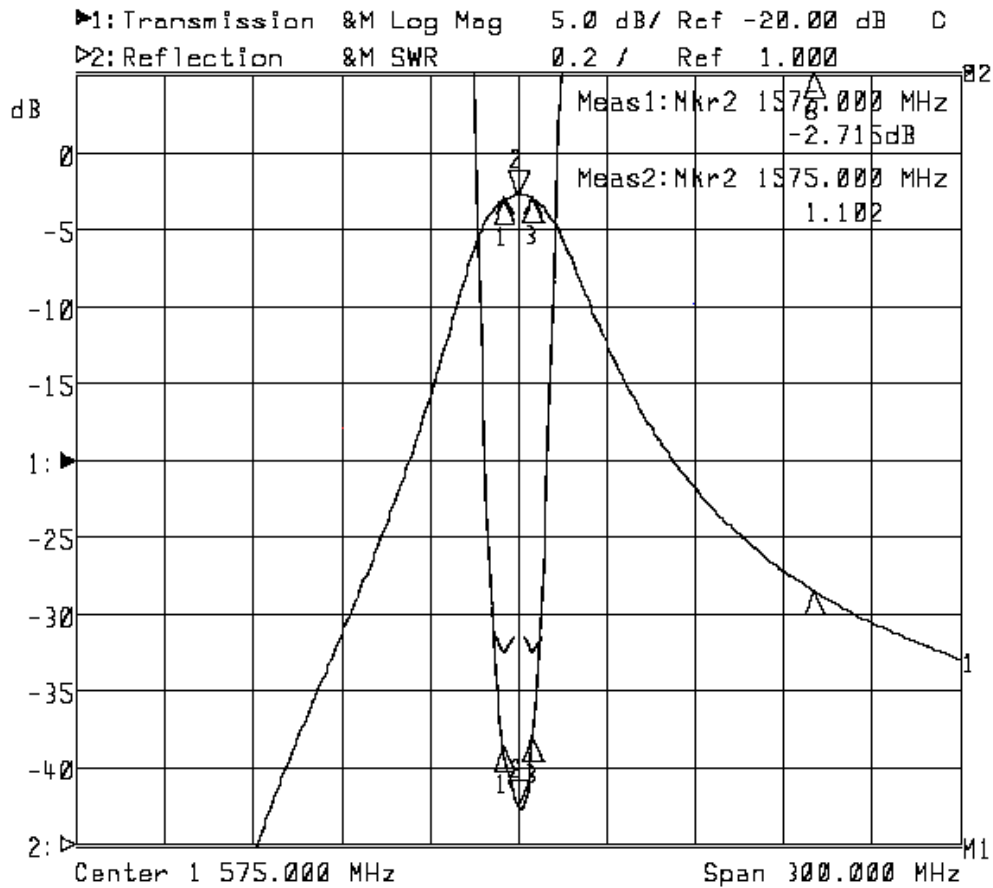
● Structure and Material

NO	Part Name	Structure and material
4.1	Filter	Dielectric material
4.2	Number of pole	2pole
4.3	In/output Terminals	AgPlated
4.4	Ground Base	AgPlated

● Electrical Characteristics

NO	Item	Specifications	PostEnvironmental Tolerance
5.1	Center frequency ( fo )	1575.42-/+2.0 MHz	-/+2MHz
5.2	Insertion loss	3.0 dB	-/+0.5 dB
5.3	Band width	fo-/+5.0MHz	-/+0.5 MHz
5.4	Ripple (in BW)	0.5 dB Max.	-/+0.5 dB
5.5	V.S.W.R (in BW)	1.5 Max.	-/+0.5
5.6	Attenuation (Absolute value)	25 (fo + 100MHz) 40 (fo - 100MHz)	-/+2 dB
5.7	Permissible Input power (Max)	1 Watt	
5.8	In/output impedance	50	

● Characteristic curve



- Environmental specifications

Post Environmental Tolerance ( Refer to the table 2 )

Temperature range                      25-/+3 °C

Relative Humidity range              55~75%RH

Operating Temperature range      -10 °C ~+70 °C

Storage Temperature range         -25 °C ~+85 °C

- 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 relative humidity 90~95% RH for 96 hours and 1~2 hours recovery time under normal condition.

- Vibration Resist

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 in X , Y and Z directions.

- Drop Shock

The device should satisfy the electrical characteristics specified in paragraph 5.1~5.6 after dropping onto the hard wooden board from the height of 30cm for 3 times each facet of the 3 dimensions of the device.

- High Temperature Endurance

The device should satisfy the electrical characteristics specified in paragraph 5.1~5.6 after exposed to temperature  $80\pm 5^{\circ}\text{C}$  for  $24\pm 2$  hours and 1~2 hours recovery time under normal temperature.

- Low Temperature Endurance

The device should also satisfy the electrical characteristics specified in paragraph 5.1~5.6 after exposed to the temperature  $-25^{\circ}\text{C}\pm 3^{\circ}\text{C}$  for  $24\pm 2$  hours and to 2 hours recovery time under normal temperature.

- Temperature Cycle Test

The device should also satisfy the electrical characteristics specified in paragraph 5.1~5.6 after exposed to the low temperature  $-25^{\circ}\text{C}$  and high temperature  $+85^{\circ}\text{C}$  for  $30\pm 2$  min each by 5 cycles and 1 to 2 hours recovery time under normal temperature.

- Solder Heat Proof

The device should be satisfied after preheating at  $120^{\circ}\text{C}\sim 150^{\circ}\text{C}$  for 60 seconds and dipping in soldering Sn at  $260^{\circ}\text{C}\pm 10^{\circ}\text{C}$  for  $10\pm 0.5$  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.

- Bending Resist Test

Weld the product to the center part of the PCB with the thickness 1.6-/+0.2mm as the illustration shows, and keep exerting force arrow-ward on it at speed of : 1mm/S , and hold for 5-/+1S at the position of 2mm bending distance , so far , any peeling off of the product metal coating should not be detected .

