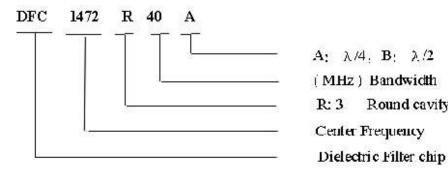
DIELECTRIC

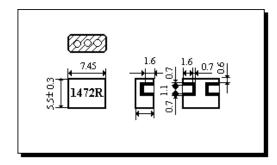
# INTRODUTION

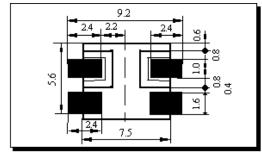
Microwave Dielectric Duplexer filter series are designed to be used in mobile & cordless phones with low insertion loss and high attenuation as well as chip design, which can simplify your complex tunning and circuit design.

### Part Number



# Dimension Unit mm





Round cavity

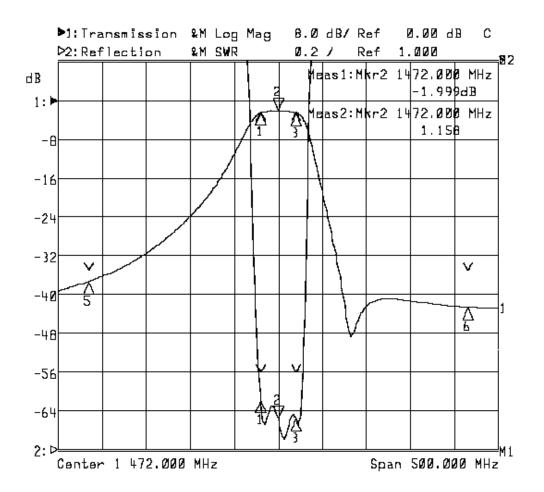
### Structure and Material

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	Post Environmental Tolerance
5.1	Center frequency ( fo )	1472.00MHz	-/+2MHz
5.2	Insertion loss	3.0 dB	-/+0.5 dB
5.3	Bandwidth	fo-/+20.0MHz	-/+0.5 MHz
5.4	Ripple (in BW)	1.0 dB Max.	-/+0.5 dB
5.5	V.S.W.R (in BW)	2.0 Max.	-/+0.5
5.6	Attenuation (Absolute value)	34 (fo -/+ 215MHz)	-/+2 dB
5.7	Permissible• Inputpower (Max)	1 Watt	
5.8	In/output impedanc	50	

### Characteristic curve



DIELECTRIC

# Environmental specifications

Post Environmental Tolerance (Refer to the table 2)

Temperature range 25–/+3 °C Relative Humidity range  $55\sim75\%$ RH Operating Temperature range -10 °C  $\sim+70$  °C Storage Temperature range -25 °C  $\sim+85$  °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  $5.1\sim5.6$  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  $5.1\sim5.6$  after exposed to temperature 80–/+5 °C for 24–/+2 hours and  $1\sim2$  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 °C-/+3 °C for 24-/+2 hours and to 2 hours recovery time under normal temperature.

# Temperature Cycle Test

The device should also satisfy the electrical characteractics specified in paragraph  $5.1\sim5.6$  after exposed to the low temperature -25 °C and high temperature +85 °C for 30–/+2 min each by 5 cycles and 1 to 2 hours recovery time under normal temperature.

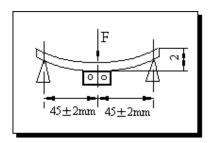
#### Solder Heat Proof

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

# 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 .

# Reflow Soldering Standard Condision

