

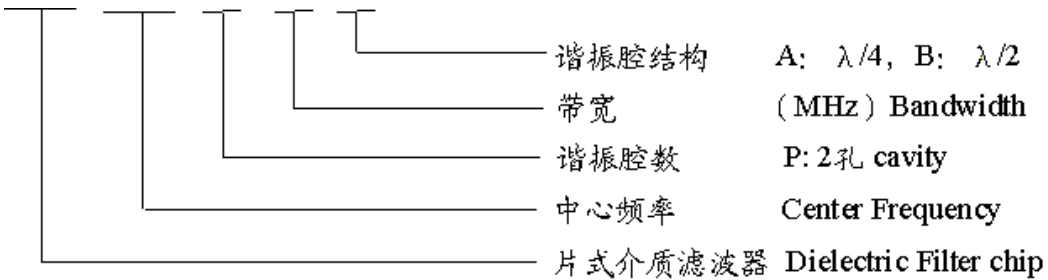
● 概述 INTRODUCTION

微波介质滤波器系列产品设计用于移动和无绳电话机中，具有低的插入损耗，高的衰减和片式设计，能减少复杂的调校工作，可以简化电路设计。

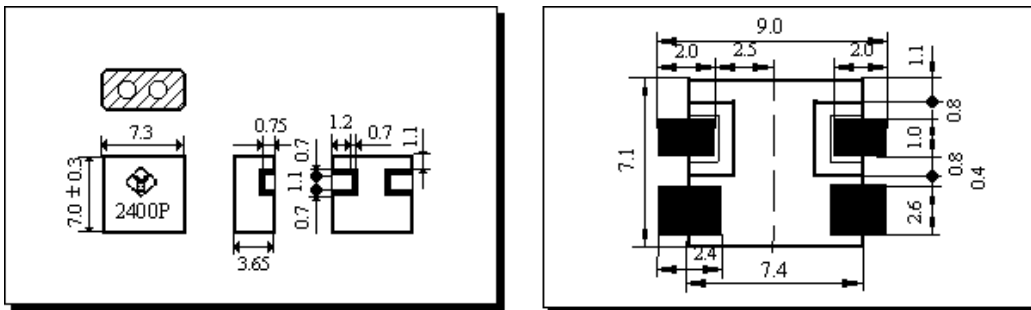
Microwave Dielectric filter series are designed to be used in mobile & cordless phones with low insertion loss and high attenuation as well as chip design , which can simplify your complex tuning and circuit design .

● 型号 Part Number

DFC 2400 P 06 A



● 外型尺寸 Dimension Unit mm



● 结构及材料 Structure and Material

表 1

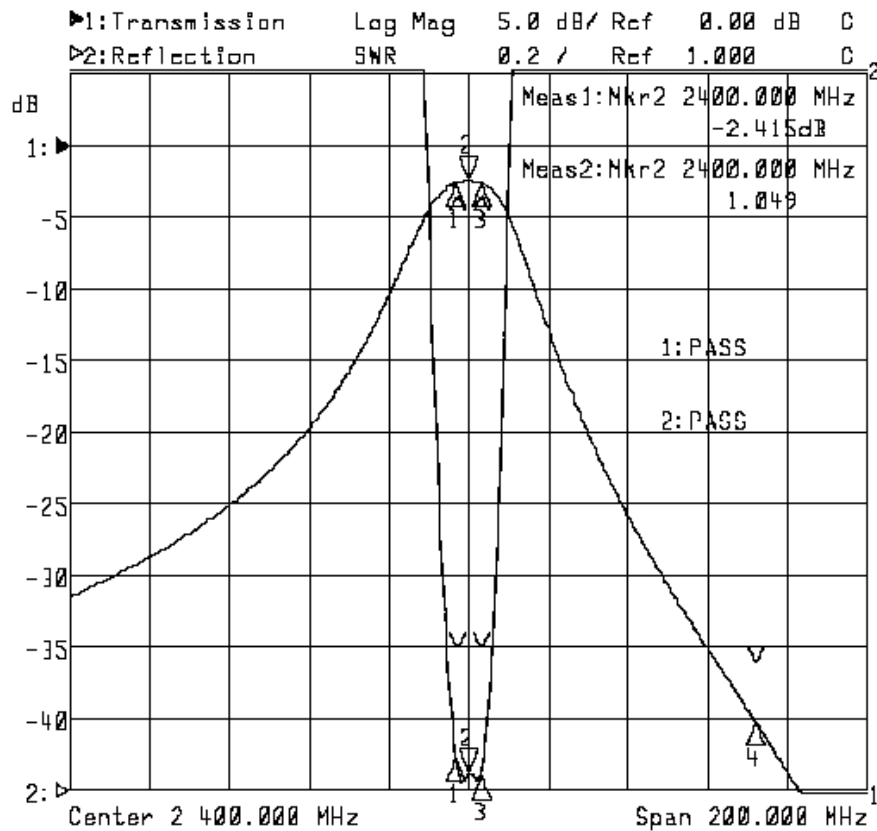
No.	Part Name	名称	Structure and material	结构及材料
4.1	Resonator	谐振体	Dielectric material	介质材料
4.2	Number of pole	电极数	2 pole	2 个电极
4.3	In/output Terminals	输入输出端子	Ag Plated	镀银
4.4	Ground Base	接地面	Ag Plated	镀银

● 电气性能 Electrical Characteristics

表 2

No.	Item (项目)	Specifications (特性)	Post Environmental Tolerance (环境试验后允许附加误差)
5.1	Center frequency 中心频率( $f_0$ )	2400.00 MHz	$\pm 1.5$ MHz
5.2	Insertion loss 插入损耗	$\leq 3.5$ dB	$\pm 0.5$ dB
5.3	Band width 通带宽度	$f_0 \pm 3.0$ MHz	$\pm 0.5$ MHz
5.4	Ripple (in BW) 通带波动	0.5 dB Max.	$\pm 0.5$ dB
5.5	V.S.W.R. (in BW) 驻波比	2.0 Max.	$\pm 0.5$
5.6	Attenuation (Absolute value) 阻带衰减 (绝对值)	35dBmin( $f_0+72.0$ MHz)	$\pm 2$ dB
5.7	Permissible Input power (Max) 允许最大输入功率	1 Watt	---
5.8	In/output impedance 输入/输出阻抗	50 $\Omega$	---

● 特性曲线 Characteristic curve



- 环境试验 Environmental specifications

经环境试验后允许比起始读数偏差见表 2

Post Environmental Tolerance (Refer to the table 2)

基准条件: 温度范围	Temperature range	25-/+3 °C
相对湿度范围	Relative Humidity range	55~75%RH
工作温度	Operating Temperature range	-10 °C ~+70 °C
贮藏温度	Storage Temperature range	-25 °C ~+85 °C

- 耐湿热特性 Moisture Proof

在温度为 40-/+2 °C, 相对湿度 90~95%的恒温湿箱中放置 96 小时, 在常温中恢复 1~2 小时后测试, 符合表 5.1~5.6 规定.

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.

- 耐振动 Vibration Resist

在振动频率为 10~55Hz 振幅为 1.5mm 沿 X.Y.Z 方向各振动 2 小时后测试符合表 5.1~5.6 规定.

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.

- 耐跌落冲击 Drop Shock

在 30cm 高度处按 X,Y,Z 三个面分别自由跌落在木制地板上共 3 次后测试符合表 5.1~5.6 规定.

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.

- 高温特性 High Temperature Endurance

在温度为 80-/+5 °C 的恒温箱中放置 24-/+2 小时, 在常温中恢复

1~2 小时后测试 符合表 5.1~5.6 规定.

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.

- 低温特性 Low Temperature Endurance

在温度为  $-25^{\circ}\text{C}\pm 3^{\circ}\text{C}$  低温箱中放置  $24\pm 2$  小时后恢复 1~2 小时测试符合表 5.1~5.6 规定.

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.

- 温度循环 Temperature Cycle Test

在  $-25^{\circ}\text{C}$  温度中保持 30 分钟, 再在  $+85^{\circ}\text{C}$  温度中保持 30 分钟, 共循环 5 次后在常温中恢复 1~2 小时后测试符合表 5.1~5.6 规定.

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.

- 耐焊接热 Solder Heat Proof

能承受经  $120\sim 150^{\circ}\text{C}$  的温度预热 60 秒后, 在  $260^{\circ}\text{C} \pm 10^{\circ}\text{C}$  的焊锡浸  $10\pm 0.5$  秒.

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.

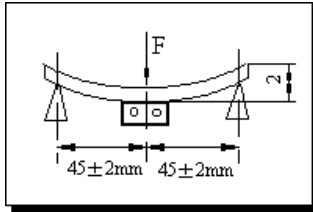
- 结合力试验 Tensile Strength of Terminal

在产品电极端子上或表面上应能承受 1kg 垂直拉力  $10\pm 1$  秒.

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  $10\pm 1$  seconds.

## DIELECTRIC

### ● 耐弯曲试验 Bending Resist Test



将产品按图焊在  $1.6\text{-}/+0.2\text{mm}$  的 PCB 板中间, 由箭头方向施力:  $1\text{mm/S}$ , 弯曲距离:  $2\text{mm}$ , 保持  $5\text{-}/+1\text{S}$ , 产品金属层无脱落.

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

### ● 回流焊温度 Reflow Soldering Standard Condision

Temp( $^{\circ}\text{C}$ )

