

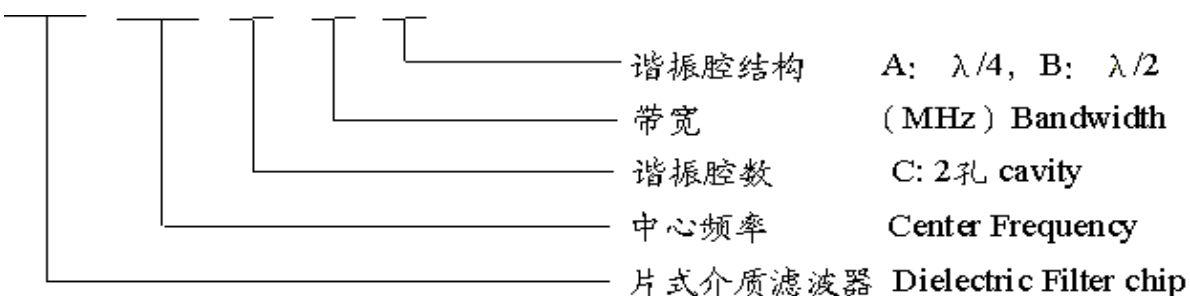
● 概述 INTRODUCTION

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.

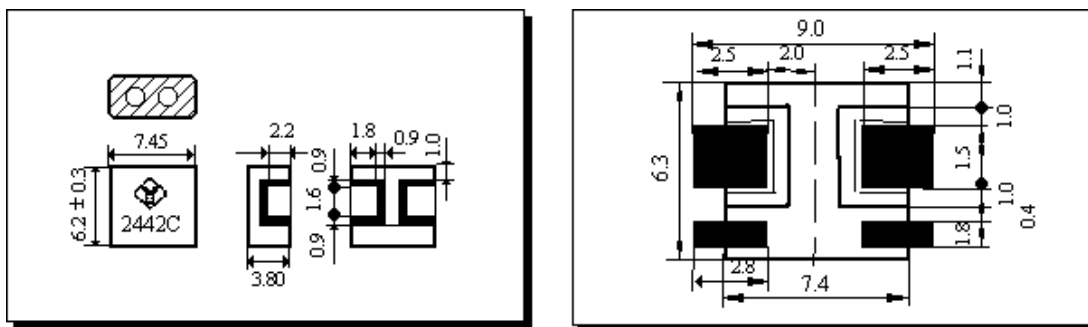
Microwave Dielectric filter series are designed to be used in mobile & cordless phones with low insertion loss and high attenuation as well as chip design , which can simplify your complex tuning and circuit design .

● 型号 Part Number

DFC 2442 C 84 A



● 外型尺寸 Dimension Unit mm



● 结构及材料 Structure and Material

表 1

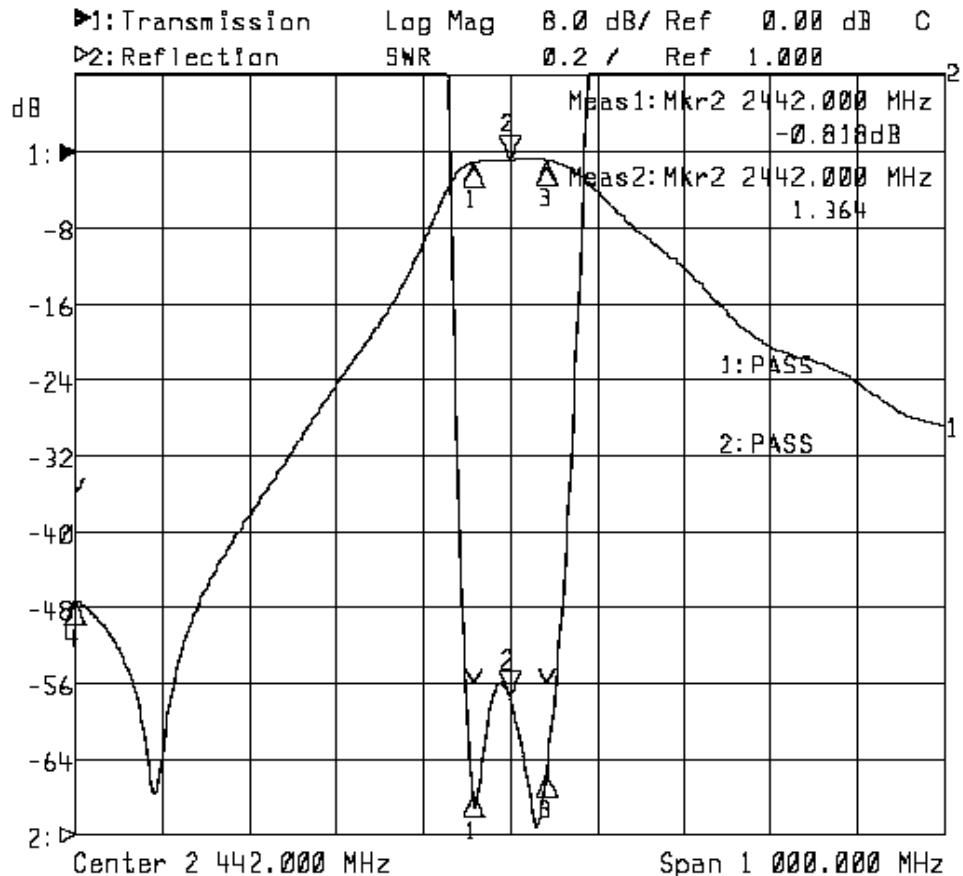
No.	Part Name	名称	Structure and material	结构及材料
4.1	Resonator	谐振体	Dielectric material	介质材料
4.2	Number of pole	电极数	2 pole	2 个电极
4.3	In/output Terminals	输入输出端子	Ag Plated	镀银
4.4	Ground Base	接地面	Ag Plated	镀银

● 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( $f_0$ )	2442.00 MHz	$\pm 1.5$ MHz
5.2	Insertion loss 插入损耗	$\leq 1.5$ dB	$\pm 0.5$ dB
5.3	Band width 通带宽度	$f_0 \pm 42$ MHz	$\pm 0.5$ MHz
5.4	Ripple (in BW) 通带波动	1.0 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)	35dB min(at 1942MHz)	$\pm 2$ 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-/+5 °C for 24-/+2 hours and 1~2 hours recovery time under normal temperature.

## ● 低温特性 Low Temperature Endurance

在温度为 -25 °C-/+3 °C 低温箱中放置 24-/+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 °C-/+3 °C for 24-/+2 hours and to 2 hours recovery time under normal temperature.

- 温度循环 Temperature Cycle Test

在-25℃温度中保持30分钟，再在+85℃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℃ and high temperature +85℃ for 30±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120~150℃的温度预热60秒后，在260℃+10℃的焊锡浸10±0.5秒。

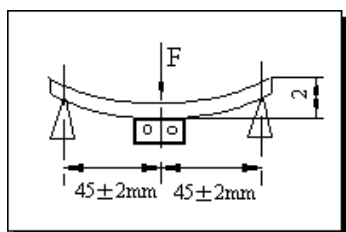
The device should be satisfied after preheating at 120℃~150℃ for 60 seconds and dipping in soldering Sn at 260℃+10℃ for 10±0.5 seconds.

- 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±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±1 seconds.

- 耐弯曲试验 Bending Resist Test



将产品按图焊在1.6±0.2mm的PCB板中间，由箭头方向施力：1mm/S，弯曲距离：2mm，保持5±1S，产品金属层无脱落。

Weld the product to the center part of the PCB with the thickness 1.6±0.2mm as the illustration

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 .

- 回流焊温度 Reflow Soldering Standard Condition

