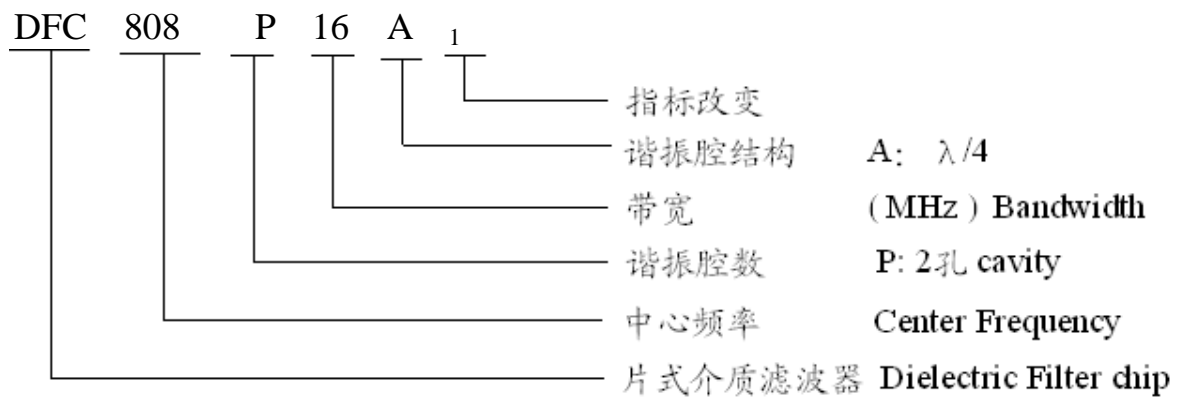


## 1. 概述 INTRODUCTION

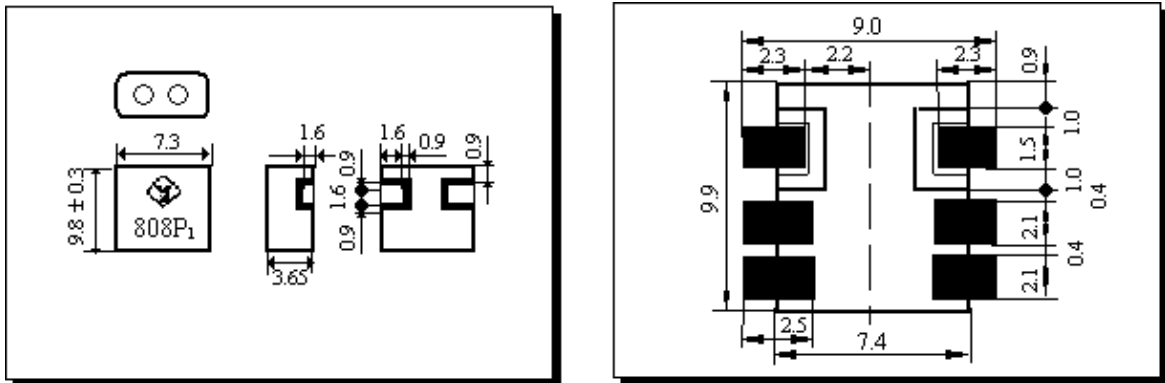
"戌月"微波介质滤波器系列产品设计用于移动和无绳电话机中，具有低的插入损耗、高的衰减和片式设计，能减少复杂的调校工作，可以简化电路设计。

"SHOULDER" 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.

## 2. 型号 Part Number



## 3. 外型尺寸 Dimension ( Unit : mm )



## 4. 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	In/output Terminals	输入输出端子	Ag Plated	镀银
4.3	Ground Base	接地面	Ag Plated	镀银

## 5. 电气性能

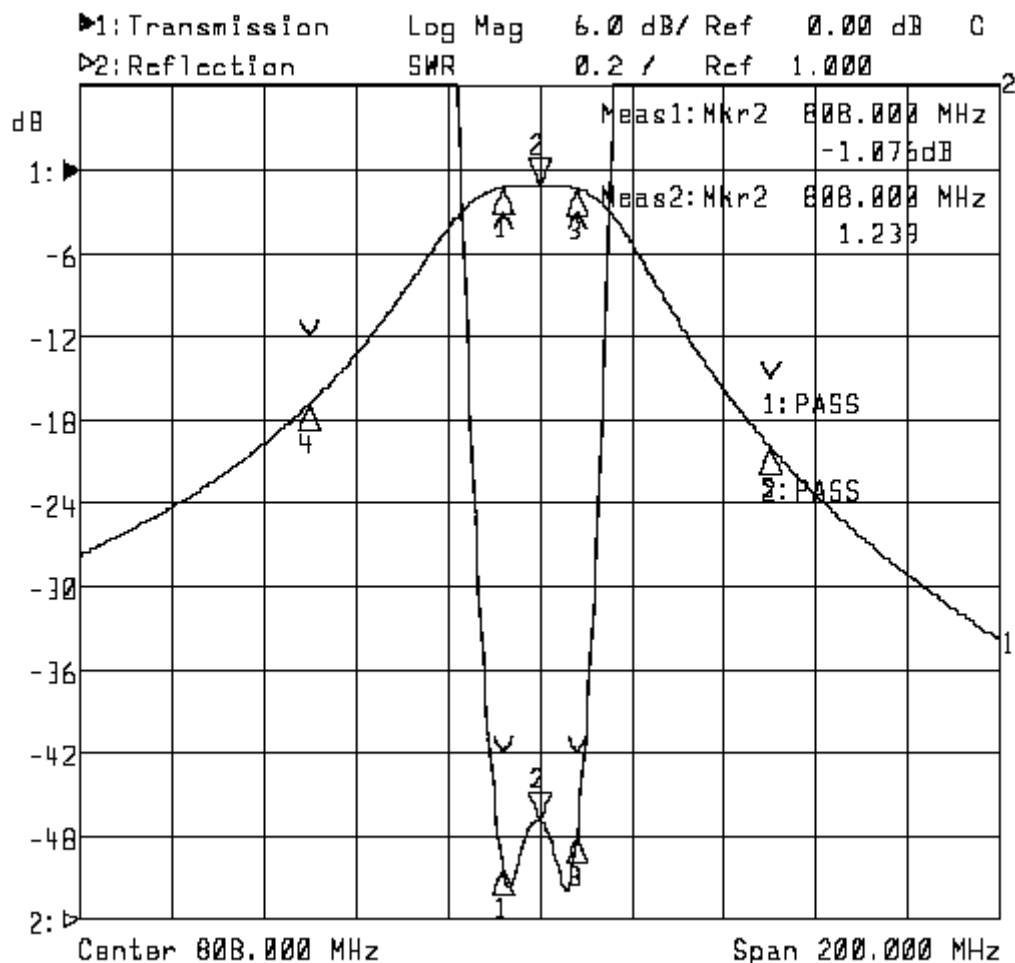
## Electrical Characteristics

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( $f_0$ )	808.00MHz	$\pm 1.5$ MHz
5.2	Insertion loss 插入损耗	$\leq 2.5$ dB (at $25 \pm 5^\circ\text{C}$ )	$\pm 0.5$ dB
		$\leq 3.0$ dB (at $-40^\circ\text{C} \sim +85^\circ\text{C}$ )	
5.3	Band width 通带宽度	$f_0 \pm 8.0$ MHz	$\pm 0.5$ MHz
5.4	Ripple (in BW) 通带波动	$\leq 1.0$ dB	$\pm 0.5$ dB
5.5	V.S.W.R (in BW) 驻波比	$\leq 2.0$	$\pm 0.5$
5.6	Attenuation (Absolute value) 阻带衰减 (绝对值)	$\geq 15$ dB( $f_0+50$ MHz) $\geq 12$ dB( $f_0 - 50$ 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	$50 \Omega$	---

## 6. 特性曲线

## Characteristic curve



## 7. 可靠性 **Reliability : MTBF=1×10<sup>6</sup>/pc.hr**

试验条件 : 温度	Temperature :	40±5°C
负荷	Load :	DC=5±0.5V
数量	Quantity :	2000pcs
持续时间	Sustained Time :	480h

## 8. 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±5°C
相对湿度范围	Relative Humidity range	55~75%RH
工作温度	Operating Temperature range	-40°C~+85°C
贮藏温度	Storage Temperature range	-40°C~+85°C

### 8.1 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.

### 8.2 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.

### 8.3 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.

### 8.4 高温特性 **High Temperature Endurance**

在温度为 85±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 85±5°C for 24±2 hours and 1~2 hours recovery time under normal temperature.

### 8.5 低温特性 **Low Temperature Endurance**

在温度为 -40°C±5°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  $-40^{\circ}\text{C}\pm 5^{\circ}\text{C}$  for  $24\pm 2$  hours and to 2 hours recovery time under normal temperature.

### 8.6 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.

### 8.7 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。

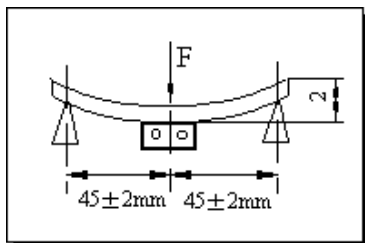
The device should be satisfied after preheating at  $120^{\circ}\text{C}\sim 150^{\circ}\text{C}$  for 60 seconds and dipping in soldering Sn at  $260^{\circ}\text{C}\pm 10^{\circ}\text{C}$  for  $10\pm 0.5$  seconds.

### 8.8 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.

### 8.9 耐弯曲试验 Bending Resist Test



将产品按图焊在  $1.6\pm 0.2\text{mm}$  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  $5\pm 1\text{S}$ ，产品金属层无脱落。

Weld the product to the center part of the PCB with the thickness  $1.6\pm 0.2\text{mm}$  as the illustration shows, and keep exerting force arrow-ward on it at speed of :

$1\text{mm/S}$  , and hold for  $5\pm 1\text{S}$  at the position of  $2\text{mm}$  bending distance , so far , any peeling off of the product metal coating should not be detected .

## 9. 回流焊温度 Reflow Soldering Standard Condition

