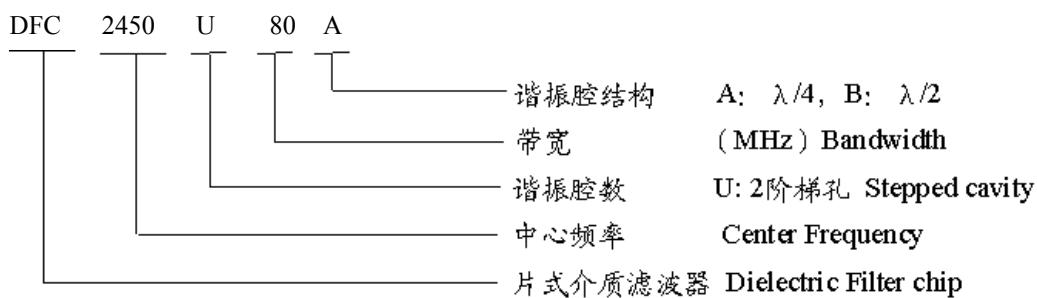


● 概述 INTRODUCTION

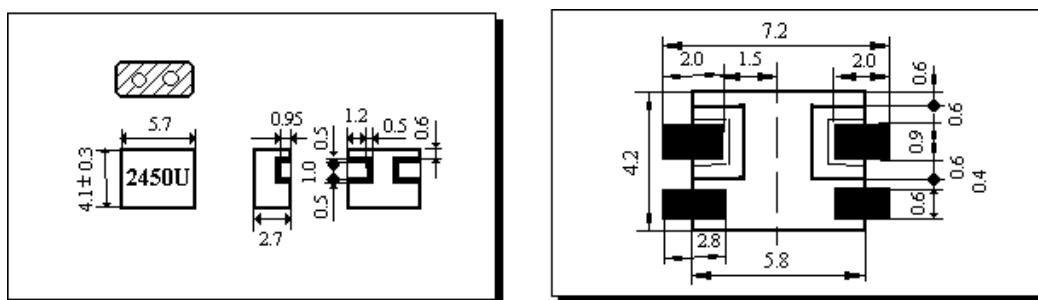
微波介质滤波器系列产品设计用于移动和无绳电话机中，具有低的插入损耗，高的衰减和片式设计，能减少复杂的调校工作，可以简化电路设计。

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 tunning and circuit design .

● 型号 Part Number



● 外型尺寸 Dimension Unit mm



● 结构及材料 Structure and Material

表 1

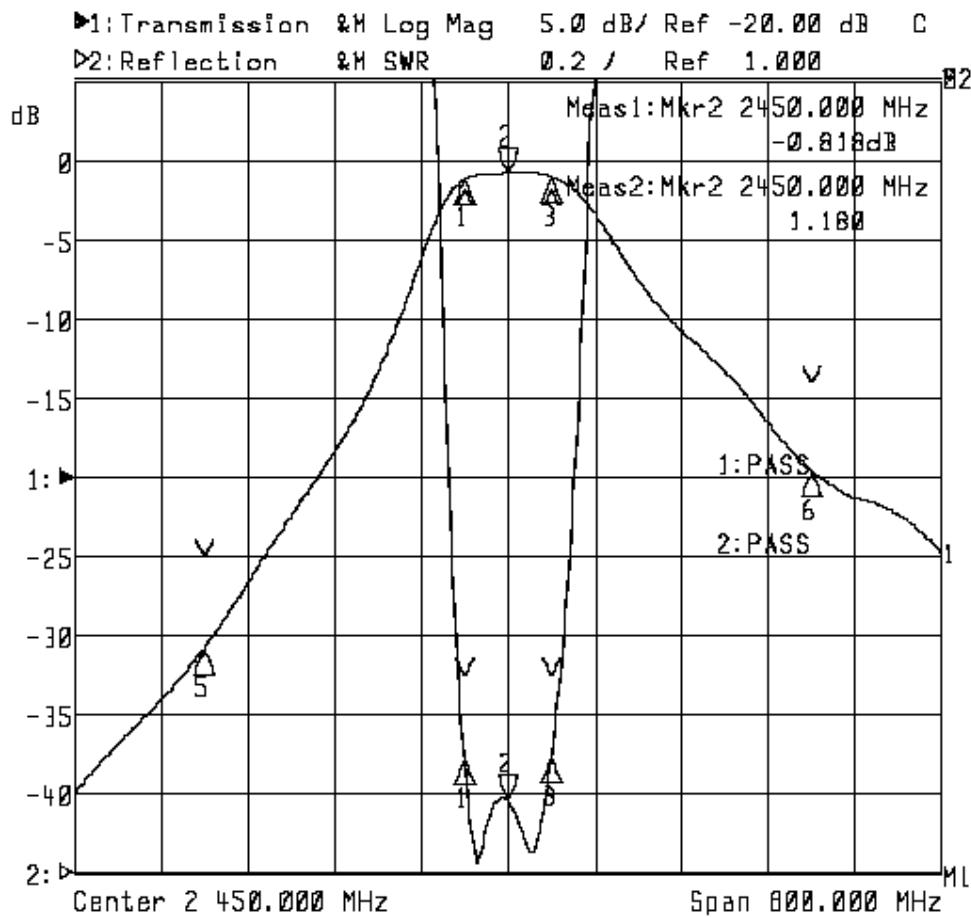
| No. | Part Name | 名称 | Structure and material | 结构及材料 |
|-----|---------------------|--------|------------------------|-------|
| 4.1 | Resonator | 谐振体 | Dielectric material | 介质材料 |
| 4.2 | Number of pole | 电极数 | 2 pole | 2 个电极 |
| 4.3 | In/output Terminals | 输入输出端子 | Ag Plated | 镀银 |
| 4.4 | Ground 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) | 2450.00 MHz | $\pm 1.5\text{MHz}$ |
| 5.2 | Insertion loss | 插入损耗 | < 2.0 | $\pm 0.5 \text{ dB}$ |
| 5.3 | Band width | 通带宽度 | $f_0 \pm 40.0 \text{ MHz}$ | $\pm 0.5 \text{ MHz}$ |
| 5.4 | Ripple (in BW) | 通带波动 | 1.0 dB Max. | $\pm 0.5 \text{ dB}$ |
| 5.5 | V.S.W.R (in BW) | 驻波比 | 2.0 Max. | ± 0.5 |
| 5.6 | Attenuation (Absolute value) | 阻带衰耗 (绝对值) | 15dB min($f_0+280\text{MHz}$) 25dB min($f_0-280\text{MHz}$) | $\pm 2 \text{ dB}$ |
| 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 | 50Ω | — |

● 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 $80/-/+5^{\circ}\text{C}$ 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 $80/-/+5^{\circ}\text{C}$ for $24/-/+2$ hours and 1~2 hours recovery time under normal temperature.

- 低温特性 Low Temperature Endurance

在温度为 $-25^{\circ}\text{C}-/+3^{\circ}\text{C}$ 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 $-25^{\circ}\text{C}-/+3^{\circ}\text{C}$ for $24/-/+2$ hours and to 2 hours recovery time under normal temperature.

- 温度循环 Temperature Cycle Test

在 -25°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 characteracitics specified in paragraph 5.1~5.6 after exposed to the low temperature -25°C and high temperature $+85^{\circ}\text{C}$ 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 $120\sim150^{\circ}\text{C}$ 的温度预热 60 秒后 在 $260^{\circ}\text{C}+10^{\circ}\text{C}$ 的焊锡浸 $10/-/+0.5$ 秒.

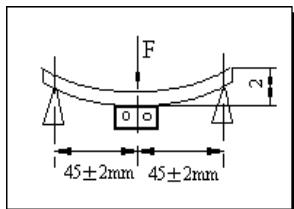
The device should be satisfied after preheating at $120^{\circ}\text{C} \sim 150^{\circ}\text{C}$ for 60 seconds and dipping in soldering Sn at $260^{\circ}\text{C}+10^{\circ}\text{C}$ for $10/-/+0.5$ seconds.

- 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 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 .

● 回流焊温度 Reflow Soldering Standard Condision

Temp(°C)

