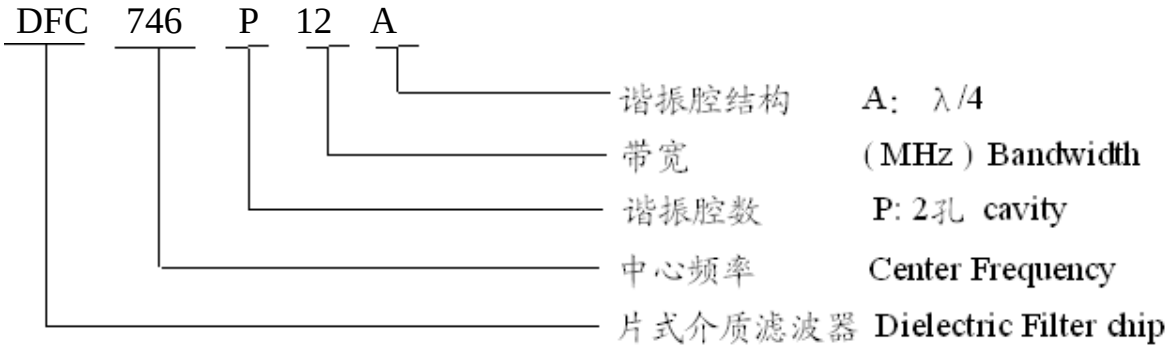
1. 概述　　INTRODUTION

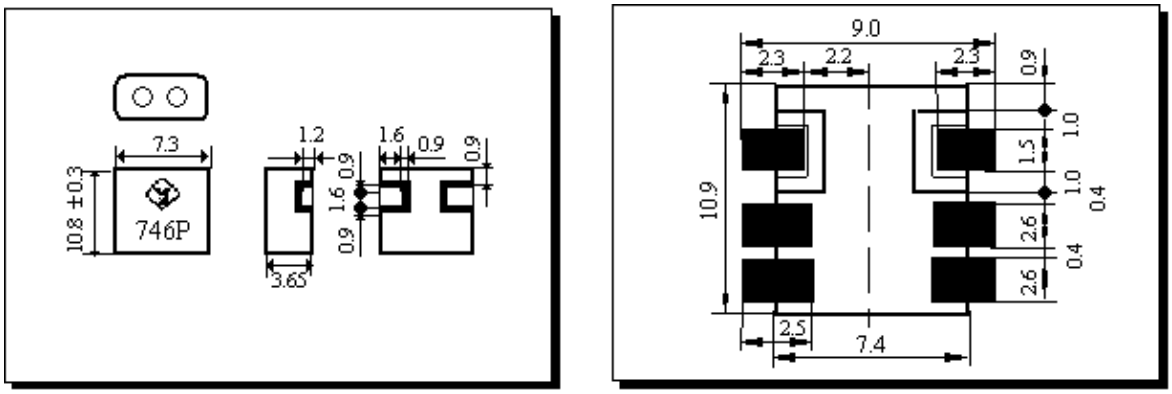
"SHOULDRE"微波介质滤波器系列产品设计用于移动和无绳电话机中，具有低的插入损耗、高的衰减和片式设计，能减少复杂的调校工作，可以简化电路设计。

"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 tunning 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

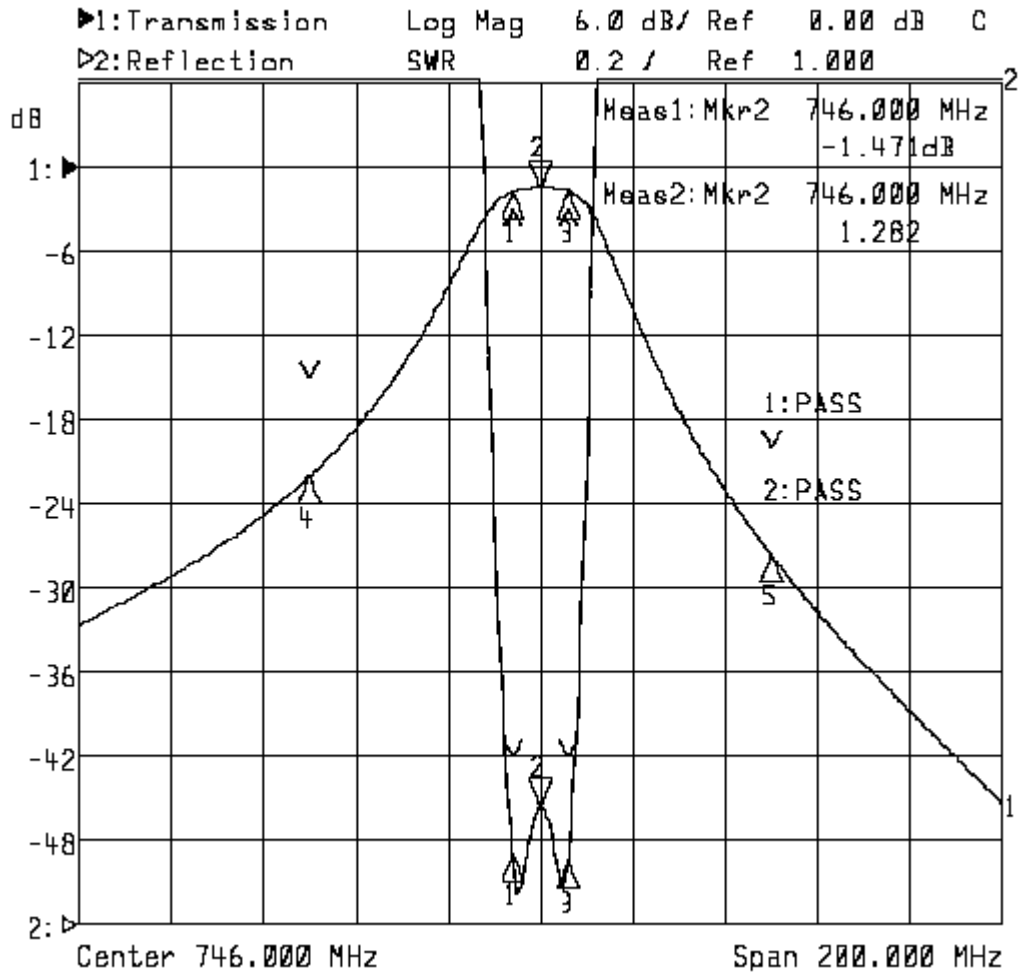
No.	Part Name	名称	Structure and material	结构及材料
4.1	Resonator	谐振体	Dielectric material	介质材料
4.2	In/output Terminals	输入输出端子	Ag Plated	镀银
4.3	Ground Base	接地面	Ag Plated	镀银

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(fo)	746.00MHz	±1.5MHz
5.2	Insertion loss 插入损耗	≤3.0dB（at 25±5℃） ≤3.5dB（at -40℃～+85℃）	±0.5 dB
5.3	Band width 通带宽度	fo±6.0 MHz	±0.5 MHz
5.4	Ripple (in BW) 通带波动	≤1.0 dB	±0.5 dB
5.5	V.S.W.R (in BW) 驻波比	≤2.0	±0.5
5.6	Attenuation (Absolute value) 阻带衰耗（绝对值）	≥20 dB(fo+50MHz) ≥15 dB(fo - 50MHz)	±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	50Ω	——

6. 特性曲线 Characteristic curve



7.可靠性 Reliability：MTBF=1×10^{-6}/pc.hr

试验条件：温度 Temperature： 40±5℃

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℃

相对湿度范围 Relative Humidity range 55~75%RH

工作温度 Operating Temperature range -40℃~+85℃

贮藏温度 Storage Temperature range -40℃~+85℃

8.1 耐湿热特性 Moisture Proof

在温度为 40±2℃，相对温度 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℃and the relative humidity 90~95% RH for 96 hours and 1~2 hours recovery time under normal condlition.

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℃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℃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℃±5℃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℃±5℃for 24±2 hours and to 2 hours recovery time under normal temperature.

8.6 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 characteractics 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.

8.7 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。

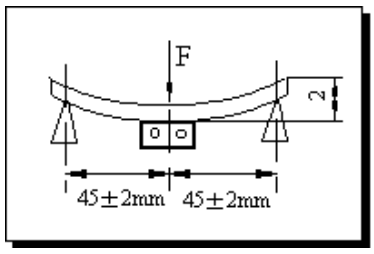
The device should be satisfied after preheating at 120℃~150℃ for 60 seconds and dipping in soldering Sn at 260℃+10℃ for 10±0.5 seconds.

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±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.

8.9 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 .

9. 回流焊温度 Reflow Soldering Standard Condision