

**SHOULDER ELECTRONICS LIMITED**  
**无锡市好达电子有限公司**

**产品技术规格书**  
**SPECIFICATION**

**产品型号 PART NO : DFN2090R80GA**

**客户料号 CUSTOMER PART NO :**

**客户确认 CUSTOMER APPROVED BY :**

**确认日期 APPROVED DATE :**

**RoHS Compliant Parts**

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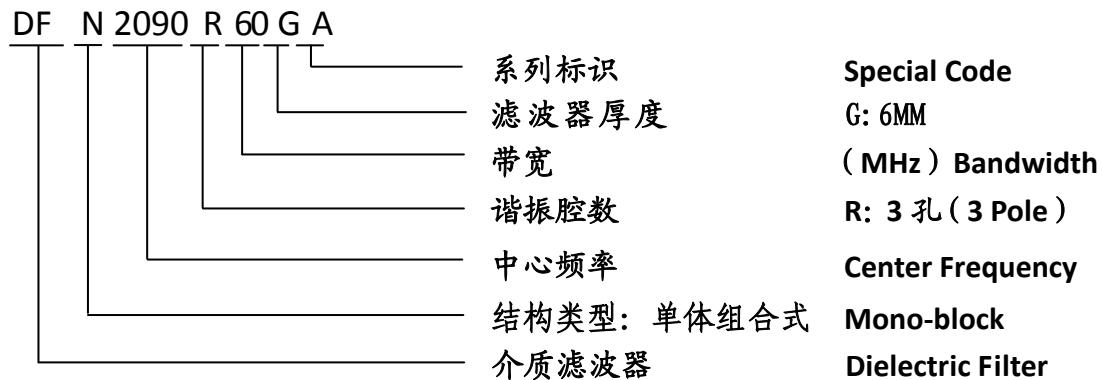
## 产品规格书版本更改记录

## 第一节 概述 INTRODUCTION

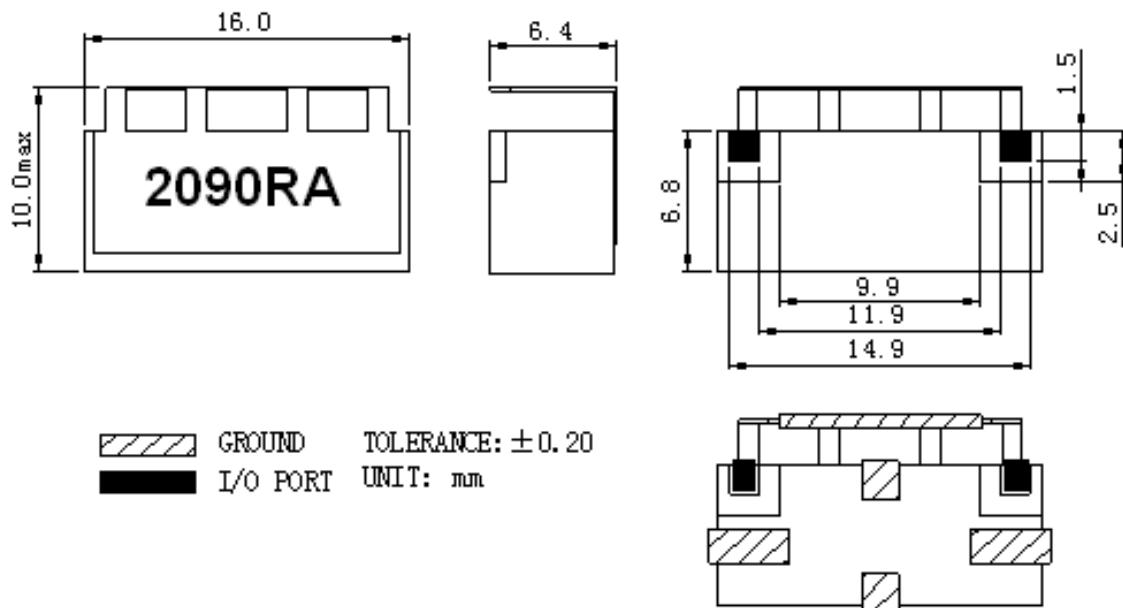
微波介质滤波器系列产品设计用于无线通讯，具有低的插入损耗、高的衰减和片式设计，能减少复杂的调校工作，可以简化电路设计。

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

## 第二节 型号 Part Number



## 第三节 外形尺寸 Dimension and schematic diagram



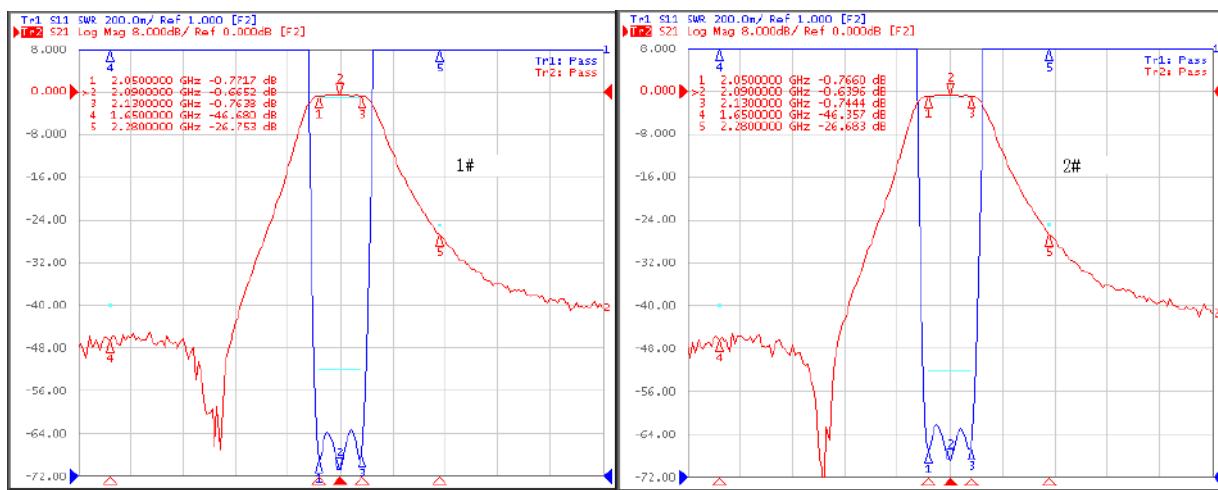
## 第四节 技术指标 Technology index

### 4.1 电气性能 Electrical Characteristics

表 2

ITEM	SPEC	Unit
1 Center Frequency [fo]	2090	MHz
2 Bandwidth [BW]	fo±40.0	MHz
3 Insertion Loss in BW	1.2 max.	dB
4 Ripple in BW	0.5max.	dB
5 V.S.W.R (in BW)	1.5:1 max	Ratio
6 Attenuation [Relative Value]	40 min. @ 1650 MHz 25 min. @ 2280 MHz	dB
7 In/Out Impedance	50	Ω
8 Operation Temperature Range	-40 to +85	℃
9 Input power	1.0 max.	W

### 4.2 特性曲线 Characteristic curve



## 第五节 环境试验 Environmental Test

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

### 5.1 环境试验后允许误差 Post Environmental Tolerance

经环境试验后允许比起始读数偏差见下表

Post Environmental Tolerance (Refer to the table)

No.	Item (项目)	Post Environmental Tolerance (环境试验后允许附加误差)
5.11	Center Frequency 中心频率 $f_0$	± 2.0 MHz
5.12	Insertion Loss 插入衰耗	± 0.5 dB
5.13	Band Width 通带宽度	± 1.0 MHz
5.14	Ripple (in BW) 通带波动	± 0.5 dB
5.15	V.S.W.R (in BW) 驻波比	± 0.2
5.16	Attenuation 阻带衰耗	± 2.0 dB

### 5.2 耐振动 Vibration Resist

在振动频率 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 5.11~5.16 规定。

The device should satisfy the electrical characteristics specified in paragraph 5.11~5.16 after applied to the vibration of 10 to 55Hz with amplitude of 1.5mm for 2 hours each in X, Y and Z directions.

### 5.3 耐湿热特性 Moisture Proof

在温度为  $60 \pm 2$  °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 5.11~5.16 规定。

The device should satisfy the electrical characteristics specified in paragraph 5.11~5.16 after exposed to the temperature  $60 \pm 2$  °C and the relative humidity 90~95% RH for 96 hours and 1~2 hours recovery time under normal condition.

### 5.4 高温特性 High Temperature Endurance

在温度为  $85 \pm 5$  °C 的恒温箱中放置  $96 \pm 2$  小时, 在常温中恢复 1~2 小时后测试。符合表 5.11~5.16 规定。

The device should satisfy the electrical characteristics specified in paragraph 5.11~5.16 after exposed to temperature  $85 \pm 5$  °C for  $96 \pm 2$  hours and 1~2 hours recovery time under normal temperature.

### 5.5 低温特性 Low Temperature Endurance

在温度为  $-40^{\circ}\text{C} \pm 5$  °C 低温箱中放置  $96 \pm 2$  小时后恢复 1~2 小时测试符合表 5.11~5.16 规定。

The device should also satisfy the electrical characteristics specified in paragraph 5.11~5.16 after exposed to the temperature  $-40^{\circ}\text{C} \pm 5^{\circ}\text{C}$  for  $96 \pm 2$  hours and to 2 hours recovery time under normal temperature.

## 5.6 温度循环 Temperature Cycle Test

在 $-40^{\circ}\text{C}$ 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 5.11~5.16 规定。

The device should also satisfy the electrical characteristics specified in paragraph 5.11~5.16 after exposed to the low temperature  $-40^{\circ}\text{C}$  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.

## 第六节 回流焊温度 Reflow Soldering Standard Condition

