

规格书

SPECIFICATION

客户名称:

CUSTOMER:

品名:

圆柱贴片电阻器-常规系列

PARTNAME:

FHRJM*****

规格:

SPECIFICATION:

版本号:

A03

VERSION:

日期:

2026-6-5

DATE :

制造			客户		
APPROVAL			APPROVAL		
拟制 Draft by	审核 Checked by	确认 Approve by	检验 Check by	审核 Checked by	批准 Approval by
张桂林	何建东	李四华			

FHRJM

圆柱贴片电阻-常规系列

Power: 1/8W ~ 3W, Resistance: 0Ω-10MΩ

Tolerance: ±0.1%-±5%, T. C. R: ±10ppm/°C ~ ±100 ppm/°C

一、特点: Peculiarity

● SMD 表面贴装

SMD structure

● 防潮湿多层包装

Conformal multi-layer coating moisture proof

● 低温度系数

Low TCR

● 高精度、高稳定度

High precision, high stability

● 可焊性极好的端子

Excellent solderability termination

● 采用蓝色或绿色涂料包封, 色环标志, 编带包装或散装包装

Blue or green flame-retardant coating Colour Code Taping Reel or Bulk



二、应用领域: Application field

● 适用于电子仪器和仪表, 设备, 彩电、空调、 音响等电器

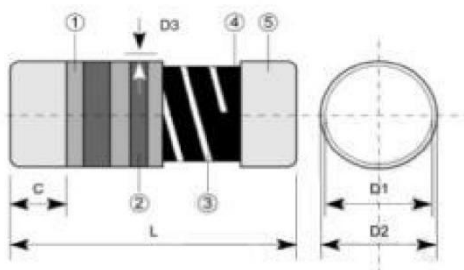
Electric instruments, equipments, TV, audio, air-conditioning and other electrical equipment

● 电子衡器

Electronic weighing apparatus

三、外形尺寸及结构

Overall dimensions and structure



型号 Type	尺寸描述 (mm) Dimension				
	L	D1	D2	D3 Max	C Min
0102	2.0±0.2	1.1 ±0.1	1.25±0.2	0.1	0.4
0204	3.5±0.2	1.1 ±0.1	1.3±0.2	0.1	0.5
0207	5.9±0.2	1.7±0.1	2.1 ±0.2	0.1	0.8
0309	8.6±0.2	2.5±0.1	3.1 ±0.2	0.15	1.2
0411 (旧版)	8.6±0.2	2.5±0.1	3.1 ±0.2	0.15	1.2
0411	10.7±0.2	3.7±0.2	4.0±0.2	0.2	1.8
0515	14.5±0.3	4.3±0.3	4.5±0.3	0.2	2.3

序号 NO.	材料名称 Name	材质 material
1	包封料 Encapsulating	绝缘环氧树脂涂料 Epoxy resin
2	色环 Color ring	涂料 coating
3	切割线 Cutting line	---
4	瓷棒 Porcelain stick	金属皮膜 Metal Film
5	端帽 cap	镀铜镀锡铁帽 Copper tinned iron cap

四、部件编号和产品描述 Part number and product description

FHRJM	75P	0207	F	2	T	1001
产品类别 Type	功率 Power Rating	尺寸 Size (D*L)	精度 Tolerance	温度系数 TCR	包装方式 Packing	标称阻值 Nominal Value
FHRJM	73P: 1/8W 73M: 1/5W 74P: 1/4W 74M: 2/5W 75P: 1/2W 76M: 1W 77M: 2W 78M: 3W	0102:2.0*1.3 0204:3.5*1.3 0207:5.9*2.1 0309:8.6*3.1 0411 (旧版):8.6*3.1 0411:10.7*4.0 0515:14.5*4.5	B: $\pm 0.1\%$ C: $\pm 0.25\%$ D: $\pm 0.5\%$ F: $\pm 1.0\%$ J: $\pm 5.0\%$	6: $\pm 10\text{ppm}$ 5: $\pm 15\text{ppm}$ 3: $\pm 25\text{ppm}$ 2: $\pm 50\text{ppm}$ 1: $\pm 100\text{ppm}$	B: 散包 T: 编带	1001=1K Ω 1122=11.2K Ω 1R00=1 Ω 1114=1.11M Ω 2205=22M Ω

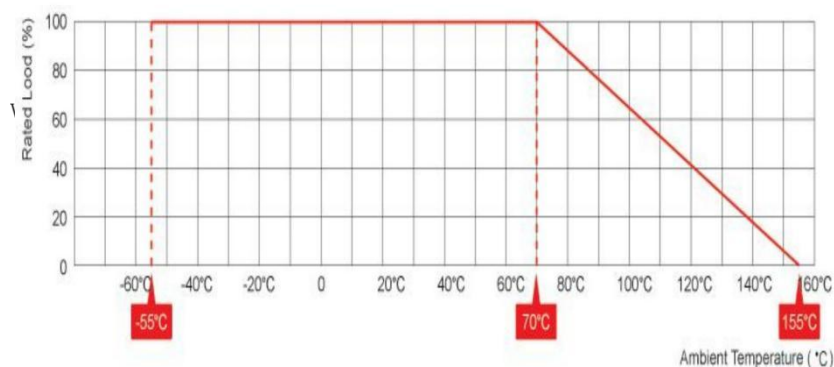
五、电气性能及试验要求 Electrical performance and test requirements

试验项目 Test Item	性能要求 Specifications	试验变化 Test method
可焊性 Soldeability	$\geq 95\%$	$235 \pm 5^\circ\text{C}$, $2 \pm 0.5\text{s}$
短时过载 Short time overload	$\Delta R \leq \pm (0.25\%R + 0.05\Omega)$	2.5VR, 5s
温度冲击 Thermal shock	$\Delta R \leq \pm (0.2\%R + 0.05\Omega)$	$-65 \sim 150^\circ\text{C}$, 5cycles
耐焊接热 Leaching	$\Delta R \leq \pm (0.1\%R + 0.05\Omega)$	$260 \pm 10^\circ\text{C}$, $10 \pm 1\text{s}$
耐湿 Resistance to moisture	$\Delta R \leq \pm (0.5\%R + 0.05\Omega)$	$-10 \sim 65^\circ\text{C}$, RH $>90\%$, 240H
70°C耐久性 Endurance at 70°C	$\Delta R \leq \pm (1\%R + 0.1\Omega)$	$70 \pm 2^\circ\text{C}$, PR 1000H

六、技术参数 Technical parameters

型号 Type	额定功率(W) Power Rating	绝缘电压 Insulate Voltage(V)	最大工作电压 Max Working Voltage(V)	阻值范围 Resistance Range(Ω)					电阻温度系数 (+25~85℃) TCR(ppm/℃)	使用温度范围 erating temperature
				±0.1%	±0.25%	±0.5%	±1%	±5%		
FHRJM73P0102	0.125	150	300	100Ω-56KΩ					±15	-55~ 155℃
				100Ω-82KΩ		49.9Ω-200KΩ	49.9Ω-390KΩ		±25	
				-		8.2Ω-1MΩ			±50	
				-			8.2Ω-2MΩ		±100	
				0Ω(<15mΩ)					-	
FHRJM73M0102	0.2	200	400	100Ω-56KΩ					±15	
				100Ω-82KΩ		49.9Ω-200KΩ	49.9Ω-390KΩ		±25	
				-		8.2Ω-1MΩ			±50	
				-			8.2Ω-2MΩ		±100	
				0Ω(<15mΩ)					-	
FHRJM74P0204	0.25	200	400	10Ω-20KΩ					±10	
				10Ω-300KΩ					±15	
				10Ω-1MΩ			10Ω-4.7MΩ		±25	
				10Ω-1MΩ	1Ω-1MΩ		0.2Ω-10MΩ		±50	
				-			0.1Ω-10MΩ		±100	
				0Ω(<15mΩ)					-	
FHRJM74M0204	0.4	200	400	10Ω-20KΩ					±10	
				10Ω-300KΩ					±15	
				10Ω-1MΩ			10Ω-4.7MΩ		±25	
				10Ω-1MΩ	1Ω-1MΩ		0.2Ω-10MΩ		±50	
				-			0.1Ω-10MΩ		±100	
				0Ω(<15mΩ)					-	
FHRJM75P0207	0.5	300	600	10Ω-20KΩ					±10	
				10Ω-300KΩ					±15	
				10Ω-1MΩ			10Ω-4.7MΩ		±25	
				10Ω-1MΩ	1Ω-1MΩ		0.2Ω-10MΩ		±50	
				-			0.1Ω-10MΩ		±100	
				0Ω(<15mΩ)					-	
FHRJM76M0207	1	350	700	10Ω-100KΩ					±15	
				10Ω-1MΩ					±25	
				10Ω-1MΩ	1Ω-1MΩ		0.2Ω-10MΩ		±50	
				-			0.1Ω-10MΩ		±100	
FHRJM77M0309	2	350	700	10Ω-100KΩ					±15	
				10Ω-1MΩ					±25	
				10Ω-1MΩ	1Ω-1MΩ		0.2Ω-10MΩ		±50	
				-			0.1Ω-10MΩ		±100	
FHRJM77M0411	2	400	800	-			10Ω-4.7MΩ	±50/±100		
FHRJM78M0411	3	400	800	-			10Ω-4.7MΩ	±50/±100		
FHRJM78M0515	3	350	700	-			10Ω-4.7MΩ	±50/±100		

额定功率曲线图 Rated power diagram Calculation



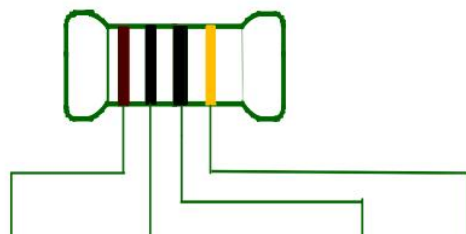
额定电压计算方式:

$$V = \sqrt{P \times R}$$

V = 额定电压 (V) RATED

P = 额定功率 (W) RATED

七、电阻值标志 Resistance value marker

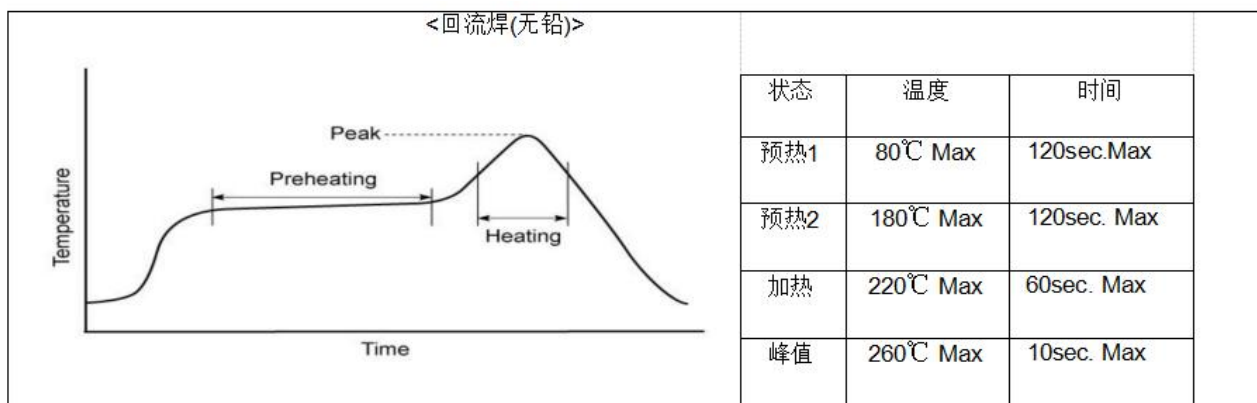


颜色 Color	第1数字 First digit	第2数 Second digit	第3数 Second digit	乘数 Malutiplier
黑Black	0	0	0	100
棕Brown	1	1	1	101
红Red	2	2	2	102
橙Orange	3	3	3	103
黄Yellow	4	4	4	104
绿Green	5	5	5	105
蓝Blue	6	6	6	106
紫Violet	7	7	7	107
灰Gray	8	8	8	108
白White	9	9	9	109
金Gold	—	—	—	10 ⁻¹
银Silver	—	—	—	10 ⁻²
无Plain	—	—	—	—

备注：有特殊要求可以标示五色环

Note: If there are special requirements, a five-color ring can be marked

八、使用回流焊接工艺条件：Use reflow welding process conditions



备注：以上焊接条件仅作参考，以客户实际使用焊接为准，如有特殊要求焊接条件，请与FH沟通。

Note: The above welding conditions are for reference only. The actual welding conditions used by the customer shall prevail. If there are any special requirements for welding conditions, please communicate with FH.

九. 包装 PACKING

1. 标签规格 LABEL SPECIFICATION

- 1) 型号及功率 TYPE、WATTS
- 2) 电阻值和误差 RESISTOR VALUE AND TOLERANCE
- 3) 数量 QUANTITY
- 4) 生产批号 LOT NO.

2. 包装数量 Packing quantity

TYPE	0102	0204	0207	0309	0411	0515
QTY (Kpcs/盘)	4	3	2	2.5	2.5	2

附加说明: Additional instructions:

1、产品存放条件 product storage conditions

a 电阻器应存放在干燥、通风的环境条件下, 产品不得受阳光直接照射;

Resistor should be stored in dry and ventilated environment conditions, the product shall not be affected by direct sunlight ;

b 电阻器存放环境应无酸、碱、硫化等具有腐蚀气氛的环境中;

Resistor to deposit environment should be no acid, alkali corrosion, sulfide, etc have atmosphere environment;

c 产品存储时间不得超过两年。Product storage time may not exceed two years

2、储存环境: Storage environment

温度18℃~28℃ , 相对湿度≤60%RH

The temperature is 18 °C to 28 °C, and the relative humidity is less than or equal to 60%RH

3、产品使用补充说明 Products use added

a 产品功率负荷, 遵循额定功率降功耗曲线负荷; Product power load, follow the rated power drop curve of load power consumption ;

b 工作电压按额定电压计算公式计算: Working voltage according to the rated voltage calculation formula:

$$V = \sqrt{P \times R}$$

式中:

V =额定电压 (伏特) rated voltage (volt)

P =额定功率 (瓦特) rated power (watts)

R =标称电阻值 (欧姆) nominal resistance (ohms)