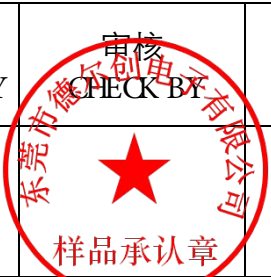


规格书  
SPECIFICATION

客户 CUSTOMER	立创
客户料号 CUSTOMER P/N	
规格描述 DESCRIPTION	1/2W/220K/J/铜脚/TB/阻燃
产品编码 PART NUMBER	RTE2203JDCUPUN1
日期 DATE	2023-05-08

德尔创承认栏 APPROVED BY DERSONIC			客户承认栏 APPROVED BY CUSTOMER	
批准 APPROVED BY	审核 CHECK BY	制订 FORMULATE BY	批准 APPROVED BY	审核 CHECK BY
				

东莞市德尔创电子有限公司

DONGGUAN DERSONIC ELECTRONIC CO., LTD.  
中国广东省东莞市寮步镇松湖智谷科技产业园2栋15楼  
15/F, Building 2, Songhu Zhigu Science and Technology Industrial Park,  
Liaobu Town, Dongguan City, Guangdong Province, China  
TEL: +86-769-8533 5208 FAX: +86-769-8155 5989  
Website: <http://www.dersonic.com>

# CF

## 碳膜固定电阻器

### CARBON FILM FIXED RESISTORS

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碳膜固定电阻器

CF(1/8W、1/4W、1/2W、1W、2W、3W、5W)

小型化(1/4WS、1/2WS、1WS、2WS、3WS、5WS)

●特性

◎高品质.

◎CNS 2320 之各项准则.

◎±2%及±5%之标准误差.

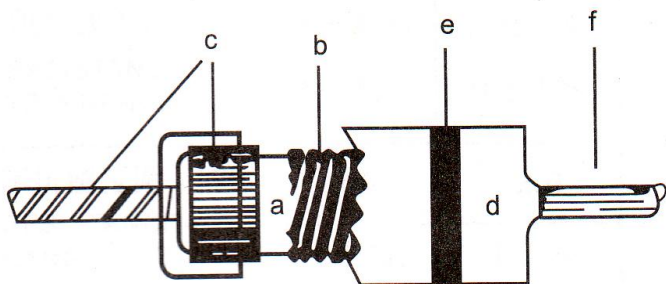
◎提供散装、带装及各种成型剪脚规格.

◎可制作极高阻抗值(1Ω-10MΩ).

◎选用高品质瓷棒制作小型品以替代大尺寸  
高功率之一般型电阻.

●结构图

●CONSTRUCTION



a) 高热传导瓷心.

b) 高稳定性碳化皮膜.

c) 压合度良好之高信赖性端帽.

d) 高绝缘及耐溶剂之环氧树脂涂料.

e) 符合 CNS 2320 规定之标准色码带.

f) 镀锡导线.

CARBON FILM FIXED RESISTOR

STANDARD TYPE CF(1/8W、1/4W、1/2W、1W、2W、3W、5W)

MINI(1/4WS、1/2WS、1WS、2WS、3WS、5WS)

●FEATURES

◎HIGH QUALITY.

◎MEET PERFORMANE REOUIREMENT OF CNS 2320.

◎STANDARD TOLERANCE: ±2%, ±5%.

◎VARIETY OF PACKAGING-BULK, TYPE AND REL, CUT AND  
FORMED SUPPLIED.

◎HIGH RESISTANCE RANGE(1Ω-10MΩ).

◎SMALL-SIZED USE SELECTED CERAMIC WITH HIGH  
PERFORMANCE WHICH IS SUITABLE FOR COMPACT SETS.

a) CERAMIC CORE (HIGH CONDUCTIVITY).

b) CARBON FILM (HIGH STABILITY).

c) END CAP (HIGH RELIABILITY FITTING BY ORIGINAL  
CAP-PRESSING METHOD).

d) EPOXY RESIN (INSULATIVE LACQUER, SOLVENT-PROOF).

e) COLOR CODE (PER CNS 2320 STANDARDS PERMANENT).

f) LEAD WIRE .

# CF

## 碳膜固定电阻器

### CARBON FILM FIXED RESISTORS

#### 电力特性 (POWER CHARACTERISTIC)

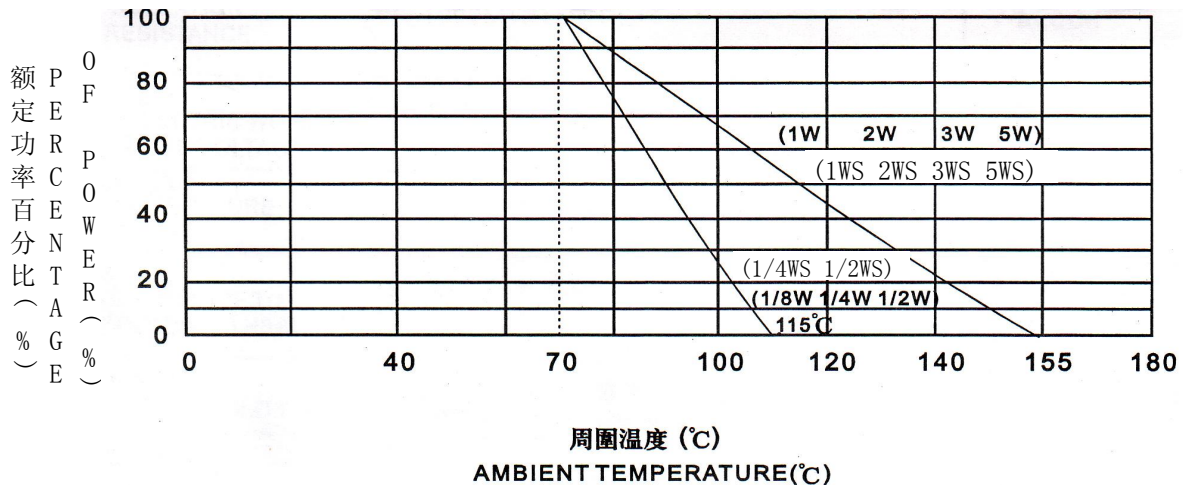
项目 ITEM	定格电力 POWER RATE	0.125W (1/8W)	0.25W (1/4W) (1/4WS)	0.5W (1/2W) (1/2WS)	1W 1WS	2W 2WS	3W 3WS	5W 5WS
	最高使用电压 MAX WORKING VOLTAGE		200V	250V	350V	500V	750V 500V	750V
最高过负荷电压 MAX OVERLOAD VOLTAGE		400V	500V	700V	1000V	1500V 1000V	1500V	1500V
最高断续过负荷电压 MAX PULSE OVERLOAD VOLTAGE		500V	600V	1000V	1500V	2000V 1500V	2000V	2000V
耐电压 DIELECTRIC WITHSTANDING VOLTAGE		300V (AC)	350V (AC)	350V (AC)	350V (AC)	350V (AC)	350V (AC)	350V (AC)
阻抗值误差 RESISTANCE TOLERANCE		J±5%	J±5%	J±5%	J±5%	J±5%	J±5%	J±5%
阻抗值范围 RESISTANCE RANGE(Ω)	MIN	1.0Ω	1.0Ω	1.0Ω	1.0Ω	1.0Ω	1.0Ω	1.0Ω
	MAX	4.7MΩ	4.7MΩ	10MΩ	10MΩ	10MΩ	4.7MΩ	4.7MΩ

注解1: 额定电压 =  $\sqrt{\text{定格电力} \times \text{公称阻抗值}}$

NOTE 1. RATED CONTINUOUS WORKING VOLTAGE (RCWV) SHALL BE DETERMINED FROM

ROWV =  $\sqrt{\text{POWER RATING} \times \text{RESISTANCE VALUE}}$

降功耗曲线 POWER DERATING CURVE



# CF

## 碳膜固定电阻器

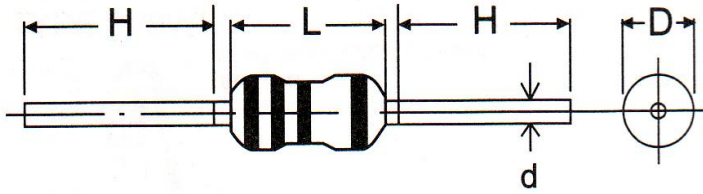
### CARBON FILM FIXED RESISTORS

特性项目 CHARACTERISTICS	规格值 SPECIFICATIONS		测试方法 TEST METHODS
直流阻抗值 DC RESISTANCE	J (±5%) G (±2%)		室温 25°C AT 25°C
温度特性 T. C. R	1/8W 1/4WS	公称电阻值范围	TEMP
		Nominal Resistance	温度系数 PPM/°C
		低于4.7 Ω LESS THAN 4.7 Ω	±350
		4.7 Ω-910 Ω	±300
		1K-62K	±500
		68K-200K	±700
	1/4W 1/2W (1/2WS) 1W (1WS) 2W (2WS) 3W (3WS) 5W (5WS)	低于4.7 Ω LESS THAN 4.7 Ω	±350
		4.7 Ω-51K	±300
		56K-430K	±500
		470K-910K	±700
		1M以上 OVER	±1000
		测试前于室温测试其阻抗值。 测试温度为室温加100°C RESISTANCE VALUE AT ROOM TEMPERATURE AND ROOM TEMPERATURE + 100°C	
耐湿负荷 LOAD LIFE IN HUMIDTY	100K以下 ±3% 100K以上(含) ±5% LESS THAN 100K, ±3% 100K OR MORE, ±5%		40°C 相对湿度90-95% 1000小时 40°C 90-95%RH, 1000, HRS.
耐久性 LOAD LIFE	56K以下 ±2% 56K以下 ±3% LESS THAN 56K, ±2% 56K OR MORE, ±3%		70°C 测试1000小时 70°C, 1000, HRS
短时间过负荷 SHORT TIME OVERLOAD	±(1%+0.05 Ω)		额定电压*2.5倍, 5秒 2.5 TIMES RATED VOLTAGE 5 SEC
绝缘阻抗 INSULATION RESISTANCE	1000M 以上 1000M OR MORE		将待测物置于V型槽 V-BLOCK
耐电压 DIELECTRIC WITHSTANDING VOLTAGE	±(0.5%+0.05 Ω)		依特性表之电压规定 VOLTAGE SPECIFIED IN RATING TABLE
温度循环 TEMPERATURE CYCLING	±(1%+0.05 Ω)		温度-25°C~85°C 5次循环 -25°C~85°C, ROR 5 CYCLES
耐热性 RESISTANCE TO SOLDERING HEAT	±(1%+0.05 Ω)		350°C ±5°C, 2 SEC(秒) 235°C ±5°C, 5 SEC(秒)
焊锡性 SOLDERABILITY	百分之90着锡于铜线导脚上 90% COVERAGE MINIMUM		235°C ±5°C, 5 SEC(秒)
端子强度 TERMINAL STRENGTH	不得损伤 LEADS NO DAMAGE		端子拉力测试 DIRECT LOAD TWIST TEST

# 电阻尺寸图

## RESISTOR DIMENSIONS

### P型尺寸(P TYPE DIMENSIONS)



品名 PART NO.	尺寸 (DIMENSIONS mm)								
	L±0.5	D±0.5	d±0.05	H±2.0	小型化 SMALL SIZE	L±0.5	D±0.5	d±0.05	H±2.0
0.125W (1/8W)	3.5	1.5	0.41	28	0.25WS (1/4WS)	3.5	1.5	0.41	28
0.25W (1/4W)	6.0	2.3	0.41	27	0.5WS (1/2WS)	6.0	2.3	0.41	27
0.5W (1/2W)	9.0	3.2	0.50	26	1WS	9.0	3.2	0.50	26
1W	11.0	4.0	0.65	25	2WS	11.0	4.0	0.65	25
2W	15.0	5.0	0.65	22	3WS	15.0	5.0	0.65	22
3W	17.0	6.0	0.70	34	5WS	17.0	6.0	0.70	34
5W	24.0	8.0	0.70	30	7WS	24.0	8.0	0.70	30