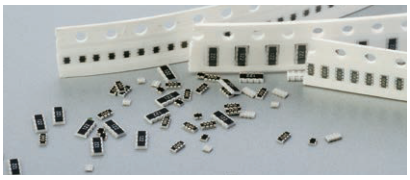
Chip Resistor Array

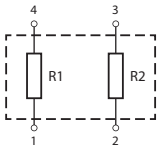
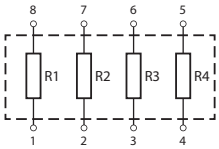
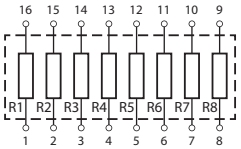
晶片排列电阻器

Feature (特性)

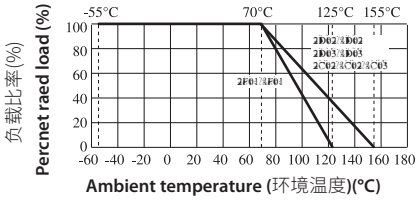
- High density, more than 1 resistors in one small case 高度密集, 多个电阻在一个表贴封装中
- Improvement of placement efficiency 装配效率高
- Tape/Reel packaging is suitable for automatic placement machine 编带卷装适合自动化机器
- Superior solderability 优越焊锡性
- Application: Master board, CD & DVD Rom, Hard Disk, RAM
  应用于 CD、DVD、硬盘、内存、主板等



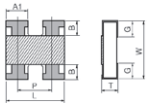
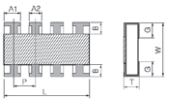
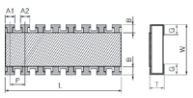
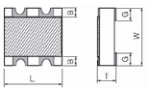
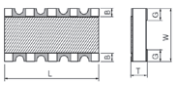
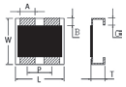
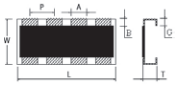
Equivalent Circuit Diagram (等效电路图)

2D02/2D03/2C02/2F01	4D02/4D03/4DP3/4C02/4C03/4F01	16P8
		
R1=R2	R1=R2=R3=R4	R1=R2=R3=R4=R5=R6=R7=R8

Derating Curve (降功率曲线)



Dimensions in mm (外观尺寸)

Convex Terminal type 凸式电极			Concave Terminal 凹式电极		Flat Terminal 平式电极	
2D02/2D03	4D02/4D03/4DP3	16P8	2C02	4C02/4C03	2F01	4F01
						

*The 16P8 series of Anti-sulfuration products are available in particular.
*16P8 系列抗硫化产品可特别提供

Type 类型	Dimensions 尺寸 (mm)							
	L	W	T	A1	A2	B	P	G
2D02 0402*2	1.00±0.10	1.00±0.10	0.35±0.10	0.33±0.10	/	0.15±0.05	0.65±0.05	0.25±0.10
4D02 0402*4	2.00±0.10	1.00±0.10	0.45±0.10	0.40±0.05	0.30±0.05	0.20±0.15	0.50±0.05	0.30±0.15
2D03 0603*2	1.60±0.15	1.60±0.15	0.50±0.10	0.60±0.15	/	0.30±0.10	0.80±0.05	0.25±0.10
4D03/4DP3 0603*4	3.20±0.20	1.60±0.20	0.50±0.10	0.65±0.15	0.50±0.15	0.30±0.15	0.80±0.10	0.30±0.15
16P8	4.00±0.20	1.60±0.15	0.45±0.10	0.45±0.05	0.30±0.05	0.30±0.15	0.50±0.05	0.40±0.15
2C02 0402*2	1.00±0.10	1.00±0.10	0.35±0.10	/	/	0.15±0. 10	/	0.30±0.10
4C02 0402*4	2.00±0.10	1.00±0.10	0.45±0.10	/	/	0.15±0.10	/	0.30±0.10
4C03 0603*4	3.20±0.20	1.60±0.20	0.60±0.10	/	/	0.30±0.20	/	0.40±0.10
2F01 0201*2	0.80±0.10	0.60±0.10	0.35±0.10	0.30±0.10	/	0.15±0.10	0.50±0.05	0.15±0.10
4F01 0201*4	1.40±0.10	0.60±0.10	0.35±0.10	0.20±0.10	/	0.15±0.10	0.40±0.05	0.15±0.10

Ratings (规格)

Type 类型	Power Rating 额定功率	Max Working Voltage 最大工作电压	Max Overload Voltage 最大过负荷电压	Dielectric Withstanding Voltage 绝缘耐压	Resistance Range 阻值范围 ±5%，±1%	Temperature Coefficient 温度系数 PPM/°C	Operating Temperature 工作温度范围	Resistance Value of Jumper 零欧姆电阻阻值	Rated Current of Jumper 零欧姆电阻额定电流
2D02	1/16W	50V	100V	100V	10Ω~1MΩ	±200	-55℃~+155℃	<50mΩ	1A
4D02	1/16W	50V	100V	100V	10Ω~1MΩ	±200			
2D03	1/16W	50V	100V	100V	10Ω~1MΩ	±200			
4D03	1/16W	50V	100V	300V	1Ω~1MΩ	≥10Ω:±200 <10Ω:±400			
4DP3	1/10W	50V	100V	300V	1Ω~1MΩ	≥10Ω:±200 <10Ω:±400			
16P8	1/16W	50V	100V	300V	1Ω~1MΩ	≥10Ω:±200 <10Ω:±400			
2C02	1/16W	50V	100V	100V	10Ω~1MΩ	±200			
4C02	1/16W	50V	100V	100V	10Ω~1MΩ	±200			
4C03	1/10W	50V	100V	300V	1Ω~1MΩ	≥10Ω:±200 <10Ω:±400			
2F01	1/20W	12.5V	25V	/	10Ω~1MΩ	±200	-55℃~+125℃	<50mΩ	1A
4F01	1/20W	12.5V	25V	/	10Ω~1MΩ	±200			

Performance Specification (性能)

Short-time overload	短时间过负荷	± (2.0%±0.1Ω) 2F01: 1%: ±(1%+0.05Ω) , 5%: ±(2%+0.05Ω)
Insulation Resistance	绝缘电阻	≥1000MΩ
Dielectric withstanding voltage	绝缘耐压	No evidence of flashover mechanical damage, arcing or insulation break down. 无击穿，飞弧及可见机械性损伤
Terminal bending	端子弯曲	± (1.0%+±0.05Ω)
Soldering heat	耐焊接热	ΔR/R ≤ ± (1.0%+0.05Ω)
Solderability	可焊性	Coverage must be over 95%.
Rapid change of temperature	温度快速变化	ΔR/R ≤ ± (1.0%+0.05Ω) 2F01: 1%: ±(0.5%+0.05Ω) , 5%:±(1%+0.05Ω)
Load life in humidity	湿度寿命	± (3.0%±0.1Ω) 2F01: 1%:±(2%+0.1Ω) , 5%: ±(3.0%±0.1Ω)
Load life	负载寿命	± (3.0%±0.1Ω) 2F01: 1%: ±(2%+0.1Ω), 5%: ±(3.0%±0.1Ω)

Ordering Procedure (Example: 2F01 1/20W ±5% 10K T/R-10000)

订购方式 (例如: 2F01 1/20W ±5% 10K T/R-10000)

2 F 0 1 W M J 0 1 0 3 T C E

Product Type (产品类型):
Fill-in 4 digits with the Chip resistor type as follow (填四位数表示产品类型)：
2F01, 4F01, 2D02, 2D03, 4D03, 4D02, 4DP3, 2C02, 4C02, 4C03, 16P8

Wattage (功率):
Fill-in 2 digits with the codes as follow (用下列代码填二位数):
WM=1/20W
WG=1/16W
WA=1/10W

Tolerance (公差):
F = ±1%
J = ±5%

Resistance Value (阻值):
5% (E-24 series) :
the 1st digit is "0", the 2nd & 3rd digits are for the significant figures of the resistance and the 4th indicate the number of zeros following
5% 产品 (E-24 系列阻值):
第 1 位数是 0，第 2、3 位数表示阻值的有效数，第 4 位表示有几个 0);
1%(E-96 series):
the 1st to 3rd digits are for the significant figures of the resistance and the 4th indicate the number of zeros following
1% 产品 (E-24, E-96 系列阻值):
第 1-3 位数表示阻值的有效数，第 4 位数表示有几个 0).
The following numbers and the letter codes is to be usedto indicate the number of zeros in the 11th digit:
以下数字及字母用来表示第11位数有几个0:
$0=10^0$ $1=10^1$ $2=10^2$ $3=10^3$ $4=10^4$ $5=10^5$ $6=10^6$
$J=10^{-1}$ $K=10^{-2}$ $L=10^{-3}$ $M=10^{-4}$ $N=10^{-5}$ $P=10^{-6}$

Packing Qty. (包装数量)
4=4,000pcs
5=5,000pcs
C=10,000pcs
D=20,000pcs
E=15,000pcs

Special Feature (特征):
E = Lead Free (standard)
(无铅标准品)

Packing Type (包装类型):
T=T/R（编带 / 卷带）
B=Bulk in Poly bag（散装 / 袋装）

Remark: For more details, please check page 152, Part No. System. 注：更多细节详见 P152 标准料号系统。