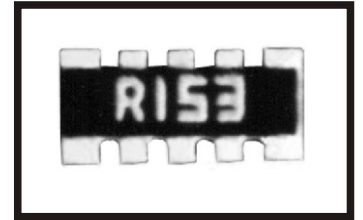
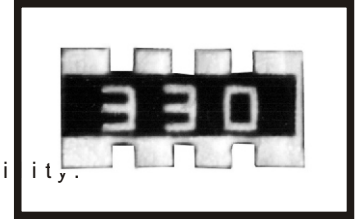


# THICK FILM CHIP NETWORK RESISTOR

## 厚膜片式网络电阻器 THICK FILM CHIP NETWORK RESISTOR

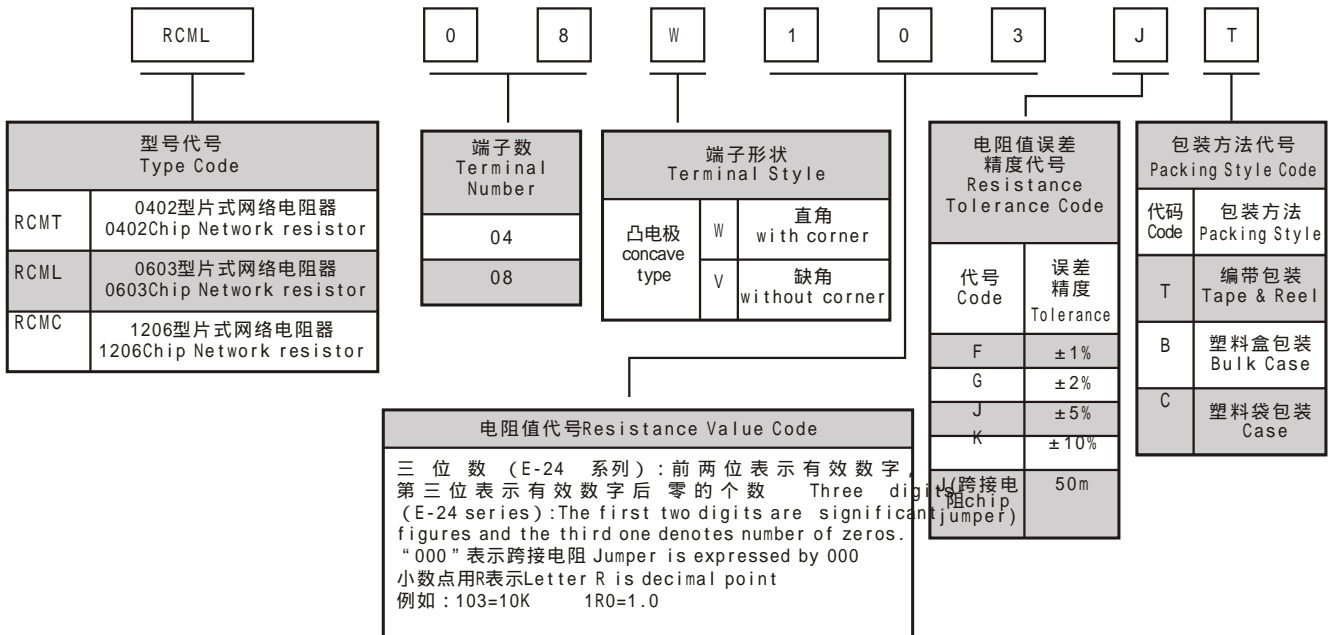
### 特性 FEATURES

- \* 体积小、重量轻。
  - \* 适应再流焊与波峰焊。
  - \* 电性能稳定，可靠性高。
  - \* 装配成本低，并与自动装贴设备匹配。
  - \* 机械强度高、高频特性优越。
- Miniature and light weight.
  - Suit for reflow and wave flow solder.
  - Stable electrical capability, high reliability.
  - Low assembly cost, suit for automatic SMT equipment.
  - Superior mechanical and frequency characteristics.

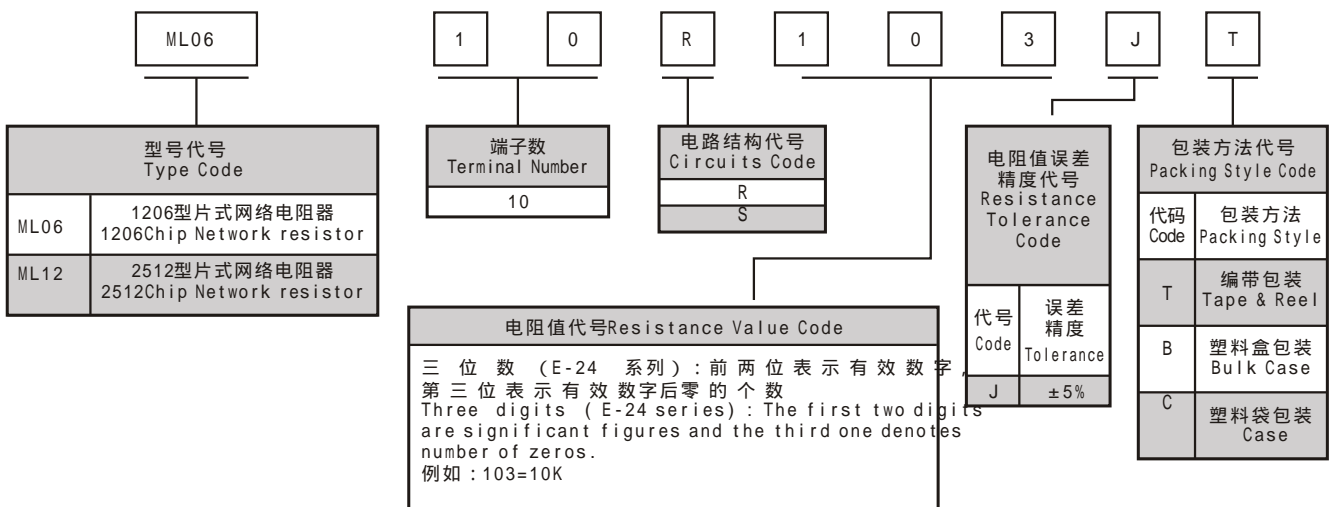


### 品名构成 Type Designation

\* 例1 Example 1



\* 例2 Example 2



● 参考标准 REFERENCE STANDARD

- GB/T 5729-94
- GB/T 9546-1995
- JIS C 5223-1989
- JIS C 5201-1994
- JIS C 5202-1985

● IEC E-24 系列电阻值代码对照表

IEC E-24 Series Resistance Cross-reference List

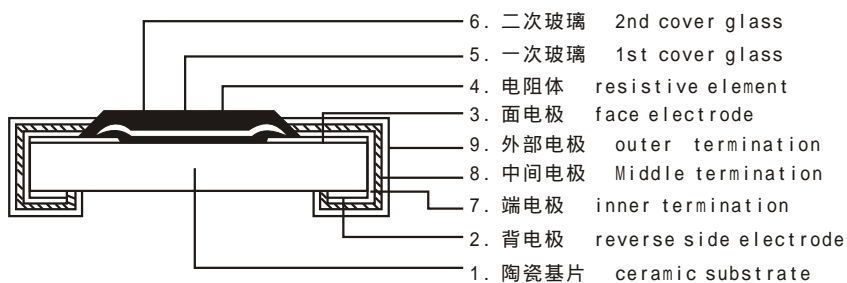
E-24 系列 E-24 Series ( $\times 10^n$ )

(单位unit:1、10、100、1K、10K、100K、1M)

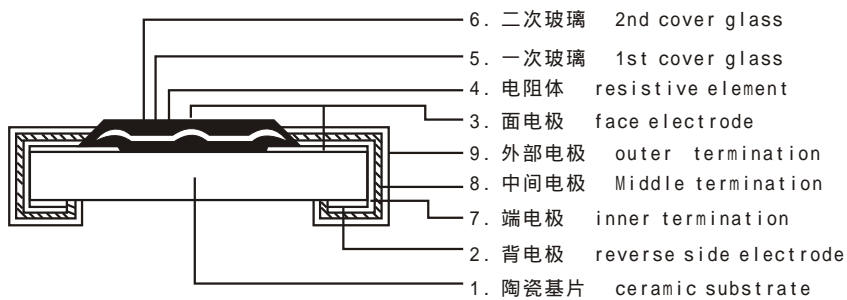
1.0	1.5	2.2	3.3	4.7	6.8
1.1	1.6	2.4	3.6	5.1	7.5
1.2	1.8	2.7	3.9	5.6	8.2
1.3	2.0	3.0	4.3	6.2	9.1

● 结构图 CONSTRUCTION

\* 例1 Example 1: RCMT/RCML/RCMC:



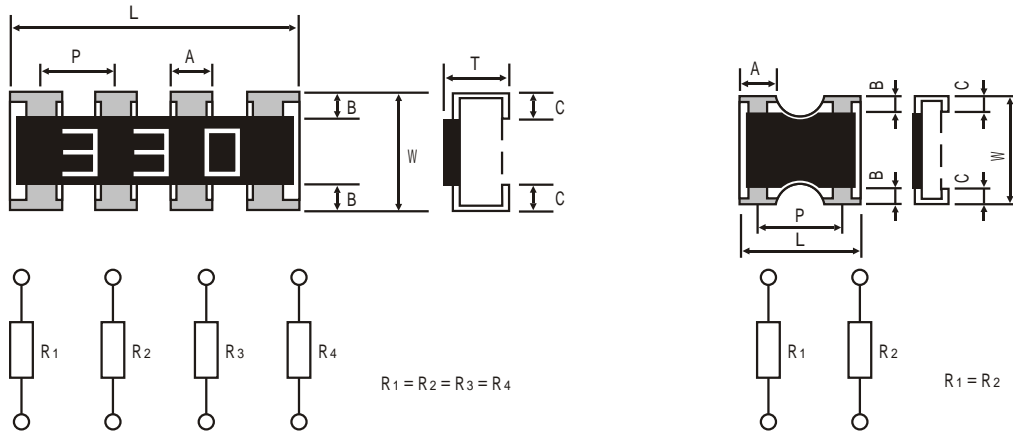
\* 例2 Example 2: ML06/ML12:



# THICK FILM CHIP NETWORK RESISTOR

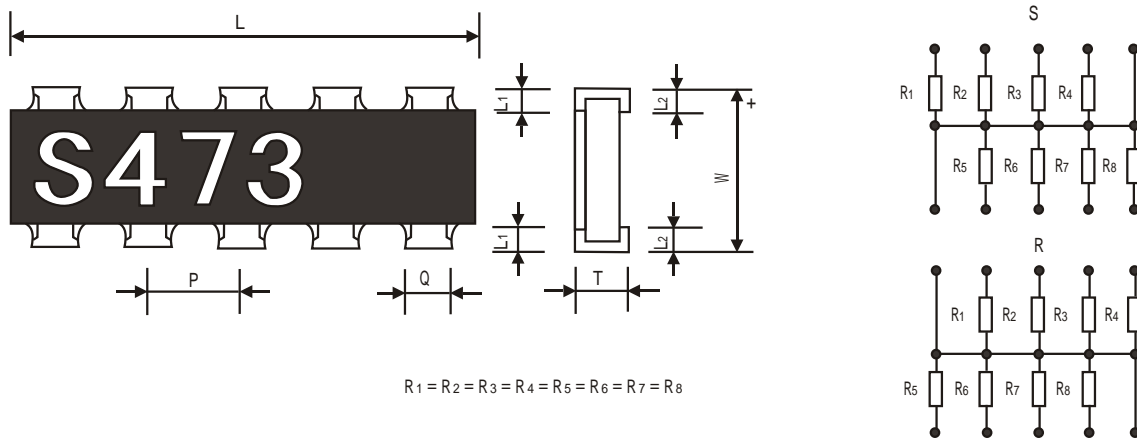
## • 规格尺寸及等效电路 DIMENSIONS AND EQUIVALENT CIRCUIT

\* 例1 Example 1: RCMT/RCML/RCMC:



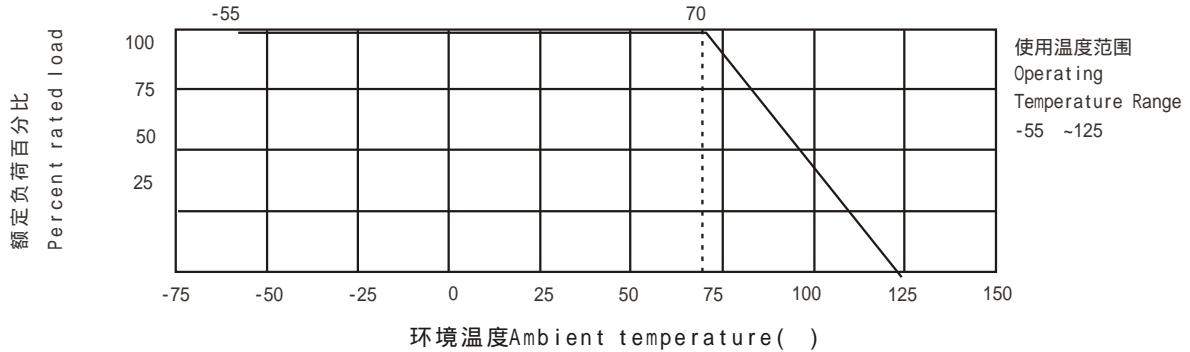
型号 Type	L	W	T	P	A	B	C
RCMT04	1.00±0.10	1.00±0.10	0.35±0.10	0.65±0.05	0.35±0.10	0.15±0.05	0.25±0.10
RCMT08	2.00±0.10	1.00±0.10	0.45±0.10	0.50±0.05	0.20±0.15	0.15±0.05	0.25±0.20
RCML08	3.20±0.15	1.60±0.15	0.50±0.10	0.80±0.10	0.50±0.15	0.30±0.20	0.30±0.15
RCMC08	5.08±0.20	3.10±0.20	0.60±0.10	1.27±0.10	1.10±0.15	0.50±0.20	0.50±0.15

\* 例2 Example 2: ML06/ML12:



型号 Type	L	W	T	L1	L2	P	Q
ML06	3.20±0.20	1.60±0.15	0.55±0.10	0.30±0.15	0.30±0.15	0.64±0.10	0.32±0.10
ML12	6.40±0.20	3.10±0.20	0.55±0.10	0.50±0.20	0.50±0.20	1.27±0.10	0.80±0.10

• 负荷下降曲线 DERATING CURVE



\* 当电阻使用的环境温度超过70 时，其额定负荷(额定功率或额定电流)按上述曲线下降。  
For resistors operated in ambient over 70 , rated load (power rating or current rating) shall be derated in accordance with above figure.

• 额定值 RATINGS

项 目 Item	标 准 Specifications					
	RCMT04	RCMT08	RCML08	RCMC08	ML-06	ML-12
额定功率 Power Rating	1/16W		1/16W	1/8W	1/32W	1/16W
最大工作电压 Max. Working Voltage	50V		50V	200V	25V	50V
最大过负荷电压 Max. Overload Voltage	100V		100V	400V	50V	100V
跨接电阻额定电流 Jumper Rated Current	1A		1A	2A	/	/
电阻温度系数 Resistance Temperature Coefficient	±200ppm/		10 R 1M : ±100ppm/ 1 R <10 , 1M <R 10M : ±250ppm/		±250ppm/	
阻值误差精度 Resistance Tolerance	±5% 跨接电阻Chip jumper: 50m		±1%, ±2%, ±5%, ±10%, 跨接电阻Chip jumper: 50m		±5%	
阻值范围 Resistance Range	0 (跨接电阻chip jumper), 1 ~10M (E-24 系列 series)		0 (跨接电阻chip jumper), 1 ~10M (E-24 系列 series)		33 ~470K (E-24系列series)	
使用温度范围 Operating Temperature Range	-55 ~125					
额定温度 Rated Temperature	+70					

\* 注：额定电压 =  $\frac{\text{额定功率} \times \text{标称电阻值}}{\text{或最大工作电压}}$  中的较小值。  
Note: Rated Voltage =  $\frac{\text{Power Rating} \times \text{Resistance Value}}{\text{or Max. Working Voltage}}$ , whichever is lower.

# THICK FILM CHIP NETWORK RESISTOR

## ● 特性 CHARACTERISTICS

项目 Item	标准 Specifications	测试方法 (JIS C 5202 标准) Test Methods (JIS C 5202)
端头强度 Bending Strength	无可见损伤, No mechanical damage $R \pm (1.0\%R + 0.05)$ 跨接电阻 Chip jumper: R 50m	弯曲速度 (Speed): 1mm/S 弯曲距离 (Bending Distance): 3mm
温度循环 Temperature Cycling	无可见损伤, No mechanical damage $R \pm (1.0\%R + 0.05)$ 跨接电阻 Chip jumper: R 50m	-55 (30分钟)~常温 (5分钟)~125 (30分钟) 5个循环 -55 (30min)~normal temperature (5min)~125 (30min) 5cycles
短时间过负载 Short Time Overload	无可见损伤, No mechanical damage $R \pm (2.0\%R + 0.05)$ 跨接电阻 Chip jumper: R 50m	2.5倍额定电压或最大过负荷电压 (取 最小者) 保持5秒 2.5×Rated voltage or Max. Overload Voltage, (choose the lower), for 5 seconds
耐焊接热 Resistance to Soldering Heat	无可见损伤, No mechanical damage $R \pm (1.0\%R + 0.05)$ 跨接电阻 Chip jumper: R 50m	260 ±5 10±1秒 260 ±5 10s±1s
稳态湿热 Steady state humidity	无可见损伤, No mechanical damage $R \pm (3.0\%R + 0.1)$ 跨接电阻 Chip jumper: R 100m	40 ±2 90%~95%RH1000小时 40 ±2 90%~95%RH1000h
70 耐久性 Load Life	无可见损伤, No mechanical damage $R \pm (3.0\%R + 0.1)$ 跨接电阻 Chip jumper: R 100m	70 ±2 1000小时 额定电压 通1.5小时, 断0.5小时 70 ±2 1000h Rated voltage 1.5h on/0.5h off
上限类别温度耐久性 Endurance at upper temperature	无可见损伤, No mechanical damage $R \pm (3.0\%R + 0.1)$ 跨接电阻 Chip jumper: R 100m	125 ±2 1000小时 125 ±2 1000h
耐溶剂性 Resistance to Solvent	无可见损伤, No mechanical damage $R \pm (1.0\%R + 0.05)$ 跨接电阻 Chip jumper: R 50m	浸入三氯乙烯 10±1小时 Dip in chloroethylene for 10h±1h.
耐电压 Dielectric Withstand Voltage	无可见损伤, No mechanical damage $R \pm (1.0\%R + 0.05)$ 跨接电阻 Chip jumper: R 50m	施加 (40~60) Hz, 峰值等于1.42倍 绝缘电压 (即耐电压) 的交流电压, 并 以大约100V/S的速率从零升到规范 规定的电压, 然后保持1min±5s Applying voltage from 0V to peak insulation resistance value at the speed of 100V/S, 1min±5s.
可焊性 Solderability	可焊面积 95% 95% Cover Min	235 ±5 2±0.5秒 235 ±5 2s±0.5s
附着力 Adhesion	外观无可见损伤 No mechanical damage	施加力5N 10±1秒 Applying 5N 10s±1s

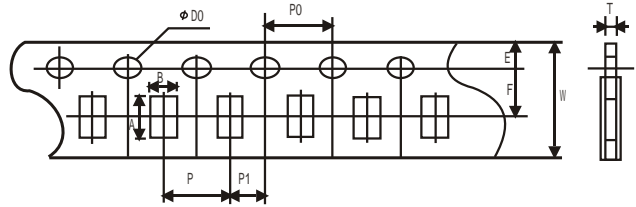
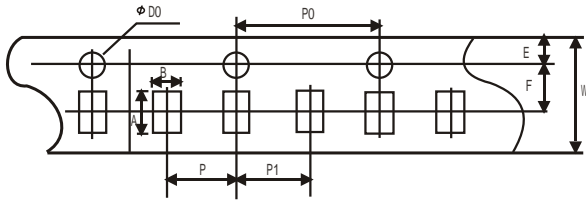
● 包装 PACKAGING

\* 编带包装 Tape and reel

纸带编带 Paper taping

RCMT04、RCMT08

RCML08、ML06



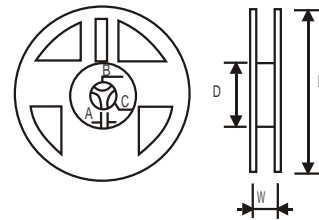
unit:mm

型号 Type	A	B	W	F	E
RCMT04	1.20±0.05	1.20±0.05	8.00±0.20	3.50±0.05	1.75±0.10
RCMT08	1.20±0.05	2.20±0.10	8.00±0.20	3.50±0.05	1.75±0.10
RCML08	3.50±0.20	1.90±0.20	8.00±0.20	3.50±0.05	1.75±0.10
ML06	3.50±0.20	1.90±0.20	8.00±0.20	3.50±0.05	1.75±0.10

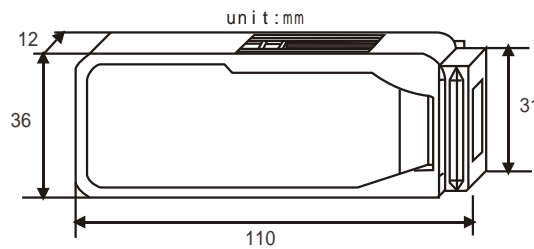
型号 Type	P	P0	P1	φ D0	T
RCMT04	2.00±0.10	4.00±0.10	2.00±0.05	1.50±0.10	0.45±0.05
RCMT08	2.00±0.10	4.00±0.10	2.00±0.05	1.50±0.10	0.45±0.05
RCML08	4.00±0.10	4.00±0.10	2.00±0.05	1.50±0.10	0.75±0.10
ML06	4.00±0.10	4.00±0.10	2.00±0.05	1.50±0.10	0.75±0.10

卷盘 Reel

型号Type	M	W	T	A	B	C	D
RCMT04/RCMT08	178.00	9.50	12.50	2.00	13.00	21.00	80.00
/RCML08ML06	±2.00	±1.00	±1.50	±0.50	±0.50	±0.50	±2.00



\* 塑料盒包装 Bulk case



\* 包装数量 Packaging quantity

包装方法 Packaging style	编带 Tape and reel		塑料盒 Bulk case		塑料袋散装 Case	
型号 Type	RCMT04 RCMT08	RCML08 ML06	RCML08 ML06	RCMC08 ML12	RCMT04/RCMT08 RCML08/ML06	RCMC08 ML12
数量 (PCS) Quantity	10000	5000	5000	1000	10000	4000