

### Feature (特性)

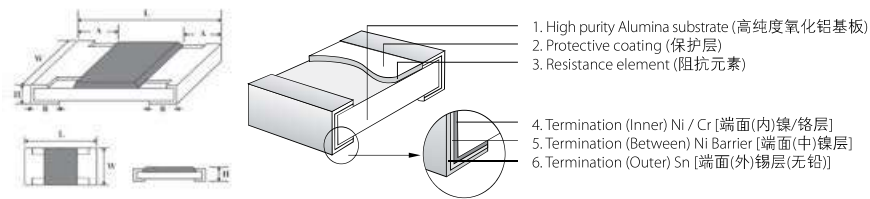
- Thin film NiCr Resistance element  
薄膜镍铬阻抗组件
- Very tight tolerance  $\pm 0.05\% \sim \pm 1\%$   
高精度的公差  $\pm 0.05\% \sim \pm 1\%$
- Extremely low TCR  $\pm 5\text{ppm} \sim \pm 50\text{ppm}$   
极低的温度系数  $\pm 5\text{ppm} \sim \pm 50\text{ppm}$
- Completed Lead-free 完全无铅产品

### Application (应用)

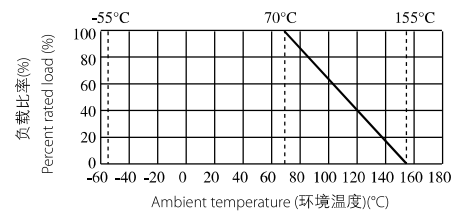
- Medical Equipment 医疗器材
- Testing / Measurement Equipment 检测仪器
- Communication Device, Cell Phone, GPS, PDA,  
通讯用具, 手机, GPS, PDA
- Automatic equipment controller 自动化设备控制器
- Printer Equipment 打印器材
- Converters 变频器



### Figures (型状)



### Derating Curve (降功率曲线)



Type 类型	Size 尺寸	L (mm)	W (mm)	H (mm)	A (mm)	B (mm)
TC02	0402 (1005)	1.00±0.10	0.50±0.05	0.35±0.05	0.20±0.10	0.25±0.10
TC03	0603 (1608)	1.60±0.10	0.80±0.10	0.45±0.10	0.30±0.20	0.30±0.20
TC05	0805 (2012)	2.00±0.15	1.25 <sup>+0.15</sup> <sub>-0.10</sub>	0.55±0.10	0.40±0.20	0.40±0.20
TC06	1206 (3216)	3.10±0.15	1.55 <sup>+0.15</sup> <sub>-0.10</sub>	0.55±0.10	0.45±0.20	0.45±0.20
TC07	1210 (3225)	3.10±0.10	2.60±0.20	0.55±0.10	0.45±0.20	0.45±0.20
TC10	2010 (5025)	5.00±0.10	2.50±0.20	0.55±0.10	0.60±0.25	0.50±0.20
TC12	2512 (6432)	6.35±0.10	3.20±0.20	0.55±0.10	0.60±0.25	0.50±0.20

### Performance Specifications (性能)

Short-time overload 短时间过负荷	$\Delta R \leq \pm 0.5\%$	Humidity (Steady State) 恒定湿热	$\Delta R \leq \pm 0.3\%$
Insulation Resistance 绝缘电阻	$\geq 1,000\text{M}\Omega$	Terminal bending 端子弯曲	$\Delta R \leq \pm 0.2\%$
Load life humidity 湿度寿命	$\Delta R \leq \pm 0.5\%$	Solderability 可焊性	Min 95% coverage (最少 95% 覆盖率)
Load life 负载寿命	$\Delta R \leq \pm 0.2\%$ $> 7\text{K}\Omega \Delta R \leq \pm 0.5\%$	Soldering heat 耐焊接热	$\Delta R \leq \pm 0.2\%$

### Feature (特性)

Type 类型	Power Rating 功率 at 70°C	Operating Temperature 工作温度范围	Max.Working Voltage 最大工作 电压	Max.Overload Voltage 最大过负荷 电压	Dielectric With-standing Voltage 绝缘耐压	Resistance Range 阻值范围				TCR 温度系数
						±0.05%	±0.1%	±0.25%	±0.5%±1%	
TC02	1/16W	-55°C~+155°C	25V	50V	100V	/	100Ω~2KΩ	100Ω~2KΩ	100Ω~2KΩ	±5PPM/°C
						/	50Ω~12KΩ	50Ω~12KΩ	50Ω~12KΩ	±10PPM/°C
						/	10Ω~332KΩ	10Ω~332KΩ	10Ω~332KΩ	±25PPM/°C
						/	10Ω~332KΩ	10Ω~332KΩ	10Ω~332KΩ	±50PPM/°C
TC03	1/10W	-55°C~+155°C	75V	150V	300V	/	100Ω~4KΩ	100Ω~4KΩ	100Ω~4KΩ	±5PPM/°C
						/	10Ω~50KΩ	10Ω~50KΩ	10Ω~50KΩ	±10PPM/°C
	4.7Ω~332K					4.7Ω~1MΩ	1.5Ω~1MΩ	1Ω~1MΩ	±25PPM/°C	
	4.7Ω~332K					4.7Ω~1MΩ	1.5Ω~1MΩ	1Ω~1MΩ	±50PPM/°C	
TC05	1/8W	-55°C~+155°C	150V	300V	500V	/	100Ω~10KΩ	100Ω~10KΩ	100Ω~10KΩ	±5PPM/°C
	1/4W					/	10Ω~100KΩ	10Ω~100KΩ	10Ω~100KΩ	±10PPM/°C
						4.7Ω~511K	4.7Ω~2MΩ	1Ω~2MΩ	1Ω~2MΩ	±25PPM/°C
TC06	1/4W	-55°C~+155°C	200V	400V	500V	/	100Ω~15KΩ	100Ω~15KΩ	100Ω~15KΩ	±5PPM/°C
	1/3W					/	10Ω~200KΩ	10Ω~200KΩ	10Ω~200KΩ	±10PPM/°C
						4.7Ω~1M	4.7Ω~2.5MΩ	1Ω~2.5MΩ	1Ω~2.5MΩ	±25PPM/°C
						4.7Ω~1M	4.7Ω~2.5MΩ	1Ω~2.5MΩ	1Ω~2.5MΩ	±50PPM/°C
TC07	1/3W	-55°C~+155°C	200V	400V	500V	/	100Ω~25KΩ	100Ω~25KΩ	100Ω~25KΩ	±5PPM/°C
						/	50Ω~200KΩ	50Ω~200KΩ	50Ω~200KΩ	±10PPM/°C
						4.7Ω~1M	4.7Ω~2.5MΩ	1Ω~2.5MΩ	1Ω~2.5MΩ	±25PPM/°C
						4.7Ω~1M	4.7Ω~2.5MΩ	1Ω~2.5MΩ	1Ω~2.5MΩ	±50PPM/°C
TC10	1/3W	-55°C~+155°C	200V	400V	500V	/	100Ω~25KΩ	100Ω~25KΩ	100Ω~25KΩ	±5PPM/°C
	1/2W					/	50Ω~200KΩ	50Ω~200KΩ	50Ω~200KΩ	±10PPM/°C
						4.7Ω~1M	4.7Ω~3MΩ	1Ω~3MΩ	1Ω~3MΩ	±25PPM/°C
						4.7Ω~1M	4.7Ω~3MΩ	1Ω~3MΩ	1Ω~3MΩ	±50PPM/°C
TC12	3/4W	-55°C~+155°C	200V	400V	500V	/	100Ω~25KΩ	100Ω~25KΩ	100Ω~25KΩ	±5PPM/°C
	1W					/	50Ω~200KΩ	50Ω~200KΩ	50Ω~200KΩ	±10PPM/°C
						10Ω~1M	10Ω~3MΩ	10Ω~3MΩ	10Ω~3MΩ	±25PPM/°C
						10Ω~1M	10Ω~3MΩ	10Ω~3MΩ	10Ω~3MΩ	±50PPM/°C
						4.7Ω~9.76Ω	4.7Ω~10Ω	1Ω~10Ω	1Ω~10Ω	±25PPM/°C
	1/2W					4.7Ω~9.76Ω	4.7Ω~10Ω	1Ω~10Ω	1Ω~10Ω	±50PPM/°C

### Ordering Procedure (Example:Thin Film TC06 1/3W 0.1% 25PPM 1KΩ T/R-5000)

订购方式(例如: 薄膜TC06 1/3W 0.1% 25PPM 1KΩ T/R-5000)

