

Feature

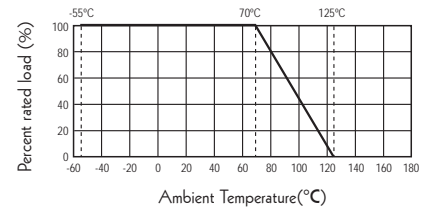
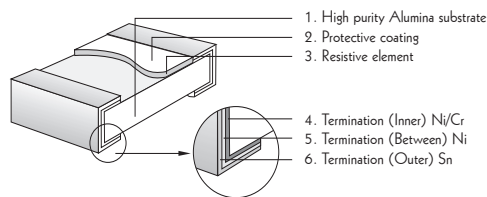
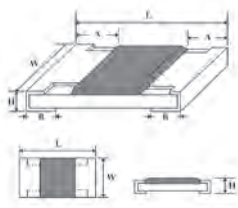
- Thin file NiCr Resistance element
- Very tight tolerance from $\pm 0.10\%$, $\pm 0.25\%$
- Extremely low TCR from $\pm 5 \sim \pm 50$ PPM/ $^{\circ}\text{C}$

Application

- Medical Equipment
- Testing / Measurement Equipment
- Communication Device, Cell Phone, GPS, PDA
- Automatic equipment controller
- Printer Equipment
- Converters

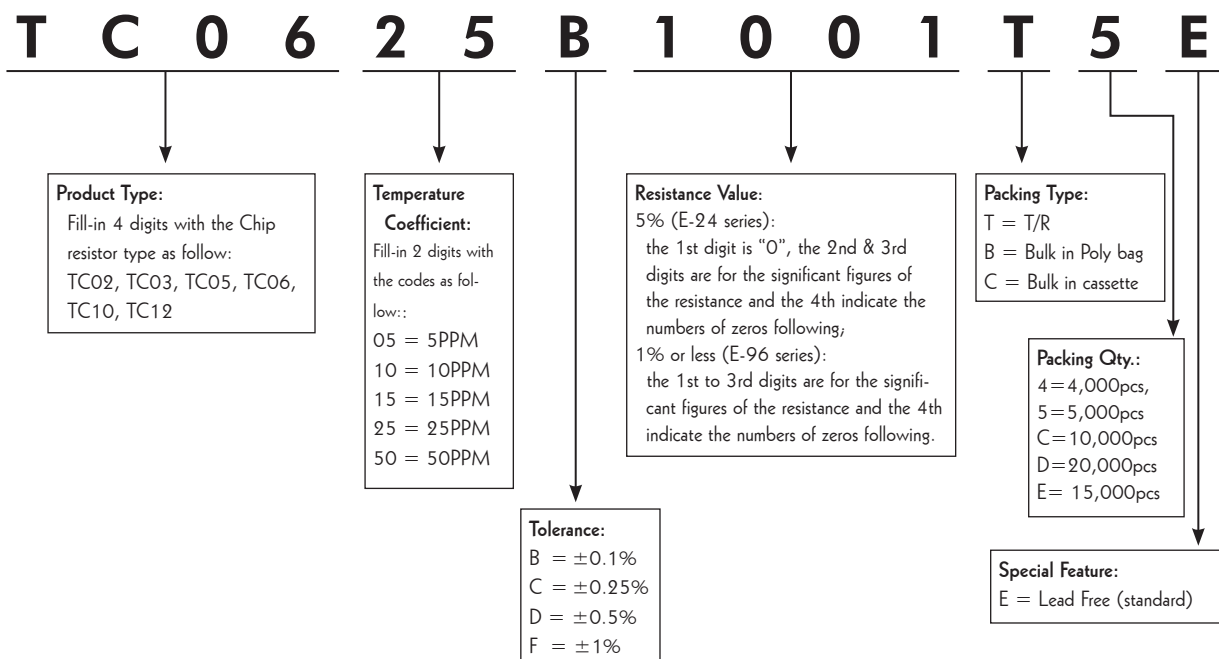
Structure

Derating Curve



Type	L	W	H	A	B
TC02	1.00 \pm 0.10	0.50 \pm 0.05	0.35 \pm 0.05	0.20 \pm 0.10	0.25 \pm 0.10
TC03	1.60 \pm 0.10	0.80 $^{+0.15}_{-0.10}$	0.45 \pm 0.10	0.30 \pm 0.20	0.30 \pm 0.20
TC05	2.00 \pm 0.15	1.25 $^{+0.15}_{-0.10}$	0.55 \pm 0.10	0.40 \pm 0.20	0.40 \pm 0.20
TC06	3.10 \pm 0.15	1.55 $^{+0.15}_{-0.10}$	0.55 \pm 0.10	0.45 \pm 0.20	0.45 \pm 0.20
TC10	5.00 \pm 0.10	2.50 $^{+0.15}_{-0.10}$	0.55 \pm 0.10	0.60 \pm 0.25	0.50 \pm 0.20
TC12	6.35 \pm 0.10	3.20 $^{+0.15}_{-0.10}$	0.55 \pm 0.10	0.60 \pm 0.25	0.50 \pm 0.20

Ordering Procedure (Example: Thin Film 1206 1/8W 0.1% 25PPM 1K Ω T/R-5000)



Performance Specification

Short-time overload	$\pm 0.25\%$, $\pm 0.10\%$: $\Delta R \leq \pm 0.5\%$
Insulation Resistance	$> 1000M\Omega$
Load life	$\pm 0.25\%$, $\pm 0.10\%$: $\Delta R \leq \pm 0.2\%$ $> 7K\Omega$ $\Delta R \leq \pm 0.5\%$
Humidity (Steady State)	$\pm 0.25\%$, $\pm 0.10\%$: $\Delta R \leq \pm 0.3\%$
Bending strength	$\pm 0.25\%$, $\pm 0.10\%$: $\Delta R \leq \pm 0.2\%$
Solderability	$\geq 95\%$ coverage
Resistance to soldering heat	$\pm 0.25\%$, $\pm 0.10\%$: $\Delta R \leq \pm 0.2\%$

Characteristics

Type	Power Rating at 70°C	Operating Temperature	Max. Working Voltage	Max. Overload Voltage	Resistance Tolerance	Resistance Range	TCR (PPM/°C)
TC02	1/16W	-55~+125°C	25V	50V	$\pm 0.10\%$ $\pm 0.25\%$	100Ω ~ 2KΩ	$\pm 5\text{ppm}$
						50Ω ~ 12KΩ	$\pm 10\text{ppm}$
						10Ω ~ 100KΩ	$\pm 25\text{ppm}$
						10Ω ~ 100KΩ	$\pm 50\text{ppm}$
TC03	1/16W	-55~+125°C	50V	100V	$\pm 0.10\%$	100Ω ~ 4KΩ	$\pm 5\text{ppm}$
						50Ω ~ 50KΩ	$\pm 10\text{ppm}$
						10Ω ~ 332KΩ	$\pm 25\text{ppm}$
						10Ω ~ 332KΩ	$\pm 50\text{ppm}$
TC03	1/16W	-55~+125°C	50V	100V	$\pm 0.25\%$	100Ω ~ 4KΩ	$\pm 5\text{ppm}$
						50Ω ~ 50KΩ	$\pm 10\text{ppm}$
						10Ω ~ 332KΩ	$\pm 25\text{ppm}$
						10Ω ~ 332KΩ	$\pm 50\text{ppm}$
TC05	1/10W	-55~+125°C	100V	200V	$\pm 0.10\%$ $\pm 0.25\%$	100Ω ~ 10KΩ	$\pm 5\text{ppm}$
						50Ω ~ 100KΩ	$\pm 10\text{ppm}$
						4.7Ω ~ 1MΩ	$\pm 25\text{ppm}$
						4.7Ω ~ 1MΩ	$\pm 50\text{ppm}$
TC06	1/8W	-55~+125°C	150V	300V	$\pm 0.10\%$ $\pm 0.25\%$	100Ω ~ 15KΩ	$\pm 5\text{ppm}$
						50Ω ~ 200KΩ	$\pm 10\text{ppm}$
						4.7Ω ~ 1MΩ	$\pm 25\text{ppm}$
						4.7Ω ~ 1MΩ	$\pm 50\text{ppm}$
TC10	1/4W	-55~+125°C	150V	300V	$\pm 0.10\%$ $\pm 0.25\%$	100Ω ~ 25KΩ	$\pm 5\text{ppm}$
						50Ω ~ 200KΩ	$\pm 10\text{ppm}$
						4.7Ω ~ 1MΩ	$\pm 25\text{ppm}$
						4.7Ω ~ 1MΩ	$\pm 50\text{ppm}$
TC12	1/2W	-55~+125°C	150V	300V	$\pm 0.10\%$ $\pm 0.25\%$	100Ω ~ 25KΩ	$\pm 5\text{ppm}$
						50Ω ~ 200KΩ	$\pm 10\text{ppm}$
						4.7Ω ~ 1MΩ	$\pm 25\text{ppm}$
						4.7Ω ~ 1MΩ	$\pm 50\text{ppm}$