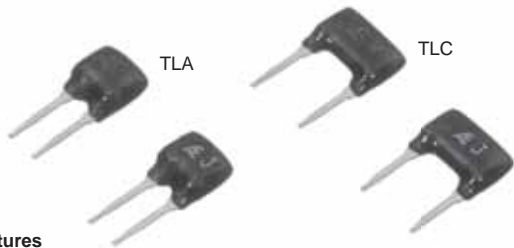


Precision Thin Film Resistor (Conformally Coated)



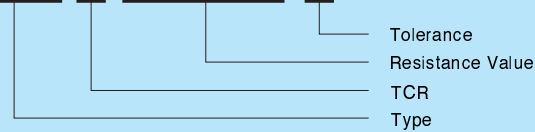
Features

- 1 High Resistance Value
- 2 TCR: $\pm 5 \text{ ppm}/^\circ\text{C}$
- 3 Tolerance: $\pm 0.02\%$
- 4 Long-Term Stability: 200ppm/year

Composition of Type Number

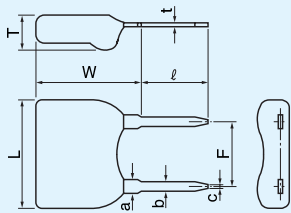
Example:

TLA X 500K00 B



Resistance value, in ohm, is expressed by a series of six characters, five of which represent significant digits. The sixth R or K is a dual-purpose letter that designates both the value range (R for ohmic; K for kilo-ohm) and the location of decimal point.

Configuration



Type	TLA	TLC
L	5.6 ± 0.5	7.5 ± 0.5
W	6.2 ± 0.5	
T	2.2 ± 0.5	
F	2.54 ± 0.25	5.08 ± 0.25
l	5 ± 1	
t	0.3 ± 0.05	
a	1.0 ± 0.05	
b	0.65 ± 0.05	
c	0.4 ± 0.05	

Dimensions in mm

Performance

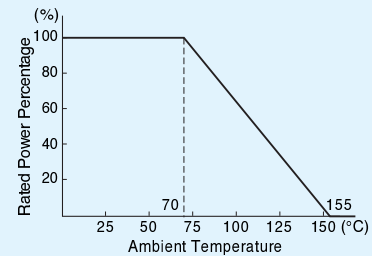
Parameters	Test Condition	ALPHA Specification	ALPHA Typical Test Data
Max. Rated Operating Temperature Working Temperature Range Maximum Working Voltage			70°C -25°C to +155°C TLA=250V, TLC=300V
Temperature Cycling Overload	-25°C/30 min., Room Temperature/5 min., +55°C/30 min., 5 cycles Rated Voltage \times 2.5, 5 sec.	$\pm 0.05\%$ $\pm 0.05\%$	$\pm 0.01\%$ $\pm 0.0025\%$
Solderability Resistance to Solvents		over 75% coverage, no damage no damage	
Low Temperature Storage Terminal Strength	-25°C, No Load, 2 hrs. 0.908kg (2 pounds), 10 sec.	$\pm 0.05\%$ $\pm 0.05\%$	$\pm 0.0025\%$ $\pm 0.0025\%$
Dielectric Withstanding Voltage Insulation Resistance Resistance to Soldering Heat Moisture Resistance	Atmospheric: AC 300V, 1 min. DC 100V, 1 min. 350°C, 3 sec. +65°C to -10°C, 90% RH to 98% RH, Rated Voltage, 10 cycles (240 hrs.)	$\pm 0.03\%$ $\pm 0.03\%$ over 10,000M Ω $\pm 0.1\%$	$\pm 0.0025\%$ $\pm 0.01\%$ over 10,000M Ω $\pm 0.05\%$
Life (Rated Load)	70°C, Rated Power, 1.5 hrs. – ON, 0.5 hr. – OFF, 1,000 hrs.	$\pm 0.1\%$	$\pm 0.01\%$
Storage Life	15°C to 35°C, 15% RH to 75% RH, No Load, 10,000 hrs.	$\pm 0.02\%$	$\pm 0.01\%$
High Temperature Exposure	155°C, No Load, 1,000 hrs.	$\pm 0.05\%$	$\pm 0.02\%$
Current Noise		-25dB	-35dB

TCR, Resistance Range, Tolerance, Rated Power

Type	TCR (ppm/°C) -25°C to +125°C	Resistance Range (Ω)	Resistance Tolerance (%)	Rated Power (W) at 70°C
TLA	0 \pm 10 (C) 0 \pm 5 (X)	100K to 5M	± 0.05 (A) ± 0.1 (B) ± 0.5 (D) ± 1 (F)	0.125
TLC		200K to 10M	± 0.02 (O) ± 0.05 (A) ± 0.1 (B) ± 0.5 (D) ± 1 (F)	0.25

Symbols in parentheses are for type number composition.

Power Derating Curve



Frequency Characteristics

