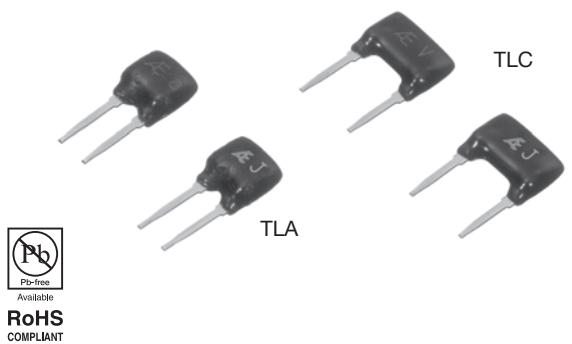


## Precision Thin Film Resistor (Conformally Coated)



### COMPOSITION OF TYPE NUMBER

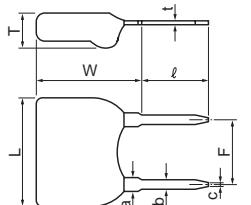
Example:

**TLA X 500K00 B**

Tolerance  
Resistance Value  
TCR  
Type

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

### CONFIGURATION (DIMENSIONS IN mm)



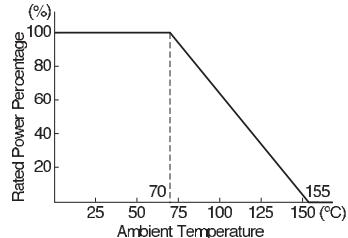
Type	TLA	TLC
L	5.3±0.5	7.3±0.5
W	6.2±0.5	
T	2.2±0.5	
F	2.54±0.25	5.08±0.25
l	5±1	
t	0.3±0.05	
a	1.0±0.05	
b	0.65±0.05	
c	0.4±0.05	

### TCR, RESISTANCE RANGE, TOLERANCE, RATED POWER

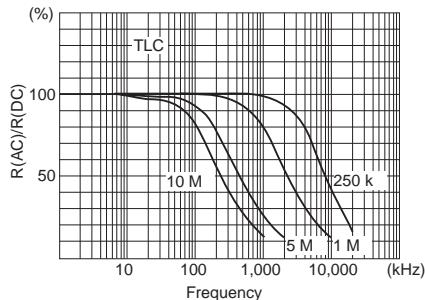
Type	TCR (ppm/°C) -25°C to +125°C*	Resistance Range (Ω)	Resistance Tolerance (%) <sup>*</sup>	Rated Power (W) at 70°C
TLA	0±10 (C) 0±5 (X)	100K to 5M	±0.05 (A) ±0.1 (B) ±0.5 (D) ±1 (F)	0.125
		200K to 10M	±0.02 (Q) ±0.05 (A) ±0.1 (B) ±0.5 (D) ±1 (F)	0.25

\* Symbols in parentheses are for type number composition.

### POWER DERATING CURVE



### FREQUENCY CHARACTERISTICS



### PERFORMANCE

Parameters	Test Condition	ALPHA Specification	ALPHA Typical Test Data
Max. Rated Operating Temperature			70°C
Working Temperature Range			-25°C to +155°C
Maximum Working Voltage			TLA = 250V, TLC = 300V
Temperature Cycling Overload	-25°C/30 min., Room Temperature/5 min., +155°C/30 min., 5 cycles Rated Voltage x 2.5, 5 sec.	±0.05% ±0.05%	±0.01% ±0.0025%
Solderability Resistance to Solvents	235°C, 2 sec. Isopropyl Alcohol		over 75% coverage no damage
Low Temperature Storage Terminal Strength	-25°C, No Load, 2 hrs. 0.908 kg (2 pounds), 10 sec.	±0.05% ±0.05%	±0.0025% ±0.0025%
Dielectric Withstanding Voltage Insulation Resistance Resistance to Soldering Heat	Atmospheric: AC 300V, 1 min. DC 100V, 1 min. 350°C, 3 sec.	±0.03% over 10,000 MΩ ±0.03%	±0.0025% over 10,000 MΩ ±0.01%
Moisture Resistance	+65°C to -10°C, 90% RH to 98% RH, Rated Voltage, 10 cycles (240 hrs.)	±0.1%	±0.05%
Life (Rated Load)	70°C, Rated Power, 1.5 hrs. - ON, 0.5 hr. - OFF, 1,000 hrs.	±0.1%	±0.01%
Storage Life	15°C to 35°C, 15% RH to 75% RH, No Load, 10,000 hrs.	±0.02%	±0.01%
High Temperature Exposure	155°C, No Load, 1,000 hrs.	±0.05%	±0.02%
Current Noise		-25 dB	-35 dB

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