Precision Resistor (Conformally Coated)

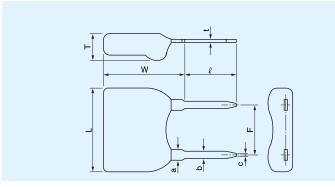


Composition of Type Number



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



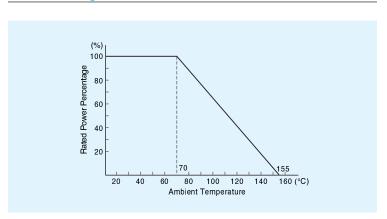
Туре	FLA	FLB	FLC	
L	5.6±0.5		7.5±0.5	
W	6.2±0.5	8.2±0.5	6.2±0.5	
Т	2.2±0.5			
F	2.54±0.25		5.08±0.25	
Q	5±1			
t	0.3±0.05			
а	1.0±0.05			
b	0.65±0.05			
С	0.4±0.05			

Dimensions in mm

TCR, Resistance Range, Tolerance, Rated Power

Туре	TCR (ppm/°C)	Resistance Range (Ω)	Resistance Tolerance (%)*	Rated Power (W) at 70°C
		9 , ,	` '	
FLA	0.5(V)	10 to 30	±0.5 (D) ±1.0 (F)	
	0±5 (X) 0±2.5 (Y)	30 to 100	±0.1 (B) ±0.5 (D)	0.125
		100 to 100k	±0.05 (A) ±0.1 (B)	
FLB	0±5 (X) 0±2.5 (Y)	10 to 30	±0.5 (D) ±1.0 (F)	
		30 to 100	±0.1 (B) ±0.5 (D)	0.25
		100 to 150k	±0.05 (A) ±0.1 (B)	
FLC	0±5 (X) 0±2.5 (Y)	10 to 30	±0.5 (D) ±1.0 (F)	
		30 to 100	±0.1 (B) ±0.5 (D)	0.25
		100 to 200k	±0.05 (A) ±0.1 (B)	

Power Derating Curve



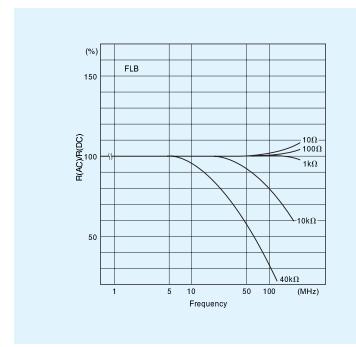
Symbols parenthesized are for type number composition.

*Resistance figures are the values obtained by measuring at the point 2.5±1.0mm below the shoulder of leads.

Performance

Parameters	Test Condition	ALPHA Specification	ALPHA Typical Test Data
Maximum Rated Operating Temperature Working Temperature Range Maximum Working Voltage		70°C -25°C to +155°C FLA=250V, FLB, FLC=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. ① Isopropyl Alcohol ② Trichloroethylene	over 75% coverage no damage	over 75% coverage no damage
Low Temperature Storage Terminal Strength	-25°C, No Load, 2 hrs. 0.908kg (2 pounds), 10 sec.	±0.05% ±0.05%	±0.0025% ±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.)	$\pm 0.03\%$ over 10,000M Ω $\pm 0.03\%$ $\pm 0.1\%$	$\pm 0.0025\%$ over 10,000M Ω $\pm 0.0025\%$ $\pm 0.015\%$
Shock Vibration	50G, 11ms, Half-Sine Wave, X, Y, Z, each 3 shocks 20G, 10Hz to 55Hz to 10Hz, 1 min., X, Y, Z, each 2 hrs.	±0.03% ±0.03%	±0.005% ±0.005%
Life (Rated Load)	70°C, Rated Power, 1.5 hr. – ON, 0.5 hr. – OFF, 1,000 hrs.	±0.1%	±0.01%
Life (Moisture Load)	40°C, 90% RH to 95% RH, Rated Power, 1.5 hr. – ON, 0.5 hr. – OFF, 1,000 hrs.	±0.05%	±0.01%
Storage Life	15°C to 35°C, 15% RH to 75% RH, No Load, 10,000 hrs.	±0.02%	±0.005%
High Temperature Exposure	155°C, No Load, 1,000 hrs.	±0.05 %	±0.01%
Current Noise Pressure Cooker Test	121°C, 100% RH, 2 atmospheric, No Load, 100 hrs.	-25dB ±0.5 %	-42dB ±0.1%

Frequency Characteristics



Temperature of Resistor Surface

