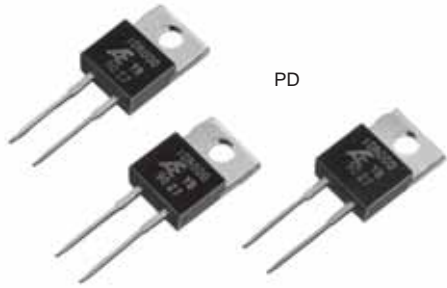


Ultra-Precision Power Resistor (8 Watts, TO-220)



PD

TCR, Resistance Range, Tolerance, Rated Power

Type	TCR (ppm/°C) -55°C to +125°C	Resistance Range(Ω)	Resistance Tolerance (%)*	Rated Power(W) at 25°C
PD	0±15 (W) 0±5 (X) 0±2.5 (Y)	0.1 to 1	±1 to ±5 (F, G, J)	1.5
		1 to 5	±0.5 to ±5 (D, F, G, J)	
		5 to 10	±0.1 to ±5 (B, D, F, G, J)	On heat sink**
		10 to 25	±0.05 to ±5 (A, B, D, F, G, J)	
25 to 10k	±0.02 to ±5 (Q, A, B, D, F, G, J)	8		

Symbols in parentheses are for type number composition.

*Resistance figures are the values obtained by measuring the leads at point 5.08±0.6mm away from the root.

**For heat sinking, an aluminum chassis in 152.4 (L) x 101.6 (W) x 50.8 (H) x 1.0mm (T) should be used.

Composition of Type Number

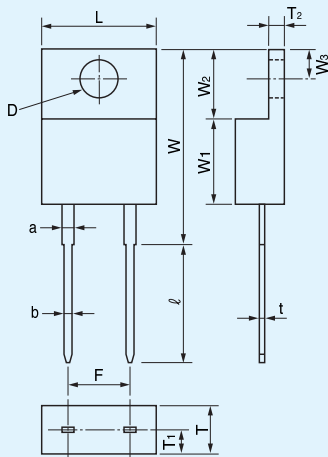
Example:

PD X 50R000 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.

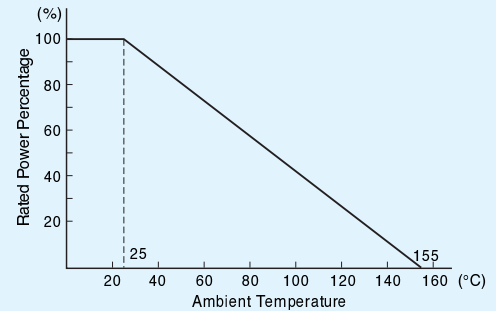
Configuration



Type	PD
L	10.6 max.
W	19.0±0.5
W ₁	8.5±0.2
W ₂	6.5±0.2
W ₃	2.7±0.5
T	4.5±0.2
T ₁	2.0±0.5
T ₂	1.5±0.2
F	5.08±0.5
l	11.0±2
t	0.5±0.05
a	1.2±0.1
b	0.75±0.05
D	φ3.6

Dimensions in mm

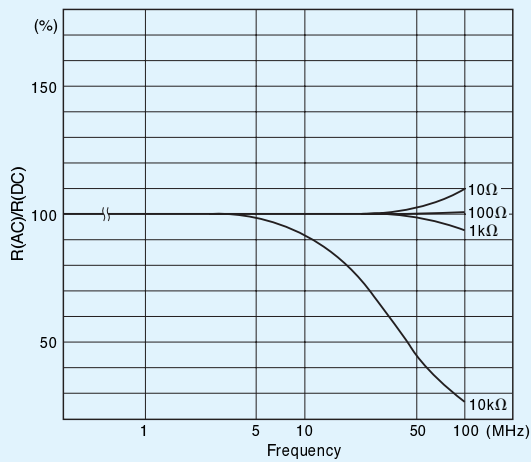
Power Derating Curve



Performance

Parameters	Test Condition	MIL-R-39009 Specification	ALPHA Typical Test Data
Maximum Rated Operating Temperature Working Temperature Range Maximum Working Voltage Maximum Working Current			25°C -55°C to +155°C 250V 4A
Power Conditioning	25°C, Rated Voltage, 96 hrs.	±0.2%	±0.02%
Low Temperature Storage Dielectric Withstanding Voltage Insulation Resistance Low Temperature Operation Overload Moisture Resistance Terminal Strength	-55°C, No Load, 24 hrs. Atmospheric: AC 1KV, 1 min. Barometric: AC 500V, 1 min. DC 500V, 2 min. -55°C, Rated Voltage Rated Voltage x 2.5, 5 sec. +65°C to -10°C, 90% RH to 98% RH, Rated Voltage, 10 cycles (240 hrs.) 0.908kg (2 pounds), 10 sec.	±0.3% ±0.2% over 10,000MΩ ±0.3% ±0.3% ±0.5% ±0.2%	±0.005% ±0.005% over 10,000MΩ ±0.005% ±0.01% ±0.05% ±0.005%
Shock (Specified Pulse) Vibration, High Frequency	100G, 6ms, Sawtooth Wave, X, Y, Z, each 3 shocks 20G, 10Hz to 2,000Hz to 10Hz, 20min., X, Y, Z, each 4 hrs.	±0.2% ±0.2%	±0.005% ±0.005%
Life	25°C, Rated Power, 1.5 hr. – ON, 0.5 hr. – OFF, 2,000 hrs.	±1.0%	±0.01%
High Temperature Exposure	155°C, No Load, 2,000 hrs.	±1.0%	±0.01%
Solderability	245°C, 5 sec.	over 95% coverage	over 95% coverage

Frequency Characteristics



Temperature of Resistor Surface

