



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

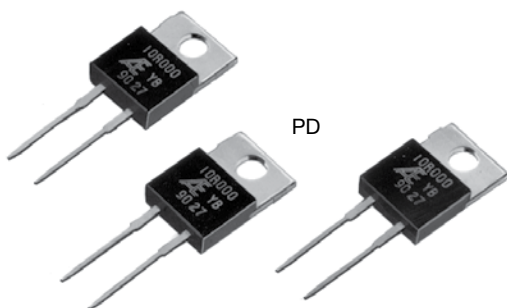
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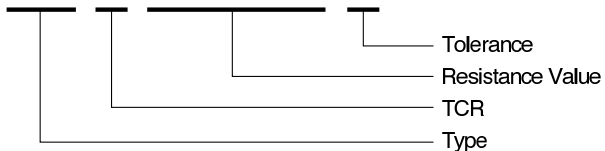
Ultra Precision Power Resistor (8 Watts, TO-220)



COMPOSITION OF TYPE NUMBER

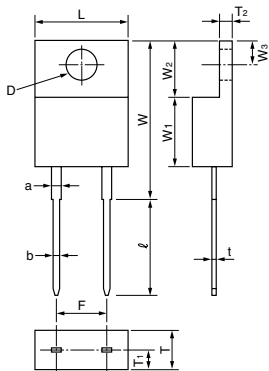
Example:

PD X 50R000 B



Resistance value, in ohm, is expressed by a series of six characters, five of which represent significant digits. 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 (DIMENSIONS IN mm)



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	Dia. 3.6

TCR, RESISTANCE RANGE, TOLERANCE, RATED POWER

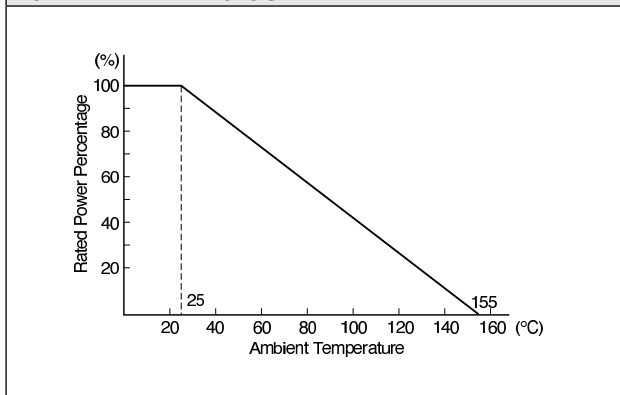
Type	TCR (ppm/°C) -25°C to +125°C*	Resistance Range (Ω)	Resistance Tolerance (%)†	Rated Power (W) at 25°C
PD	0±15 (W)	0.1 to 1	±1 to ±5 (F, G, J)	1.5 In free air and 8 On heat sink**
		1 to 5	±0.5 to ±5 (D, F, G, J)	
	0±5 (X) 0±2.5 (Y)	5 to 10	±0.1 to ±5 (B, D, F, G, J)	
		10 to 25	±0.05 to ±5 (A, B,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

* Symbols in parentheses are for type number composition.

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

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

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	-55°C, No Load, 24 hrs. Atmo. Pres.: AC 1 kV, 1 min. Baro. Pres. 8 mHg: AC 500V, 1min. DC 500V, 2 min. -55°C, Rated Voltage Rated Voltage x 2.5, 5 sec.	±0.3% ±0.2% over 10,000 MΩ ±0.3%	±0.005% ±0.005% over 10,000 MΩ ±0.005%
Moisture Resistance Terminal Strength	+65°C to -10°C, 90% RH to 98% RH, Rated Voltage, 10 cycles (240 hrs.) 0.908 kg (2 pounds), 10 sec.	±0.3% ±0.5% ±0.2%	±0.01% ±0.05% ±0.005%
Shock Vibration, High Frequency	100G, 6 ms, Sawtooth Wave, X, Y, Z, each 3 shocks 20G, 10 Hz to 2,000 Hz to 10 Hz, 20min., X, Y, Z, each 4 hrs.	±0.02% ±0.02%	±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	

