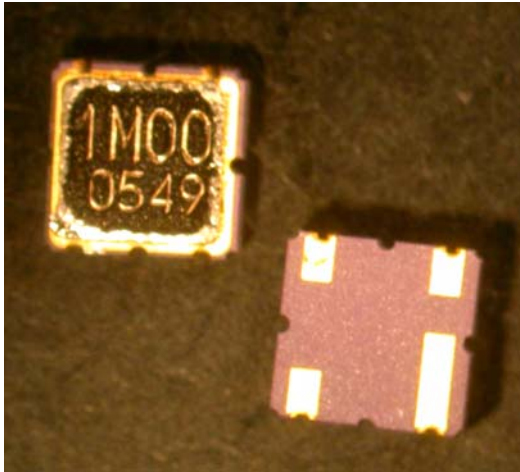


**NEW**

# Thin Film High Value SMD Resistor (Ceramic Package)



## Features

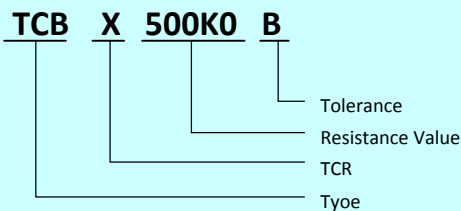
- Realized excellent stability and moisture-proof performance using hermetically sealed ceramic package with new developed thin film element.
- High resistance value available (100kΩ to 10MΩ) with small package
- Low TCR and high accuracy, no influence from outside strains
- High ambient temperature is available up to 200 deg.C

## TCR, Resistance Range, Tolerance, Rated Power

Type	TCR (ppm/deg.C) -25deg.C to +125deg.C	Resistance Value (Ω)	Resistance Tolerance (%)	Rated Power (W) at 125deg.C
TCB	0±5(X) 0±10(C)	100k to 1M	±0.02(Q) ±0.05(A) ±0.1(B)	0.1
		1M to 10M	±0.05(A) ±0.1(B) ±0.5(D) ±1.0(F)	

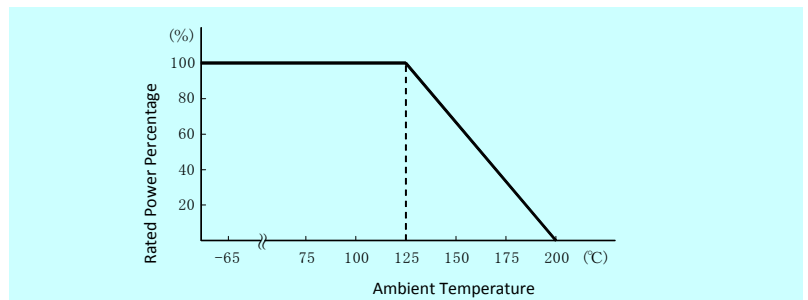
## Composition of Type Number

Example:



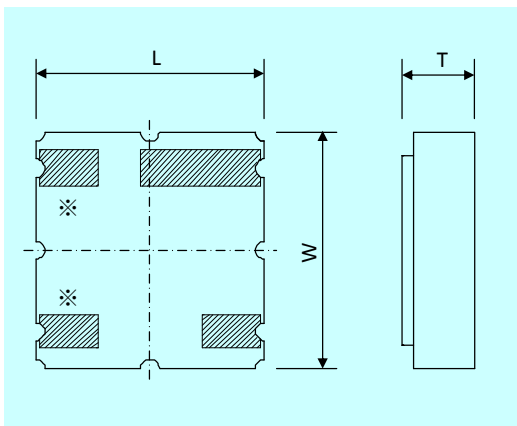
Resistance value in ohm is expressed by 4 significant digits and the R or K or M is a dual purpose letter that designates both the value and location of decimal point.

## Power Derating Curve



## Performance

## Configuration



Type	TCB
L	3.8±0.2
W	3.8±0.2
T	1.25±0.2

mm

Parameters	Test Condition	Typical
Maximum Rated Operating Temp.		125deg.C
Working Temp. Range		-65deg.C to +200deg.C
Maximum Working Voltage		300V
Overload	Rated Power x 2.5, 5sec.	±500ppm
Moisture Resistance	+65deg.C to -10deg.C, 90%RH to 98%RH, Rated Power, 10 cycles	±100ppm
Life (Rated Power)	125deg.C, Rated Voltage, 1.5 hrs ON/0.5 hrs OFF, 1000hrs.	±500ppm
Storage Life	15deg.C to 35deg.C, 15%RH to 75%RH, No load, 10000hrs.	±50ppm
High Temp. Exposure	200deg.C, No load, , 1000hrs.	±200ppm
Vending Substrate	3mm, 60 sec.	±100ppm
Pressure Cooker Test	120 deg.C, 100%RH, 2 bar, No load, 96hrs.	±100ppm
Thermal Shock	-65deg.C to +175deg.C/30min., 5cycles	±100ppm
Low Tem. Storage and Operation	-65deg.C, no load, 24hrs.-> Rated Voltage, 45min.	±500ppm
Dielectric Withstand Voltage	AC200V, 1min.	±100ppm
Insulation Resistance	DC100V, 1min.	>10,000MΩ
Solderability	260deg.C. 10 sec.	±100ppm
Shock	100G, 6msec., Sawtooth Wave, X, Y, Z 10shocks	±200ppm
High Frequency Vibration	20G, 10 to 2K to 10Hz, 20min., X, Y, Z 2.5hrs. each	±200ppm
Voltage Coefficient		<0.1ppm/V

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