

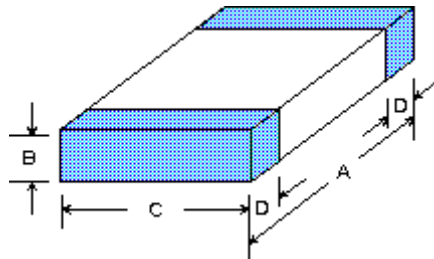
PTC SMD Switching Thermistor

Applications

- Over temperature sensing
- Temperature compensation

Features

- Five sided terminations
- Solid state ceramic composition



0805 & 1206

SPECIFICATION TABLE

Part Number	Ω @ 25°C +/- 30%	Switch Temp. +/- 5 °C	Reference Dimensions (inches)			
			A	B	C	D
WSM0805DC501N	500	100	0.080" (2.03mm)	0.050" (1.27mm)	0.050" (1.27mm)	0.020" (0.51mm)
WSM0805DC102N	1000	100	0.080" (2.03mm)	0.050" (1.27mm)	0.050" (1.27mm)	0.020" (0.51mm)
WSM0805DC202N	2000	100	0.080" (2.03mm)	0.050" (1.27mm)	0.050" (1.27mm)	0.020" (0.51mm)
WSM1206DC501N	500	100	0.120" (3.05mm)	0.060" (1.52mm)	0.060" (1.52mm)	0.020" (0.51mm)
WSM1206DC102N	1000	100	0.120" (3.05mm)	0.060" (1.52mm)	0.060" (1.52mm)	0.020" (0.51mm)
WSM1206DC202N	2000	100	0.120" (3.05mm)	0.060" (1.52mm)	0.060" (1.52mm)	0.020" (0.51mm)

SPECIAL PARTS						
Part Number	Ω @ 25°C +/- 30%	Switch Temp. +/- 5 °C	Reference Dimensions (inches)			
			A	B	C	D
WSM8055DA201N	200	120	0.100	0.055	0.080	0.02
WSM8040DA301N	300	120	0.100	0.040	0.080	0.02
WSM6540DA401N	400	120	0.100	0.040	0.065	0.02
WSM6540DA501N	500	120	0.110	0.040	0.065	0.02
WSM6535DA601N	600	120	0.110	0.035	0.065	0.02
WSM6535DA801N	800	120	0.110	0.035	0.065	0.02
WSM6035DA102N	1000	120	0.110	0.035	0.060	0.02
WSM6035DA152N	1500	120	0.110	0.035	0.060	0.02
WSM6035DA202N	2000	120	0.110	0.035	0.060	0.02
WSM6035DA302N	3000	120	0.110	0.035	0.060	0.02
WSM6035DA402N	4000	120	0.110	0.035	0.060	0.02
WSM6035DA502N	5000	120	0.110	0.035	0.060	0.02

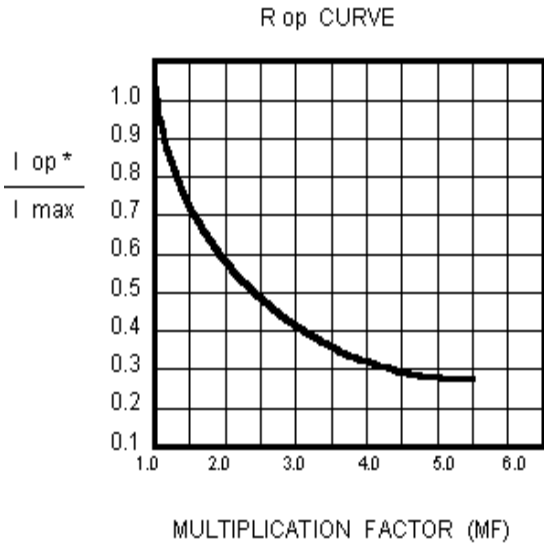
Options

- Tape and Reeling
- Special Resistance Values

Terminology

Base Resistance - The resistance value of a thermistor at a specified temperature with negligible electrical power to avoid self heating. Usually base resistance will be defined at 25 C.

Switch Temperature - The temperature when the resistance of the PTC thermistor reaches two (2) times the base resistance, sometimes referred to as curie point or transition



RESISTANCE OPERATING CHARACTERISTICS

1. Locate the place on the curve where I_{op}/I_{max} intersects the multiplication factor (MF).
2. Multiply the multiplication factor (MF) by $R@I_{max}$ for the specific thermistor being used. The resulting value will be equal to the operating resistance (R_{op}). The equation is:

$$R_{op} = (R@I_{max}) \times (MF)$$

* I_{op} = operating current

PTC Thermistors can be formulated to have switching temperatures as low as zero (0) C to well over 200 C. Figure 2 illustrates typical 60, 80, 100, and 120 C switching temperature curves.

