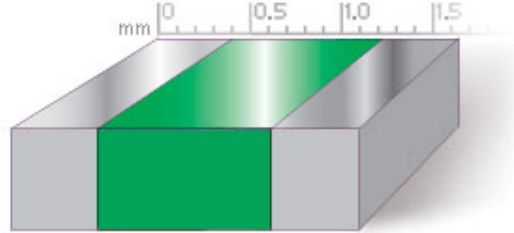


Series 3 Surface Mount Device (SMD)

Introduction

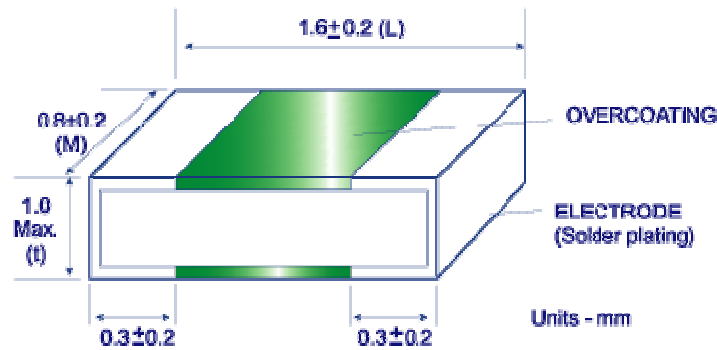


The 0603 Surface Mount NTC Thermistors from Betatherm are the ideal choice for general temperature sensing and compensation network applications in circuits that require dependable NTC thermistor characteristics.

They are available in a wide variety of standard SMD configurations from the 1206 to the 0402 packages. An extensive range of resistance values and tolerances are offered in all of the standard SMD packages. Standard resistance values from 40 ohms to 500 K ohms are manufactured in the different packages. Details of standard resistance values are given for each of the sizes (1206, 0805, 0603, and 0402) as per detailed in the table below.

With resistance tolerances of $\pm 1\%$, $\pm 3\%$ and $\pm 5\%$, these NTC devices are suitable for the most demanding requirements. The operating temperature range for these devices is from -40°C to $+125^{\circ}\text{C}$. They are suitable for both flow and reflow soldering processes.

Shape and Dimensions





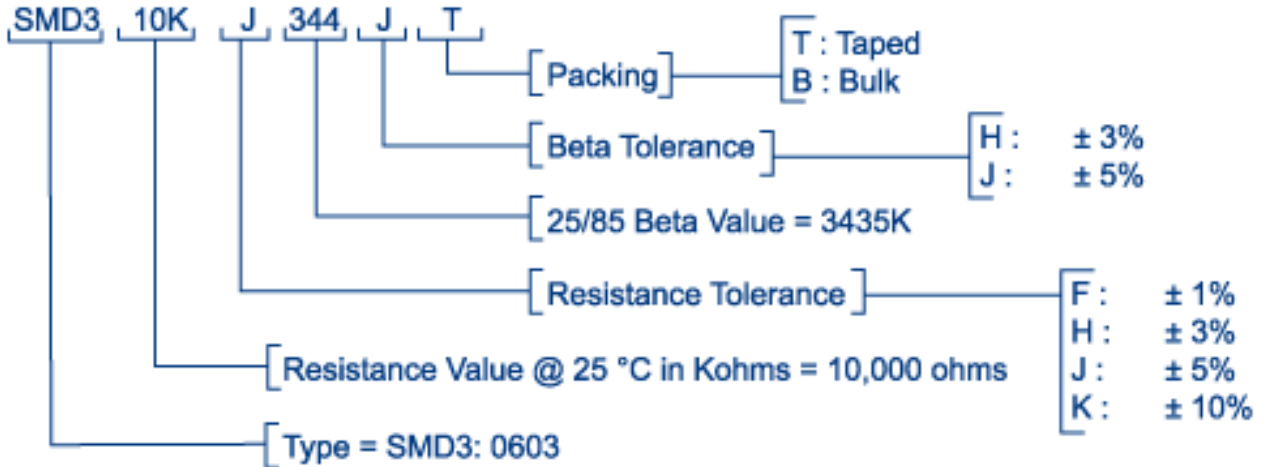
Features

- Cost effective.
- Tape and reel packaging for automatic placement.
- Wide range of resistance values.
- Operating temperature range from -40°C to +125°C.
- Max. rated wattage 150mW.
- Available in ±1%, ±5% and ±10% tolerance on R25 values.
- Dissipation Constant (D.C.) = 1.7 mW/°C.

Applications

- Temperature compensation of transistors, IC's and crystal oscillators in mobile telecommunication equipment.
- Temperature measurement and control.
- Temperature detection.
- LCD controls.
- Consumer Electronics.
- Automotive Electronics.

PartNumbering System



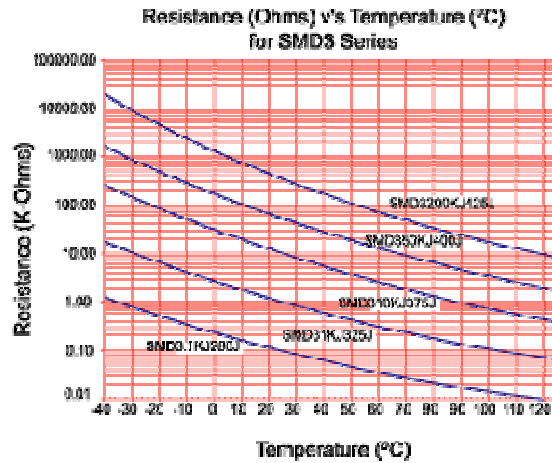
NOTE:

For Resistance Tolerance of ± 1% @ 25°C, the Beta Tolerance = H (± 3%)
 For Resistance Tolerance of ± 3, 5 & 10% @ 25°C, the Beta Tolerance = J (± 5%)
 Minimum Order Quantity = 3,000 (Loose or Tape & Reel)

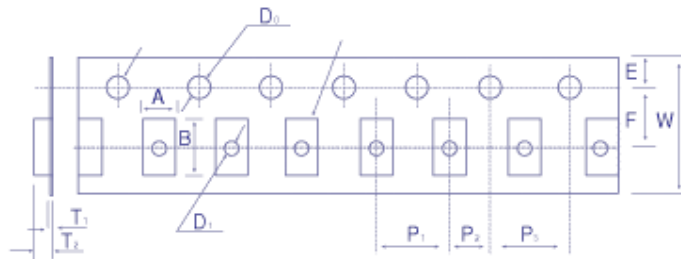
Betatherm Part Number	Electrical Specifications			Dimensions(mm)			Dissipation Constant	Maximum Rated Wattage @ 25°C
	R25	Tolerance @ 25°C	B25/85	L	W	t		
SMD3.04KJ280J	40	±5%	2800	1.6±0.2	0.8±0.2	1.0 Max	1.7 mW/°C	150 mW
SMD3.1KJ280J	100	±5%	2800	1.6±0.2	0.8±0.2	1.0 Max	1.7 mW/°C	150 mW
SMD3.5KJ325J	500	±5%	3250	1.6±0.2	0.8±0.2	1.0 Max	1.7 mW/°C	150 mW
SMD31KJ325J	1,000	±5%	3250	1.6±0.2	0.8±0.2	1.0 Max	1.7 mW/°C	150 mW
SMD32KJ410J	2,000	±5%	4100	1.6±0.2	0.8±0.2	1.0 Max	1.7 mW/°C	150 mW
SMD33KJ410J	3,000	±5%	4100	1.6±0.2	0.8±0.2	1.0 Max	1.7 mW/°C	150 mW
SMD35KJ355J	5,000	±5%	3550	1.6±0.2	0.8±0.2	1.0 Max	1.7 mW/°C	150 mW
SMD310KJ344J	10,000	±5%	3435	1.6±0.2	0.8±0.2	1.0 Max	1.7 mW/°C	150 mW



SMD310KJ375J	10,000	±5%	3750	1.6±0.2	0.8±0.2	1.0 Max	1.7 mW/°C	150 mW
SMD315KJ380J	15,000	±5%	3800	1.6±0.2	0.8±0.2	1.0 Max	1.7 mW/°C	150 mW
SMD320KJ380J	20,000	±5%	3800	1.6±0.2	0.8±0.2	1.0 Max	1.7 mW/°C	150 mW
SMD330KJ400J	30,000	±5%	4000	1.6±0.2	0.8±0.2	1.0 Max	1.7 mW/°C	150 mW
SMD347KJ400J	47,000	±5%	4000	1.6±0.2	0.8±0.2	1.0 Max	1.7 mW/°C	150 mW
SMD350KJ400J	50,000	±5%	4000	1.6±0.2	0.8±0.2	1.0 Max	1.7 mW/°C	150 mW
SMD3100KJ415J	100,000	±5%	4150	1.6±0.2	0.8±0.2	1.0 Max	1.7 mW/°C	150 mW
SMD3150KJ425J	150,000	±5%	4250	1.6±0.2	0.8±0.2	1.0 Max	1.7 mW/°C	150 mW
SMD3200KJ425J	200,000	±5%	4250	1.6±0.2	0.8±0.2	1.0 Max	1.7 mW/°C	150 mW



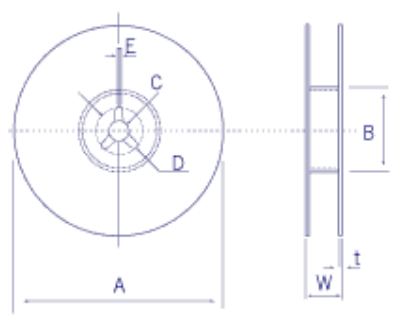
Tape Dimension (mm)



Parameter	A	B	W	F	E	P1
Dimension in mm	1.1 ±0.05	1.9 ±0.2	8.0 ±0.3	3.5 ±0.05	1.75 ±0.1	4.0 ±0.1
Parameter	P2	P3	D0	D1	T2	T1
Dimension in mm	2.0 ±0.05	4.0 ±0.1	1.5 ±0.1/-0	-	0.95 ±0.05	-



Reel Dimension (mm)



Parameter	A	B	C	D	E	W	t
Dimension in mm	$\phi 180 \pm 20$	$> \phi 50$	$\phi 13 \pm 0.5$	$\phi 21 \pm 0.8$	2.0 ± 0.5	10 ± 1.5	2.0 ± 0.5

For details on the minimum order quantity (MOQ) of this product, please contact BetaTHERM Sensors or your local BetaTHERM Sensors representative