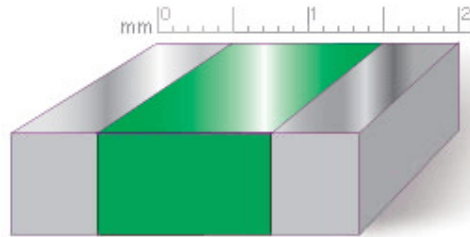


Series 2 Surface Mount Device (SMD)

Introduction

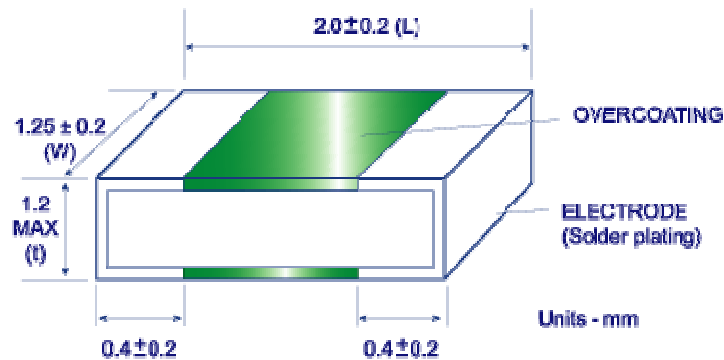


The 0805 Surface Mount NTC Thermistors from Betatherm are the ideal choice for general temperature sensing and compensation network applications in circuits that require dependable NTC thermistor characteristics.

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





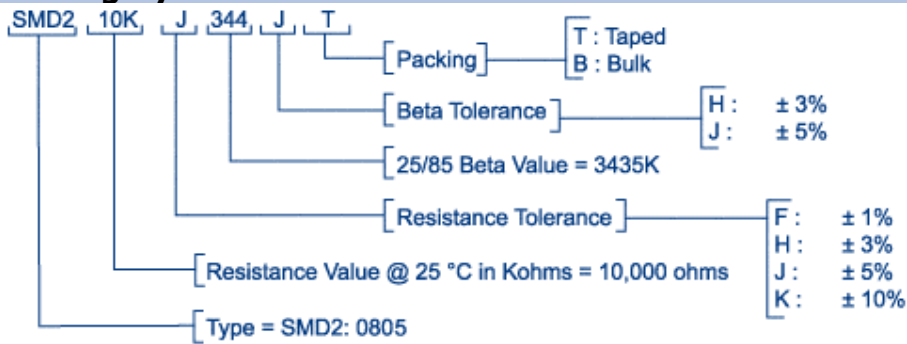
Features

- 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 300mW.
- Available in ±1%, ±5% and ±10% tolerance on R25 values.
- Dissipation Constant (D.C.) = 2.0 mW/°C.

Applications

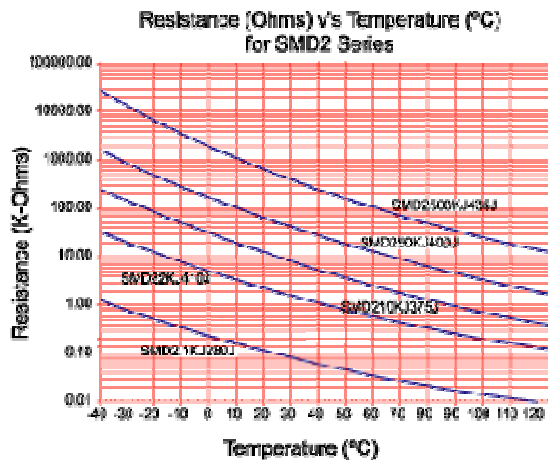
- Temperature compensation of transistors, IC's and crystal oscillators in mobile telecommunication equipment.
- Temperature measurement and control.
- Temperature detection.
- LCD controls.
- Consumer Electronics.
- Automotive Electronics.

Part Numbering System



NOTE:

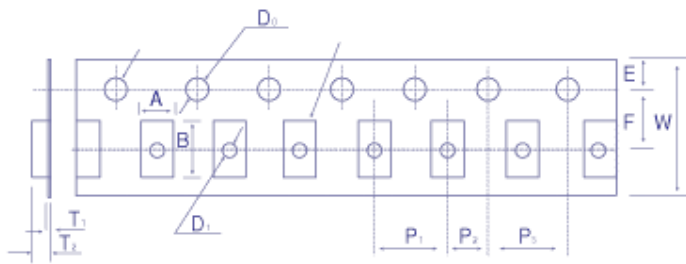
For Resistance Tolerance of ± 1% @ 25°C, the Beta Tolerance = H (± 3%)
 For Resistance Tolerance of ± 3, 5 & 10% @ 25°C, the Beta Tolerance = J (± 5%)
 Minimum Order Quantity = 3,000 (Loose or Tape & Reel)





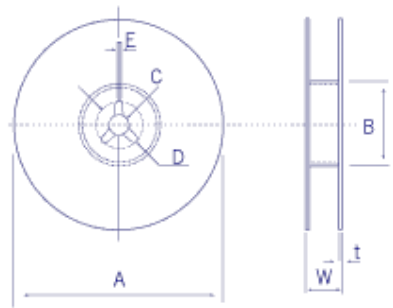
Betatherm Part Number	Electrical Specifications						Dissipation Constant	Maximum Rated Wattage @ 25°C
	Tolerance			Dimensions(mm)				
	R25	@ 25°C	B25/85	L	W	t		
SMD2.04KJ280J	40	±5%	2800	2.0±0.2	1.25±0.2	1.2 Max	2 mW/°C	300 mW
SMD2.1KJ280J	100	±5%	2800	2.0±0.2	1.25±0.2	1.2 Max	2 mW/°C	300 mW
SMD2.5KJ325J	500	±5%	3250	2.0±0.2	1.25±0.2	1.2 Max	2 mW/°C	300 mW
SMD22KJ410J	2,000	±5%	4100	2.0±0.2	1.25±0.2	1.2 Max	2 mW/°C	300 mW
SMD23KJ410J	3,000	±5%	4100	2.0±0.2	1.25±0.2	1.2 Max	2 mW/°C	300 mW
SMD25KJ355J	5,000	±5%	3550	2.0±0.2	1.25±0.2	1.2 Max	2 mW/°C	300 mW
SMD210KJ344J	10,000	±5%	3435	2.0±0.2	1.25±0.2	1.2 Max	2 mW/°C	300 mW
SMD210KJ375J	10,000	±5%	3750	2.0±0.2	1.25±0.2	1.2 Max	2 mW/°C	300 mW
SMD215KJ400J	15,000	±5%	4000	2.0±0.2	1.25±0.2	1.2 Max	2 mW/°C	300 mW
SMD220KJ400J	20,000	±5%	4000	2.0±0.2	1.25±0.2	1.2 Max	2 mW/°C	300 mW
SMD230KJ400J	30,000	±5%	4000	2.0±0.2	1.25±0.2	1.2 Max	2 mW/°C	300 mW
SMD247KJ4150J	47,000	±5%	4150	2.0±0.2	1.25±0.2	1.2 Max	2 mW/°C	300 mW
SMD250KJ415J	50,000	±5%	4150	2.0±0.2	1.25±0.2	1.2 Max	2 mW/°C	300 mW
SMD2100KJ425J	100,000	±5%	4250	2.0±0.2	1.25±0.2	1.2 Max	2 mW/°C	300 mW
SMD2150KJ425J	150,000	±5%	4250	2.0±0.2	1.25±0.2	1.2 Max	2 mW/°C	300 mW
SMD2200KJ425J	200,000	±5%	4250	2.0±0.2	1.25±0.2	1.2 Max	2 mW/°C	300 mW
SMD2500KJ435J	500,000	±5%	4350	2.0±0.2	1.25±0.2	1.2 Max	2 mW/°C	300 mW

Tape Dimension (mm)



Parameter	A	B	W	F	E	P1
Dimension in mm	1.45 +0.2/-0.1	2.25 +0.2/-0.1	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	1.0 +0.2/-0	<1.4	<0.3

Reel Dimension (mm)



Parameter	A	B	C	D	E	W	t
Dimension in mm	φ180 ±20	>φ50	φ13 ±0.5	φ21 ±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