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02166766957 - 02166766927



info@atrinelec.com



تهران پاساژ امجد طبقه 1 واحد 16



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## NTC Thermistor

### Features

This is a Negative Temperature Coefficient Resistor Whose resistance changes with ambient temperature changes. Thermistor comprises 2 or 4 kinds of metal oxides of iron, nickel, cobalt, manganese and copper, being shaped and Sintered at high temperature(1200°C to 1500°C )

### Critical Technical Parameters of NTC Thermistor

\*  $R_t$ ---Resistance Value at Zero-power

It's a resistance which is got at a fixed temperature on a basis of a testing power which causes resistance to Vary in a range which can be ignored in relation to the total testing error.

\*  $R_{25}$ ---Resistance Value at Rated Zero-power

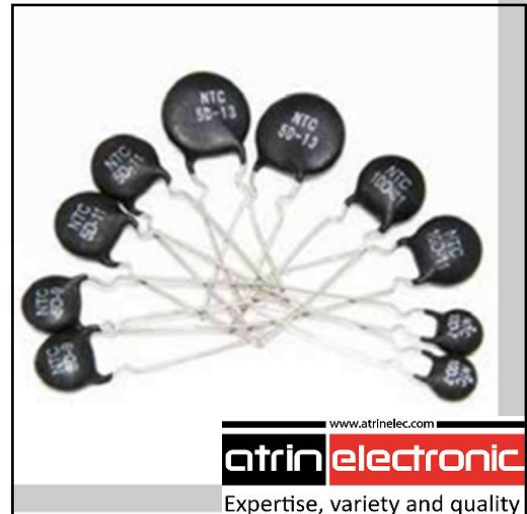
The design resistance of the thermistor usually refers to the resistance value got at Zero-power at 25°C , which is usually indicated on the thermistor.

\* Max. steady state current  $I_{max}$ .

The maximum allowable continuous current passing through thermistor at 25°C.

\* Dissipation Coefficient  $\delta$

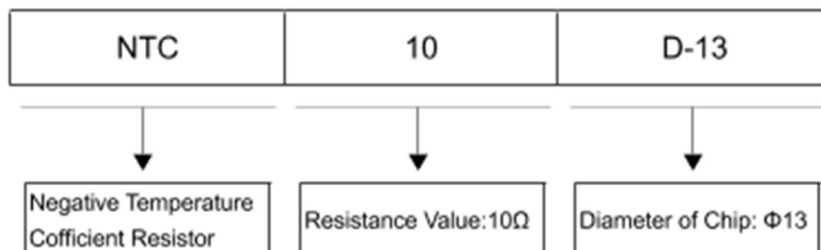
It's the ratio of the changes with a thermistor dissipation power, in a pre-set ambient temperature, to the changes with the temperature. The formula is as below:  $\delta = \Delta P / \Delta T$  ,  $\delta$  changes in response when the ambient temperature changes, within the ranges of the working temperature.



### Applications

Conversion power supply, switch power, UPS power, Kinds of electric heter, electronic energy-saving lamps, electronic ballast etc all kinds of power cicuit proterction of electronic equipments, filament proterction of CRT, bulb and other lighting lamps.

### Part Numbering System



# NTC Thermistor

## Electrical Characteristics

Type Number	Zero Power Resistance At 25°C	Max. Steady State Current At 25°C	Thermal Dissipation Constant	Thermal Time Constant	Operating Temperature Range	Package Dimensions (mm)
	$\Omega$	A	mW/°C	Sec	°C	
<b>D-15 Series Sensing NTC Thermistor</b>						
1.3D-15	1.3	8	18	68	-55 ~ +200	
1.5D-15	1.5	8	18	69	-55 ~ +200	
3D-15	3	7	18	76	-55 ~ +200	
5D-15	5	6	20	76	-55 ~ +200	
6D-15	6	5	20	80	-55 ~ +200	
7D-15	7	5	20	80	-55 ~ +200	
8D-15	8	5	20	80	-55 ~ +200	
10D-15	10	5	20	75	-55 ~ +200	
12D-15	12	5	21	75	-55 ~ +200	
15D-15	15	4	21	85	-55 ~ +200	
16D-15	16	4	21	70	-55 ~ +200	
20D-15	20	4	21	86	-55 ~ +200	
30D-15	30	3	21	75	-55 ~ +200	
47D-15	47	3	21	86	-55 ~ +200	
120D-15	120	1.8	22	87	-55 ~ +200	
<b>D-20 Series Sensing NTC Thermistor</b>						
0.7D-20	0.7	11	24	89	-55 ~ +200	
1.3D-20	1.3	9	24	88	-55 ~ +200	
3D-20	3	8	24	88	-55 ~ +200	
5D-20	5	7	24	87	-55 ~ +200	
6D-20	6	6	25	103	-55 ~ +200	
8D-20	8	6	25	105	-55 ~ +200	
10D-20	10	6	25	102	-55 ~ +200	
12D-20	12	5	25	100	-55 ~ +200	
16D-20	16	5	25	100	-55 ~ +200	
<b>D-25 Series Sensing NTC Thermistor</b>						
1D-25	1	12	30	120	-55 ~ +200	
1.5D-25	1.5	10	30	121	-55 ~ +200	
3D-25	3	9	32	124	-55 ~ +200	
5D-25	5	8	32	125	-55 ~ +200	
8D-25	8	7	33	125	-55 ~ +200	
10D-25	10	7	32	125	-55 ~ +200	
12D-25	12	6	32	126	-55 ~ +200	
16D-25	16	6	35	126	-55 ~ +200	