Leiditech

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℃ to 1500℃)

Critical Technical Parameters of NTC Thermistor

* Rt---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 eror.

* R25---Resistance Value at Rated Zero-power

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

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

The maximum allowable continuous current passing through thermistor at 25℃.

* Dissipation Coefficient δ

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:δ = △P/ △T ,δ changes in response when the ambient temperature changes, within the ranges of the working temperature.

Applications

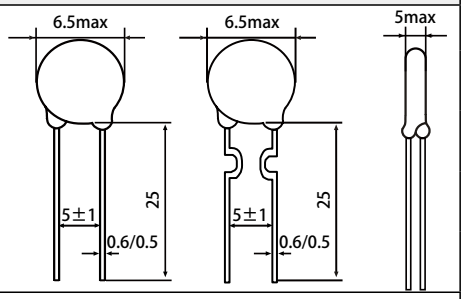
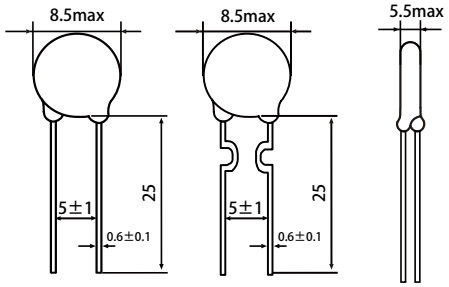
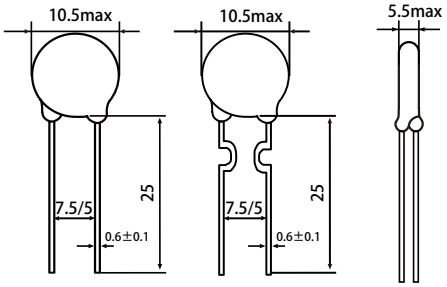
Conversion power supply, switch power, UPS power, Kinds of electric heter, electronic energy-saving lamps, electronic ballast etc all kinds of power cicuit proterction of electronic equipments, filament proterction of CRT, bulb and other lighting lamps.

Part Numbering System

NTC	10	D-13
Negative Temperature Cofficient Resistor	Resistance Value:10Ω	Diameter of Chip: Φ13

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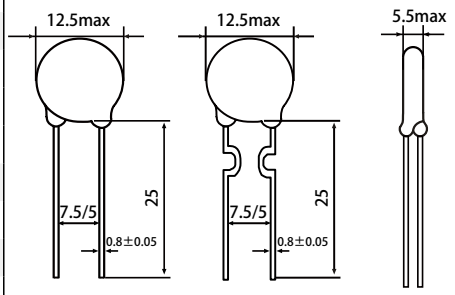
Electriacl Characteristics

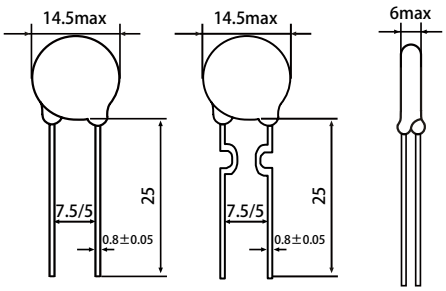
Type Number	Zero Power Resistance At 25°C	Max.Steady State Current At 25°C	Thermal Dissipation Constant	Thermal Time Constant	Operating Temperature Range	Package Dimensions (mm)
	Ω	A	mW/°C	Sec	°C	
D-5 Series Sensing NTC Thermistor						
5D-5	5	1	6	20	-55 ~ +200	
10D-5	10	0.7	6	20	-55 ~ +200	
60D-5	60	0.3	6	18	-55 ~ +200	
200D-5	200	0.1	6	18	-55 ~ +200	
D-7 Series Sensing NTC Thermistor						
5D-7	5	2	10	28	-55 ~ +200	
8D-7	8	1	9	27	-55 ~ +200	
10D-7	10	1	9	27	-55 ~ +200	
12D-7	12	1	9	27	-55 ~ +200	
16D-7	16	0.7	9	27	-55 ~ +200	
22D-7	22	0.6	9	27	-55 ~ +200	
33D-7	33	0.5	10	28	-55 ~ +200	
200D-7	200	0.2	11	28	-55 ~ +200	
D-9 Series Sensing NTC Thermistor						
3D-9	3	4	11	35	-55 ~ +200	
4D-9	4	3	11	35	-55 ~ +200	
5D-9	5	3	11	34	-55 ~ +200	
6D-9	6	2	11	34	-55 ~ +200	
8D-9	8	2	11	32	-55 ~ +200	
9D-9	9	2	11	32	-55 ~ +200	
10D-9	10	1	11	32	-55 ~ +200	
12D-9	12	1	11	32	-55 ~ +200	
16D-9	16	1	11	31	-55 ~ +200	
20D-9	20	1	11	30	-55 ~ +200	
22D-9	22	1	11	30	-55 ~ +200	
30D-9	30	1	11	30	-55 ~ +200	
33D-9	33	1	11	30	-55 ~ +200	
50D-9	50	1	11	30	-55 ~ +200	
60D-9	60	0.8	11	30	-55 ~ +200	
80D-9	80	0.8	11	30	-55 ~ +200	
120D-9	120	0.8	11	30	-55 ~ +200	
200D-9	200	0.5	11	32	-55 ~ +200	
400D-9	400	0.2	11	32	-55 ~ +200	

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Electriacl 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)
	Ω	A	mW/°C	Sec	°C	
D-11 Series Sensing NTC Thermistor						
2.5D-11	2.5	5	13	43	-55 ~ +200	
3D-11	3	5	13	43	-55 ~ +200	
4D-11	4	4	13	44	-55 ~ +200	
5D-11	5	4	13	45	-55 ~ +200	
6D-11	6	3	13	45	-55 ~ +200	
8D-11	8	3	14	47	-55 ~ +200	
10D-11	10	3	14	47	-55 ~ +200	
12D-11	12	2	14	48	-55 ~ +200	
16D-11	16	2	14	50	-55 ~ +200	
20D-11	20	2	15	52	-55 ~ +200	
22D-11	22	2	15	52	-55 ~ +200	
30D-11	30	1.5	15	52	-55 ~ +200	
33D-11	33	1.5	15	52	-55 ~ +200	
50D-11	50	1.5	15	52	-55 ~ +200	
60D-11	60	1.5	15	52	-55 ~ +200	
80D-11	80	1.2	15	52	-55 ~ +200	
120D-13	120	1.2	16	65	-55 ~ +200	
D-13 Series Sensing NTC Thermistor						
1.3D-13	1.3	7	13	60	-55 ~ +200	
1.5D-13	1.5	7	13	60	-55 ~ +200	
2.5D-13	2.5	6	13	60	-55 ~ +200	
3D-13	3	6	14	60	-55 ~ +200	
4D-13	4	5	15	67	-55 ~ +200	
5D-13	5	5	15	68	-55 ~ +200	
6D-13	6	4	15	65	-55 ~ +200	
7D-13	7	4	15	65	-55 ~ +200	
8D-13	8	4	15	60	-55 ~ +200	
10D-13	10	4	15	65	-55 ~ +200	
12D-13	12	3	16	65	-55 ~ +200	
15D-13	15	3	16	60	-55 ~ +200	
16D-13	16	3	16	60	-55 ~ +200	
20D-13	20	3	16	65	-55 ~ +200	
30D-13	30	2.5	16	65	-55 ~ +200	
47D-13	47	2	17	65	-55 ~ +200	
120D-13	120	1.2	16	65	-55 ~ +200	

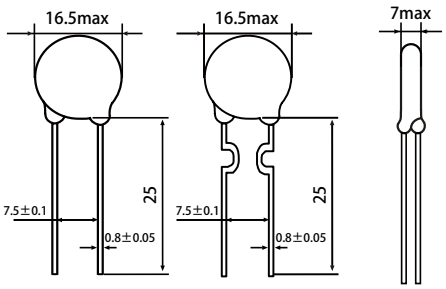


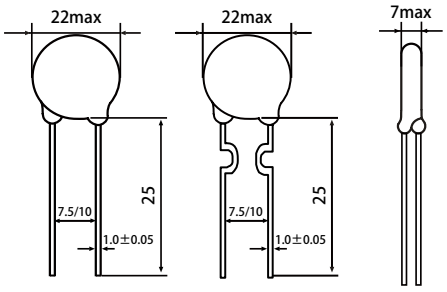


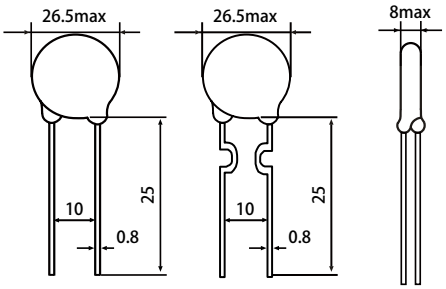
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Electriacl Characteristics

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)
	Ω	A	mW/°C	Sec	°C	
D-15 Series Sensing NTC Thermistor						
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	
D-20 Series Sensing NTC Thermistor						
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	
D-25 Series Sensing NTC Thermistor						
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	







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