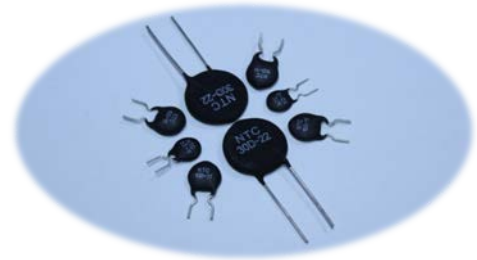


NSE HIGH POWER THERMISTOR

▶ Characteristics

- Strong power and strong capability of surge current protection
- Fast response to surge current.
- Large steady state current, longevity of service, high reliability.
- Convenient for PCB installing, integral series, extensive operating range.
- Big material constant (B value), Small remain resistance



<NTC High Power Thermistor>

▶ Application

- High power switch power, Power conversion, UPS power.
- High power battery charger, electric vehicle battery charger.
- High power LED light, high power electronic energy saving lamps and other lighting lamps.

▶ Application

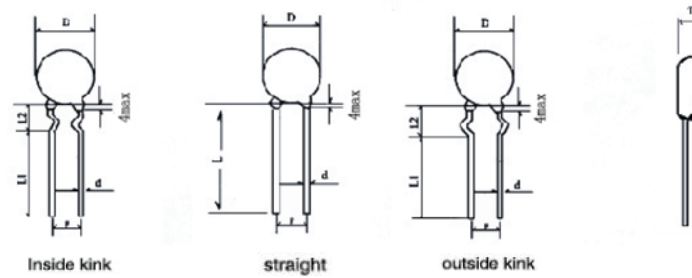
- | | |
|---|---|
| <ul style="list-style-type: none"> - Battery Chargers - Frequency Generators - Plasma Cutting Tools - MRI Machine and Toroidal Transformers | <ul style="list-style-type: none"> - Battery Chargers - Frequency Generators - Plasma Cutting Tools - MRI Machine and Toroidal Transformers |
|---|---|

▶ Part Numbering Form

1	2	3	4	5	6	7	8	9
NTC	1H	5/2	D	9	M	IF	050	P
1	Product Type			NTC HIGH POWER THERMISTOR				
2	Series Type			1H = HIGH POWER , 2H = SUPER HIGH POWER				
3	Zero Power Resistance(R25) / Max Steady State Current I_{max}(A)			5 ~ 400 Ω 0.3 ~ 9A				
4	Shape			DISK				
5	Diameter of Element			3φ / 5φ / 7φ / 9φ / 11φ / 13φ / 15φ / 22φ / 25φ / 30φ / 35φ / 40φ				
6	The tolerance of Resistance			M (±20%)				
7	Lead Type			S = Straight / O = Out Forming IF = In Forming				
8	Lead Length			040 = 4mm / 050 = 5mm / 250 = 25mm				
9	Type of Coating			S = Silicon Coating / P = Phernols Coating				



► Dimension



SIZE	3φ	5φ	8φ	10φ	13φ	15φ	22φ	25φ	30φ	35φ	40φ
Dmax	4.0	7	11.0	13.0	15.5	17.5	22.5	29	36	41	45
Tmax	4.0	5	5.5	5.5	6	6	7	8	10	12	15
F ± 1.5	2.5	2.5	7.5	7.5	7.5	7.5	10	10	18	18	18
d ± 0.05	0.45	0.45	0.8	0.8	0.8	0.8	1.0	1.0	1.6	2.0	2.0
(L) min	25	25	25	25	25	25	25	25	25	25	25
(L1) min	/	/	17	17	17	17	17	17	/	/	/
Inside kink	x	x	o	o	o	o	x	x	x	x	x
Straight	o	o	o	o	o	o	o	o	o	o	o
Outside Kink	x	x	x	x	x	x	o	o	x	x	x

► Main Techno-Parameter

Working Temperature : Ø3mm ~ Ø5mm: -40 ~ +150

Part No. H1 POWER	R25 (Ω)	Max. Steady State Current I max(A)	Approx. R of Max . Current R max (Ω)	Max rated Power Pmax (W)	Dissi. Coef. (mW/°C)	Thermal Time Constant (S)
Ø3mm						
5/2	5	2	0.493	1.5	≥8	≤15
8/1	8	1	1.025			
10/1	10	1	1.223			
20/0.7	20	0.7	3.011			
25/0.7	25	0.7	3.461			
30/0.7	30	0.7	3.651			
50/0.2	50	0.2	7.346			
Ø5mm						
2.5/3	22	0.6	1.108	1.8	≥9	≤25
5/2.5	33	0.5	1.485			
8/2	200	0.2	11.65			
10/2	3	4	0.120			
12/1.5	4	3	0.190			
16/1.2	5	3	0.210			
20/1	6	2	0.315			
30/1	8	2	0.400			



► Main Techno-Parameter

Working Temperature : $\varnothing 8$ mm ~ $\varnothing 10$ mm: -40 ~ +170

Part No. H1 POWER	R25 (Ω)	Max. Steady State Current I max(A)	Approx. R of Max . Current R max (Ω)	Max rated Power Pmax (W)	Dissi. Coef. (mW/'C)	Thermal Time Constant (S)
$\varnothing 5$mm						
33/0.8	10	2	0.458	1.8	≥ 9	≤ 25
36/0.8	12	1	0.652			
50/0.8	16	1	0.802			
60/0.6	20	1	0.864			
100/0.6	22	1	0.950			
200/0.3	30	1	1.022			
$\varnothing 8$mm						
0.7/7	0.7	7	0.032	2.2	≥ 10	≤ 42
1/6	1.6	6	0.040			
1.3/6	1.3	6	0.056			
1.5/6	1.5	6	0.078			
2/5	2	5	0.098			
2.5/5	3	5	0.107			
3/5	3	5	0.109			
4/4	4	4	0.171			
5/4	5	4	0.180			
6/4	6	4	0.182			
8/3	8	3	0.278			
10/3	10	3	0.297			
12/2.5	12	2.5	0.414			
16/2.5	16	2.5	0.428			
20/2	20	2	0.646			
22/2	22	2	0.653			
30/2	30	2	0.700			
33/1.5	33	1.5	1.139			
47/1.5	47	1.5	1.172			
50/1.5	50	1.5	1.174			
60/1.2	60	1.2	1.784			
80/1.2	80	1.2	1.825			
120/1.2	120	1.2	2.007			
200/0.8	200	0.8	4.152			
220/0.8	220	0.8	4.227			
400/0.5	400	0.5	9.956			
$\varnothing 10$mm						
0.7/8	0.7	8	0.041	2.4	≥ 12	≤ 50
1/7	1	7	0.062			
1.3/7	1.3	7	0.070			
1.5/7	1.5	7	0.072			
2/6	2	6	0.074			
2.5/6	2.5	6	0.075			



► Main Techno-Parameter

Working Temperature : $\varnothing 13\text{ mm} \sim \varnothing 40\text{ mm} : -40 \sim +200$

Part No. H1 POWER	R25 (Ω)	Max. Steady State Current I max(A)	Approx. R of Max . Current R max (Ω)	Max rated Power Pmax (W)	Dissi. Coef. (mW/'C)	Thermal Time Constant (S)
$\varnothing 10\text{mm}$						
3/6	3	6	0.080	2.4	≥ 12	≤ 50
4/5	4	5	0.09			
5/5	5	5	0.100			
6/5	6	5	0.120			
8/4	8	4	0.155			
10/4	10	4	0.175			
12/4	12	4	0.192			
15/3	15	3	0.230			
16/3	16	3	0.250			
20/3	20	3	0.270			
22/3	22	3	0.285			
25/2.5	25	2.5	0.310			
30/2.5	30	2.5	0.352			
33/2.5	33	2.5	0.384			
50/2	50	2	0.450			
60/2	60	2	0.540			
80/2	80	2	0.820			
120/1.5	120	1.5	1.268			
200/1.3	200	1.3	2.895			
$\varnothing 13\text{mm}$ Chip diameter						
0.7/9	0.7	9	0.032	3.0	≥ 13	≤ 65
1/9	1	9	0.032			
1.3/9	1.3	9	0.042			
1.5/9	1.5	9	0.043			
2.5/8	2.5	8	0.048			
3/8	3	8	0.052			
4/7	4	7	0.068			
5/7	5	7	0.078			
6/6	6	6	0.090			
7/6	7	6	0.098			
8/6	8	6	0.104			
10/6	10	6	0.126			
12/5	12	5	0.146			
15/4	15	4	0.155			
16/4	16	4	0.158			
20/4	20	4	0.192			
30/3.5	30	3.5	0.237			
47/3	47	3	0.340			
60/2.5	60	2.5	0.420			
120/1.8	120	2	0.994			



► Main Techno-Parameter

Working Temperature : $\varnothing 13$ mm ~ $\varnothing 40$ mm: -40 ~ +200

Part No. H1 POWER	R25 (Ω)	Max. Steady State Current I max(A)	Approx. R of Max . Current R max (Ω)	Max rated Power Pmax (W)	Dissi. Coef. (mW/'C)	Thermal Time Constant (S)
$\varnothing 35$mm						
0.5/32	3	6	0.080	9	≥ 45	≤ 280
1/32	4	5	0.09			
1.5/28	5	5	0.100			
2/25	6	5	0.120			
2.5/23	8	4	0.155			
3/22	10	4	0.175			
4/21	12	4	0.192			
4.7/20	15	3	0.230			
5/19	16	3	0.250			
6.8/18	20	3	0.270			
7/17	22	3	0.285			
8/16	25	2.5	0.310			
10/15	30	2.5	0.352			
12/14	33	2.5	0.384			
15/13	50	2	0.450			
18/11	60	2	0.540			
20/10	80	2	0.820			
$\varnothing 40$mm						
0.2/40	0.2	40	0.005	12.0	≥ 55	≤ 450
0.5/40	1	40	0.008			
1/40	1.0	40	0.010			
1.5/36	2	36	0.012			
2/32	2.0	32	0.014			
2.5/30	2.5	30	0.018			
3/28	3	28	0.020			
4/27	4	27	0.022			
4.7/26	5	26	0.023			
5/25	5	25	0.028			
6.8/23	7	23	0.030			
8/20	8	20	0.034			
10/19	10	19	0.038			
12/18	12	18	0.040			
15/16	15	16	0.050			
18/14	18	14	0.062			
20/13	20	13	0.075			

