

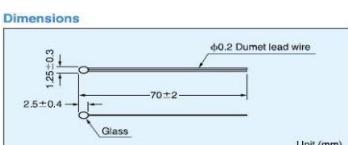
NT THERMISTOR

HIGH TEMPERATURE-RESISTANCE AND HIGH ACCURACY THERMISTOR

The NT-4 thermistor series features high temperature resistance and accuracy. Compared to conventional thermistors the NT-4 series are smaller, faster and more reliable and suitable for numerous applications.

Applications

Heating/cooling devices, boilers, microwave ovens, cooking appliances, hybrid cars, fuel cell cars, medical devices, disaster prevention, security, office, automation, other high temperature applications.



Part number

103 NT - 4 - R025 H 34 G

- Tolerance of B value ... G : 2%
- First double digits of B value ... 34 : B25/85=3435K
- Tolerance of Rated zero-power resistance ... H : 3%
- Base temperature of Rated zero-power resistance
- NT thermistor
- Rated zero-power resistance value at 25°C 103:10×10³Ω

Specifications

Part No.	Rated zero-power resistance *1			B Value *2			Dissipation Factor (mW/°C) Approx	Thermal time constant (s)*3	Rated Power mW at 25°C	Category temp. range (°C)
	Temperature (°C)	Resistance (kΩ)	Tolerance	Temperature (°C)	B Value	Tolerance				
852NT-4-R050H34G	50	3.485		0/100	3450K					
103NT-4-R025H34G	25	10		25/85	3435K					
103NT-4-R025H41G	25	10		25/85	4126K					
493NT-4-R100H40G	100	3.3		0/100	3970K					
503NT-4-R025H42G	25	50		25/85	4288K					
104NT-4-R025H42G	25	100		25/85	4267K					
104NT-4-R025H43G	25	100		25/85	4390K					
204NT-4-R025H43G	25	200		25/85	4338K					
234NT-4-R200H42G	200	1		100/200	4537K					
504NT-4-R025H45G	25	500		25/85	4526K					
105NT-4-R025H46G	25	1000		25/85	4608K					

*1 Rated zero-power resistance at each temperature

*2 B value: determined by rated zero-power resistance at each temperature

*3 Time when thermistor reaches 63.2% of temperature difference. The value is measured in air

Resistance - Temperature

Temperature (°C)	852NT-4 R050H34G	103NT-4 R025H34G	103NT-4 R025H41G	493NT-4 R100H40G	503NT-4 R025H42G	104NT-4 R025H42G	104NT-4 R025H43G	204NT-4 R025H43G	234NT-4 R200H42G	504NT-4 R025H45G	105NT-4 R025H46G
-40	187.8	214.8	406.8	1689	1817	4275	4755	9061	8942	24850	52120
-30	106.1	122	207.7	885.4	965	2156	2353	4524	4633	12290	25610
-20	62.42	72.04	110.3	484.4	533.5	1136	1218	2362	2496	6333	13110
-10	38.02	44.09	60.87	275.5	302.8	623.2	657	1284	1393	3396	6979
0	23.92	27.86	34.85	162.2	175.2	354.6	368.1	724.5	804.8	1887	3849
10	15.49	18.13	20.65	98.65	104	208.8	213.5	423	479.2	1027	2195
20	10.31	12.12	12.64	61.79	63.42	126.9	127.8	254.9	293.6	642.5	1290
30	7.026	8.297	7.97	39.77	39.66	79.33	78.78	158	184.7	391.7	780.2
40	4.899	5.806	5.166	26.23	25.42	50.9	49.9	100.6	119	245.2	484.7
50	3.485	4.144	3.437	17.7	16.69	33.45	32.42	65.72	78.46	157.3	308.4
60	2.524	3.011	2.341	12.2	11.19	22.48	21.54	43.89	52.84	103.1	200.7
70	1.859	2.225	1.631	8.572	7.657	15.43	14.63	29.93	36.3	69.11	133.5
80	1.391	1.668	1.159	6.134	5.343	10.8	10.13	20.81	25.39	47.24	90.54
90	1.055	1.267	0.8396	4.464	3.924	7.69	7.141	14.73	18.07	32.87	62.55
100	0.8104	0.9754	0.6189	3.3	2.741	5.569	5.122	10.61	13.06	23.27	43.96
110	0.63	0.759	0.4637	2.475	2.012	4.097	3.735	7.761	9.586	16.75	31.42
120	0.4952	0.592	0.3525	1.882	1.498	3.058	2.763	5.759	7.13	12.23	22.78
130	0.3916	0.4651	0.2717	1.448	1.13	2.313	2.072	4.333	5.374	9.051	16.75
140	0.3108	0.3679	0.2121	1.127	0.8635	1.77	1.574	3.301	4.098	6.787	12.48
150	0.2484	0.2937	0.1676	0.8873	0.668	1.371	1.21	2.547	3.161	5.153	9.418
160	0.2	0.2365	0.1339	0.7057	0.5225	1.074	0.9414	1.985	2.466	3.957	7.188
170	0.1622	0.1919	0.1081	0.5667	0.4129	0.8501	0.7398	1.563	1.942	3.071	5.546
180	0.1325	0.1568	0.08811	0.4592	0.3296	0.6793	0.5873	1.244	1.544	2.406	4.322
190	0.1091	0.129	0.07249	0.3753	0.2656	0.5476	0.4706	0.9993	1.238	1.903	3.402
200	0.09036	0.1068	0.06015	0.3092	0.2158	0.4452	0.3804	0.8098	1	1.519	2.703
210	0.0754	0.08901	0.0503	0.2567	0.1768	0.365	0.3101	0.6614	0.8141	1.224	2.167
220	0.06329	0.07467	0.04239	0.2145	0.1459	0.3016	0.2549	0.5442	0.6674	0.9937	1.75
230	0.05347	0.063	0.03597	0.1805	0.1213	0.251	0.211	0.451	0.5508	0.8136	1.424
240	0.04543	0.05345	0.03072	0.1529	0.1016	0.2104	0.176	0.3765	0.4574	0.6712	1.168
250	0.03883	0.04558	0.02641	0.1303	0.0856	0.1775	0.1478	0.3164	0.3821	0.5576	0.9643
260	0.03337	0.03907	0.02285	0.1117	0.07261	0.1507	0.125	0.2676	0.321	0.4663	0.8019
270	0.02884	0.03366	0.0199	0.09624	0.06197	0.1287	0.1063	0.2278	0.2712	0.3922	0.6712
280	0.02506	0.02912	0.01743	0.08336	0.05319	0.1105	0.09101	0.195	0.2302	0.3317	0.5651
290	0.02188	0.02531	0.01536	0.07256	0.0459	0.09539	0.0783	0.1678	0.1964	0.282	0.4785
300	0.01919	0.02209	0.01361	0.06345	0.03981	0.08278	0.06772	0.1452	0.1683	0.241	0.4074