

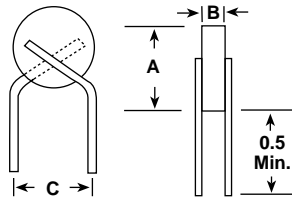
# NTC Thermistors



## FEATURES

- Temperature measurement.
- Temperature control.
- Inrush current limiting.
- Temperature compensation.
- Sensing liquid level or air flow.

## STANDARD ELECTRICAL SPECIFICATIONS and DIMENSIONS in inches [millimeters]



PART NUMBER	BASE RESISTANCE $R_0$ @ 25°C ( $\Omega$ ) $\pm 10\%$	TCR @ 25°C (%/°C) (Curve)	DISSIPATION CONSTANT Dc (mW/°C)	TIME CONSTANT Tc (Sec)	BODY TYPE	REFERENCE DIMENSIONS (inches)				
						A	B	C	Lead AWG #	
DN5004D2R5K	2.50	- 3.3 (D)	14.00	60.00	DISC	0.500	0.040	0.30	22.00	
DN4005D5R0K	5.00		9.00	50.00	DISC	0.400	0.050	0.30	22.00	
DN3003D5R0K	5.00		8.00	35.00	DISC	0.300	0.030	0.20	24.00	
DN4008D7R5K	7.50		9.00	65.00	DISC	0.400	0.080	0.30	22.00	
DN3005D7R5K	7.50		8.00	42.00	DISC	0.300	0.045	0.20	24.00	
DN3508D100K	10.00		9.00	60.00	DISC	0.350	0.080	0.25	22.00	
DN2304D100K	10.00		7.00	22.00	DISC	0.225	0.035	0.20	24.00	
DN2707D150K	15.00		8.50	55.00	DISC	0.270	0.070	0.20	24.00	
DN2004D150K	15.00		7.00	20.00	DISC	0.200	0.040	0.20	24.00	
DN2508D200K	20.00		8.00	45.00	DISC	0.250	0.080	0.20	24.00	
DN2005D200K	20.00		7.00	25.00	DISC	0.200	0.050	0.20	24.00	
DN1705D250K	25.00		7.00	19.00	DISC	0.170	0.050	0.20	24.00	
DN2008D300K	30.00		7.00	25.00	DISC	0.200	0.080	0.20	24.00	
DN1708D400K	40.00		7.00	22.00	DISC	0.170	0.075	0.20	24.00	
DN5004A250K	25.00		- 3.9 (A)	14.00	60.00	DISC	0.500	0.040	0.30	22.00
DN4005A500K	50.00			9.00	50.00	DISC	0.400	0.055	0.30	22.00
DN3003A500K	50.00	8.00		48.00	DISC	0.350	0.040	0.20	24.00	
DN4008A750K	75.00	9.00		65.00	DISC	0.400	0.080	0.30	22.00	
DN3005A750K	75.00	8.00		42.00	DISC	0.300	0.045	0.20	24.00	
DN3508A101K	100.00	9.00		60.00	DISC	0.350	0.080	0.20	22.00	
DN2304A101K	100.00	7.00		22.00	DISC	0.225	0.035	0.20	24.00	
DN2707A151K	150.00	8.50		55.00	DISC	0.270	0.070	0.20	24.00	
DN2004A151K	150.00	7.00		20.00	DISC	0.200	0.040	0.20	24.00	

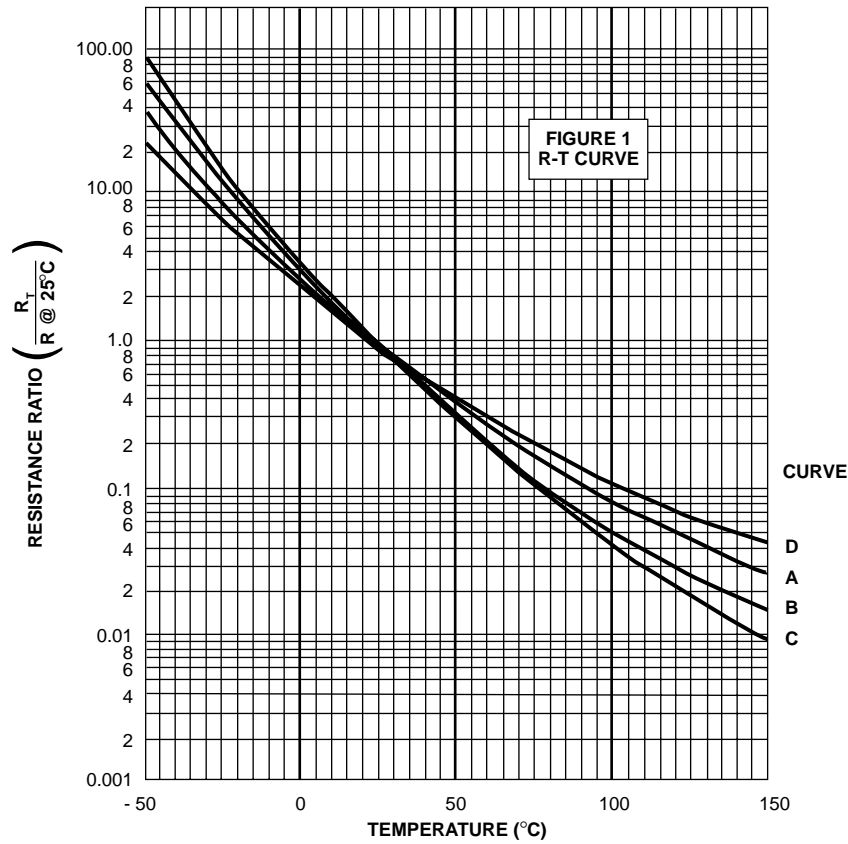


STANDARD ELECTRICAL SPECIFICATIONS									
PART NUMBER	BASE RESISTANCE $R_0$ @ 25°C ( $\Omega$ ) $\pm$ 10%	TCR @ 25°C (%/°C) (Curve)	DISSIPATION CONSTANT Dc (mW/°C)	TIME CONSTANT Tc (Sec)	BODY TYPE	REFERENCE DIMENSIONS (inches)			
						A	B	C	Lead AWG #
DN2508A201K	200.00	- 3.9 (A)	8.00	45.00	DISC	0.250	0.080	0.20	24.00
DN2005A201K	200.00		7.00	25.00	DISC	0.200	0.055	0.20	24.00
DN2008A301K	300.00		7.00	25.00	DISC	0.200	0.080	0.20	24.00
DN5005B201K	200.00	- 4.4 (B)	14.00	60.00	DISC	0.500	0.050	0.30	22.00
DN4004B251K	250.00		9.00	50.00	DISC	0.400	0.040	0.30	22.00
DN3506B501K	500.00		9.00	55.00	DISC	0.350	0.060	0.30	22.00
DN3004B501K	500.00		8.00	35.00	DISC	0.300	0.040	0.20	24.00
DN3308B751K	750.00		8.00	52.00	DISC	0.330	0.080	0.25	22.00
DN2701B751K	750.00		8.00	33.00	DISC	0.270	0.050	0.20	24.00
DN2707B102K	1000.00		8.00	38.00	DISC	0.270	0.070	0.20	24.00
DN2004B102K	1000.00		7.00	22.00	DISC	0.200	0.040	0.20	24.00
DN1704B152K	1500.00		7.00	20.00	DISC	0.170	0.040	0.20	24.00
DN2008B202K	2000.00		7.00	26.00	DISC	0.200	0.080	0.20	24.00
DN5005C202K	2000.00	- 4.9 (C)	14.00	60.00	DISC	0.500	0.050	0.30	22.00
DN4004C252K	2500.00		9.00	50.00	DISC	0.400	0.040	0.30	22.00
DN3004C502K	5000.00		8.00	35.00	DISC	0.300	0.040	0.20	24.00
DN3308C752K	7500.00		8.00	52.00	DISC	0.330	0.080	0.25	22.00
DN2705C752K	7550.00		8.50	33.00	DISC	0.270	0.050	0.20	24.00
DN2707C103K	10,000.00		8.00	38.00	DISC	0.270	0.070	0.20	24.00
DN2004C103K	10,000.00		7.00	22.00	DISC	0.200	0.040	0.20	24.00
DN2008C203K	20,000.00		7.00	26.00	DISC	0.200	0.080	0.20	24.00

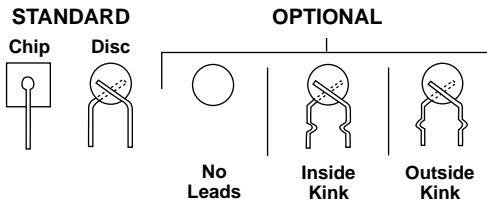


STANDARD NTC CURVE CHARACTERISTICS									
CURVE		D		A		B		C	
BETA IN K 25/75 (°C)		2925 ± 225		3545 ± 150		3965 ± 125		4500 ± 200	
RESIS. RATIO 0/50°C		5.15 ± 8%		7.04 ± 5%		9.1 ± 5%		11.8 ± 6%	
RESIS. RATIO 25/125°C		11.8 ± 15%		19.80 ± 10%		29.4 ± 10%		48.7 ± 10%	
TCR @ 25°C (%/°C)		- 3.3		- 3.9		- 4.4		- 4.9	
TEMPERATURE		R-T CURVE	TCR (%/°C)	R-T CURVE	TCR (%/°C)	R-T CURVE	TCR (%/°C)	R-T CURVE	TCR (%/°C)
°F	°C								
- 58.00	- 50.00	23.62	5.400	40.06	6.100	67.06	7.20	98.20	7.40
- 49.00	- 45.00	18.13		29.62		47.81		67.83	
- 40.00	- 40.00	14.05	5.050	22.06	5.900	34.01	6.70	47.34	7.00
- 31.00	- 35.00	10.94		16.59		24.49		33.37	
- 22.00	- 30.00	8.623	4.700	12.51	5.500	17.84	6.20	23.76	6.60
- 13.00	- 25.00	6.849		9.633		13.12		17.06	
- 4.00	- 20.00	5.461	4.400	7.431	5.100	9.766	5.80	12.39	6.30
5.00	- 15.00	4.410		5.780		7.331		9.072	
14.00	- 10.00	3.588	4.10	4.534	4.80	5.552	5.50	6.700	5.90
23.00	- 5.00	2.932		3.879		4.246		4.989	
32.00	0.00	2.417	3.80	2.848	4.50	3.269	5.10	3.746	5.60
41.00	5.00	2.002		2.281		2.539		2.835	
50.00	10.00	1.674	3.60	1.844	4.30	1.988	4.80	2.161	5.30
59.00	15.00	1.397		1.494		1.567		1.661	
68.00	20.00	1.194	3.40	1.216	4.00	1.245	4.50	1.284	5.10
77.00	25.00	1.000	3.30	1.000	3.90	1.000	4.40	1.000	4.90
86.00	30.00	0.8575	3.20	0.8260	3.80	0.9052	4.30	0.7844	4.80
95.00	35.00	0.7340		0.6858		0.6526		0.6190	
104.00	40.00	0.6311	3.00	0.5726	3.60	0.5320	4.00	0.4915	4.50
113.00	45.00	0.5419		0.4804		0.4361		0.3926	
122.00	50.00	0.4673	2.85	0.4051	3.40	0.3596	3.80	0.3174	4.30
131.00	55.00	0.4015		0.3425		0.2983		0.2547	
140.00	60.00	0.3512	2.65	0.2915	3.20	0.2485	3.60	0.2069	4.10
149.00	65.00	0.3066		0.2489		0.2076		0.1689	
158.00	70.00	0.2686	2.50	0.2137	3.00	0.1745	3.40	0.1385	3.90
167.00	75.00	0.2365		0.1837		0.1478		0.1142	
176.00	80.00	0.2090	2.35	0.1592	2.90	0.1257	3.30	0.09453	3.70
185.00	85.00	0.1860		0.1385		0.1070		0.07863	
194.00	90.00	0.1660	2.25	0.1206	2.70	0.09146	3.10	0.06568	3.50
203.00	95.00	0.1485		0.1055		0.07856		0.05509	
212.00	100.00	0.1335	2.10	0.09242	2.60	0.06778	2.90	0.04640	3.40
221.00	105.00	0.1210		0.08137		0.05867		0.03923	
230.00	110.00	0.1100	2.00	0.07182	2.50	0.05094	2.80	0.03329	3.30
239.00	115.00	0.1002		0.06367		0.04443		0.02836	
248.00	120.00	0.09211	1.95	0.05653	2.30	0.03884	2.70	0.02424	3.10
257.00	125.00	0.08472	1.90	0.05033	2.30	0.03407	2.60	0.02059	3.00
266.00	130.00	0.07830	1.90	0.04488	2.20	0.02998	2.50	0.01789	3.00
275.00	135.00	0.07246		0.04022		0.02645		0.01545	
284.00	140.00	0.06767	1.80	0.03622	2.10	0.02340	2.40	0.01338	2.90
293.00	145.00	0.06323		0.03267		0.02079		0.01162	
302.00	150.00	0.05912	1.75	0.02679	2.00	0.01847	2.30	0.010110	2.70

**STANDARD RESISTANCE RATIO - TEMPERATURE CURVE**



**CONFIGURATIONS**



**PACKAGING**

— Bulk

**ORDERING INFORMATION**

DN2005D200K  
MODEL

- 06  
MODIFICATION

- 01 No Leads ..... Disc/Chip
- 02 Inside Kink ..... Disc Only
- 03 Outside Kink ..... Disc Only
- 04 Epoxy Coating  
(150°C Max. Temp.) ..... Disc/Chip
- 05 Silicone Coating ..... Disc/Chip  
(200°C Max. Temp.)
- 06 Epoxy/Inside Kink ..... Disc Only
- 07 Epoxy/Outside Kink ..... Disc Only
- 08 Silicone/Inside Kink ..... Disc Only
- 09 Silicone/Outside Kink ..... Disc Only

**Example:** DN2005D200K-06 (standard part with epoxy coating and inside kink leads).

**NOTE:** If one of the modifications is required, add the dash number listed to the part number (see example). Other options are available including non-standard base resistance values and tolerances.