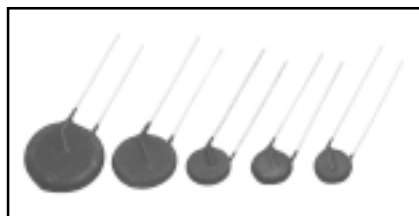
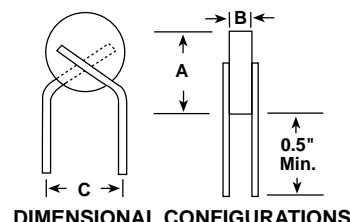


NTC Thermistors



TYPICAL APPLICATIONS

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



DIMENSIONAL CONFIGURATIONS

STANDARD ELECTRICAL SPECIFICATIONS

PART NUMBER	BASE RESISTANCE R_0 @ 25°C (Ω) $\pm 10\%$	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
DN1104D400K	40.00		2.50	4.00	CHIP	0.110	0.040	—	28.00
DN1004D500K	50.00		2.50	4.00	CHIP	0.100	0.040	—	28.00
DN0804D400K	80.00		2.00	4.00	CHIP	0.080	0.040	—	28.00
DN0704D101K	100.00		2.00	4.00	CHIP	0.070	0.040	—	28.00
DN0503D151K	150.00		2.00	3.00	CHIP	0.050	0.040	—	28.00
DN0504D201K	200.00		2.00	3.00	CHIP	0.050	0.030	—	28.00
DN0404D301K	300.00		2.00	2.00	CHIP	0.040	0.040	—	28.00
DN0407D501K	500.00		2.00	2.00	CHIP	0.040	0.070	—	28.00
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
DN2508A201K	200.00		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
DN1104A401K	400.00		2.50	4.00	CHIP	0.110	0.040	—	28.00
DN1004A501K	500.00		2.50	4.00	CHIP	0.100	0.040	—	28.00
DN0904A601K	600.00		2.00	4.00	CHIP	0.090	0.040	—	28.00



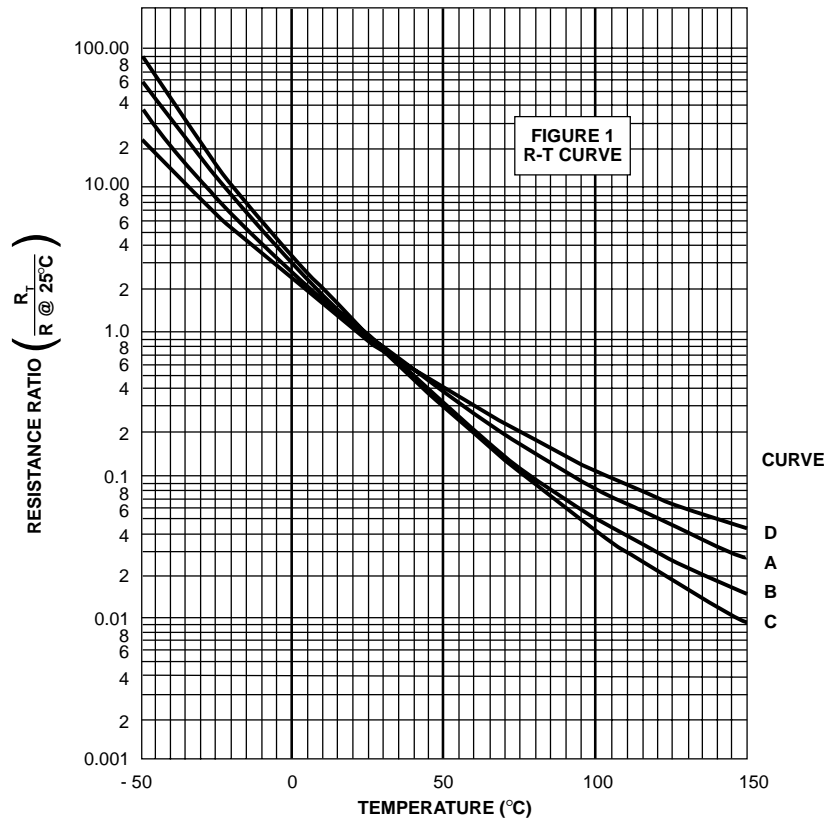
STANDARD ELECTRICAL SPECIFICATIONS									
PART NUMBER	BASE RESISTANCE R_o @ 25°C (Ω) $\pm 10\%$	TCR @ 25°C (%/°C) (Curve)	DISSIPATION CONSTANT Dc (mW/°C)	TIME CONSTANT Tc (Sec)	BODY TYPE	REFERENCE DIMENSIONS (inches)			
						A	B	C	Lead AWG #
DN0804A801K	800.00	- 3.9 (A)	2.00	4.00	CHIP	0.080	0.045	—	28.00
DN0704A102K	1000.00		2.00	4.00	CHIP	0.070	0.040	—	28.00
DN0503A152K	1500.00		2.00	3.00	CHIP	0.055	0.040	—	28.00
DN0504A202K	2000.00		2.00	3.00	CHIP	0.050	0.040	—	28.00
DN0404A302K	3000.00		2.00	2.00	CHIP	0.040	0.040	—	28.00
DN0406A402K	4000.00		2.00	2.00	CHIP	0.040	0.055	—	28.00
DN0407A502K	5000.00		2.00	2.00	CHIP	0.040	0.070	—	28.00
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
DN1204B202K	2000.00		3.00	6.00	CHIP	0.120	0.035	—	28.00
DN1004B302K	3000.00		3.00	5.00	CHIP	0.100	0.035	—	28.00
DN0804B502K	5000.00		3.00	5.00	CHIP	0.080	0.040	—	28.00
DN0804B602K	6000.00		2.00	4.00	CHIP	0.075	0.040	—	30.00
DN0704B802K	8000.00		2.00	3.00	CHIP	0.065	0.040	—	30.00
DN0605B103K	10,000.00		2.00	3.00	CHIP	0.060	0.045	—	30.00
DN0607B153K	15,000.00		2.00	4.00	CHIP	0.060	0.065	—	30.00
DN0607B203K	20,000.00		2.00	4.00	CHIP	0.055	0.070	—	30.00
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
DN1204C203K	20,000.00		3.00	6.00	CHIP	0.120	0.035	—	28.00
DN1104C253K	25,000.00		3.00	6.00	CHIP	0.110	0.035	—	28.00
DN1004C303K	30,000.00		3.00	5.00	CHIP	0.100	0.035	—	28.00
DN0804C503K	50,000.00		3.00	5.00	CHIP	0.080	0.040	—	28.00
DN0804C603K	60,000.00		2.00	4.00	CHIP	0.075	0.040	—	30.00
DN0704C803K	80,000.00		2.00	3.00	CHIP	0.065	0.040	—	30.00
DN0605C104K	100,000.00		2.00	3.00	CHIP	0.060	0.045	—	30.00
DN0607C154K	150,000.00		2.00	4.00	CHIP	0.060	0.065	—	30.00
DN0607C204K	200,000.00		2.00	4.00	CHIP	0.055	0.070	—	30.00
DN0507C304K	300,000.00		2.00	4.00	CHIP	0.045	0.070	—	30.00
DN0408C404K	400,000.00		2.00	4.00	CHIP	0.040	0.075	—	30.00
DN0410C504K	500,000.00		2.00	5.00	CHIP	0.040	0.095	—	30.00



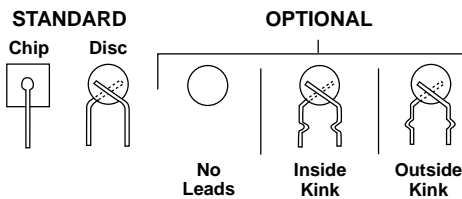
STANDARD NTC CURVE CHARACTERISTICS

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

HOW TO ORDER

DP2005D200K
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: DP2005D200K-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.