

Innovative **Technology** for a **Connected** World

TC-NTC-1

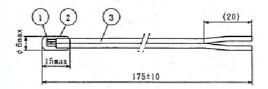
Thermistor Specification

ELECTRICAL CHARACTERISTICS

- 1.1 Zero Power Resistance at 0°C: KO 10 kilo ohms ±2% ² ±0.5°C (0-10°C)³
- 1.2 B-Value: B0/25 3860K 1% ³
- 1.3 Thermal Time Constant (±63.2%): 40 sec. max. (in still air)
- 1.4 Thermal Dissipation Constant: 2.5 mW/°C (in still air)
- 1.5 Insulation Resistance: 100 M Ω min. (500 V DC in water)
- 1.6 Operating Temperature Range: -30 to +90°C

MECHANICAL CHARACTERISTICS

- 2.1 Tensile Strength
 When 9.8 N(1 kg f) is applied gradually for
 1 minute to the lead wire by fixing the epoxy
 resin, abnormality should not be allowed on
 appearance nor property
- 2.2 Drop Test
 When natural drop is performed 5 times onto the oak-boad of thickness 10 mm thick from the height at 1m, abnormality shall not be allowed on appearance.



DIMENSION DRAWINGS

1	Thermistor	Chip Type
2	Coating Resin	Epoxy Resin
3	Lead Wire	105°C Heat Resisting PVC (Black) Insulated Flat Cord °0.14 (7/0.16) (TW-11535)

- 2 Jan. 25 95 Changed (S.H)
- 3 Feb. 1 95 Added and Changed (S.H)

RELIABILITY TEST

- High Temperature Storage Test Leave the test piece in atmosphere of 100°C for 1000 hours.
- Low Temperature Storage Test
 Leave the test piece in atmosphere of
 -30°C for 1000 hours.
- High Humidity Storage Test
 Leave the test piece in atmosphere of 65±1°C
 and 95%RH min. for 1000 hours.
- Temperature Cycling Test
 Perform 500 cycles with -30°C (in antifreeze
 coolant)

 10 min. room temperature (in air)
 2 min 90°C (in water) 10 min. as one cycle

After the test above items , resistance and B-value change ration shall be within $\pm 3\%$, appearance shall not change and shall satisfy item 1.5

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TX (°C)	R MIN (KΩ)	R NOM ($K\Omega$)	R MAX ($K\Omega$)
-30.0	52.7751	54.7745	56.8275
-29.0	49.6043	51.4515	2.3465
-28.0	46.6449	48.3518	50.1016
-27.0	43.8814	45.4592	47.0753
-26.0	41.2996	42.7584	44.2514
-25.0	38.8865	40.2356	41.6152
-24.0	36.6300	37.8780	39.1531
-23.0	34.5190	35.6737	36.8525
-22.0	32.5432	33.6118	34.7019
-21.0	30.6931	31.6823	32.690
-20.0	28.9600	29.8758	30.8084
-19.0	27.3358	28.1838	29.0466
-18.0	25.8129	26.5983	27.3967
-17.0	24.3844	25.1120	25.8509
-16.0	23.0440	23.7180	24.4020
-15.0	21.7858	22.4101	23.0434
-14.0	20.6039	21.1825	21.7689
-13.0	19.4935	20.0298	20.5727
-12.0	18.4499	18.9469	19.4497
-11.0	17.4685	17.9293	18.3948
-10.0	16.5454	16.9725	17.4037
-9.0	15.6767	16.0726	16.4720
-8.0	14.8589	15.2260	15.5959
-7.0	14.0888	14.4290	14.7716
-6.0	13.3632	13.6789	13.9960
-5.0	12.6794	12.9718	13.2657
-4.0	12.0346	12.3057	12.5779
-3.0	11.4265	11.6778	11.9298
-2.0	10.828	11.0857	11.3191
-1.0	10.3113	10.5271	10.7432
0.0	9.8000	10.0000	10.2000
1.0	9.3073	9.5021	9.6971
2.0	8.8423	9.0320	9.2221
3.0	8.4034	8.5880	8.7731
4.0	7.9888	8.1684	8.3487
5.0	7.5972	7.7719	7.9473
6.0	7.2270	7.3969	7.5676
7.0	6.8771	7.0422	7.2083
8.0	6.5462	6.7066	6.8682
9.0	6.2331	6.3890	6.5461
10.0	5.9369	6.0883	6.2413

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