

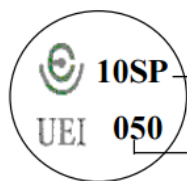
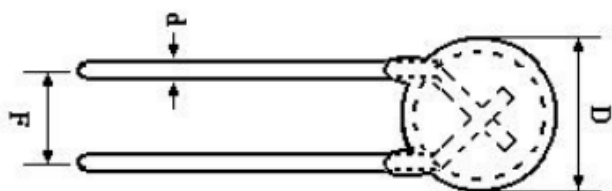
# Datasheet

## 25Ω Protection NTC Thermistor

RS Stock 516-7760



### Dimensions: (mm)



Nominal Diameter

Resistance at 25°C

0R7 : 0.7Ω

1R3 : 1.3Ω

003~008 : 3~8Ω

010~080 : 10~80Ω

120 : 120Ω

D : Diameter with coating

F : Forming Pitch

T : Thickness of thermistor with coating

L : Length of leads

d : Diameter of leads

10Φ	D	F	T	L	d
max.	11.5	6.0	5.0	-	0.82
$\bar{X}$	-	5.0	-	-	0.80
min.	-	4.0	-	25.0	0.78

UNIT : mm

## Specification

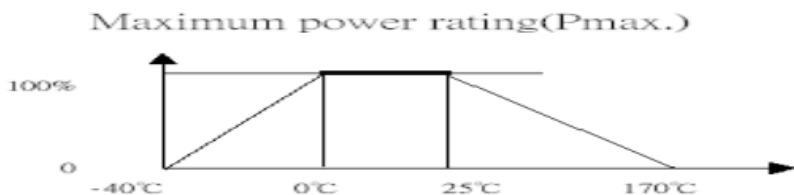
Style: Disc Type Thermistor (Negative Temperature Coefficient)

- Material coating: Silicone
- Colour Coating: Black
- Material of Lead: Cu, Fe,Sn Material

**Maximum Ratings (Ambient Ta=25°C)**

	Item	Conditions	Max. Rated Value
a	Rated Temperature	in still air	-40 ~ +170 °C
b	Max. Permissible Working Current	Ta : 25 °C	2 Amp.

### Electrical Characteristics

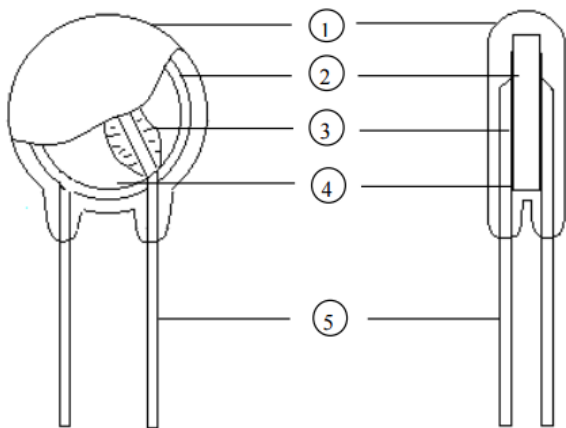
	Item	Conditions	Specification
a	Zero Power Resistance	Ta : 25 ±0.2 °C , I ≤ 0.5mA	50 Ω ± 20 %
b	Beta Value	8876*Log(R25/R50)	3211 ± 7 %
c	Thermal Dissipation Constant	Ta : 25 °C	10 mW/°C (Approx.)
d	Thermal Time Constant	Ta : 25 °C	58 sec. (Approx.)
e	Insulation	1000 Vdc	> 500 MΩ
f	V-I Test	Steady State Current I: 0.5 Amps I: 1 Amps I: 2 Amps	Resistance Under Load 4701 mΩ (Approx.) 1901 mΩ (Approx.) 723 mΩ (Approx.)
g	UL APPROVAL MAX. load capacitance(uf), { 240Vac/420uf } , compares of the twice R-T value of Before test & After test, the variation of temperature must be within ±20°C.		
h	Permissible Electrolytic Capacitor suggestion to use in the safety range is under {340Vdc/100uf}		
i	UL Test Temperature (min : 0 °C)		
j	VDE Test Temperature (None)		
k	<p>Maximum power rating(Pmax.)</p>  <p>The customer makes the test according to the actual design demand temperature</p>		

**Mechanical Characteristics**

	Item	Conditions	Specification
a	Terminal Pull	Load : 2.5 kg, time : 5 sec.	No Break Out
b	Terminal Bend	Load : 1 kg Bend : 0° → 90° → 0° * 2 Cycles	No Break Out
c	Solderability	230±5°C , 3± 0.5 sec.	at Least 95% of the lead wire circumference is covered with solder.
d	Solder Heat Resistance	260± 5°C , 3± 0.5 sec.	$\Delta R/R : \leq \pm 10\%$

**Reliability Test**

	Item	Conditions	Specification Variable Rate of Resistance
a	Thermal Shock	-40°C *30' → +25°C *30' → +150°C *30' → + 25°C *30' *8 Cycles	Max.+15%
b	Humidity	45°C, 95% R.H.*1000 Hours 300mA on 2 Min. off 6 Min. * 5000 Times	Max.+15%
c	Continuous Load Life	25°C , 2 Amps *1000 Hours	Max.+25%
d	Temperature Storage	60°C *300 mA*1000 Hours	Max.+25%



### Material

No.	Component	Material
1	Coating	Silicone
2	NTC Thermistor	Mn,Ni,Cu,Fe,Oxide
3	Solder	Sn-Ag
4	Electrode	Ag
5	Lead Wire	( Cu,Fe,Sn ) Material