## NCT6KT－Temperature Transducer

## Product Overview

NCT6KT temperature transducer is composed of NT and relative leading wire，the value of NTC the exponential relation as per the temperature change，get current，then referring to temperature／resistance meter．It is whole structure，small volume，can test＂point＂ temperature，real resistance，high sensitivity；（3）high resistivity，measurement；（4）small power consumption，fit for remote medium＇s temperature such as air，liquid（oil）．

## Main Technical Data

## Ambient conditions

Operating temperature：$-10^{\circ} \mathrm{C} \sim 125^{\circ} \mathrm{C}$
Relative Humidity：0～95\％
Vibration and shock：comply with Sort 1 Grade B in item

## Mechanical structure

Shell：reinforcement PPO，high－temperature plastic cop
Encapsulated material：heat silicon gel ZR341，epoxy 605

## Electrical performance and interface

Tested media：gas（air），liquid（water），oil，etc．
Measurement range：$-40^{\circ} \mathrm{C} \sim 150^{\circ} \mathrm{C}$
Measurement accuracy：$-10^{\circ} \mathrm{C} \sim 30^{\circ} \mathrm{C}, \pm 0.3^{\circ} \mathrm{C} ; 30^{\circ} \mathrm{C}$
Output signal： 169.8 ohm～49510 ohm（RT charact．table）
Electric interface：GDM（GSP）aviation plug（Pin
Installation interface：M20×1．5 screws

## Insulation performance

Insulation resistance：greater than between Pin 1，2 and copper shell
Voltage withstand： $500 \mathrm{Vac} / 50 \mathrm{~Hz} / 1 \mathrm{~min}$ ，no breakdown or flashover phenomena

## Plug No．Output function

${ }_{2}^{1}$ Output signal without stipulation of positive and negative electrode，

## Installation，operation and malfunction disposal

1．1 Connect any one of two output lines of the sensor as positive electrode，form a circuit is ok．．
1．2 Before installation，check transducer，test DC resistance of the transducer with multimeter；at ambient $25^{\circ} \mathrm{C}$ ，the value of resistance within 4934ohm $\sim 5066$ ohm between two lines
means the temperature work normally．
1．3 When installation，suggest to make sure the copper probe totally immersed to the tested media．

## Outline and Dimensions



## Table of thermal Resistance

Thermo－resistive characteristic table of thermal resistance

| Temperature <br> ${ }^{\circ} \mathrm{C}$ | Min．Resistance <br> Value | Resistance Value | Max．Resistance <br> Value | Allowance <br> ${ }^{\circ} \mathrm{C}$ |
| :---: | :---: | :---: | :---: | :---: |
| -20 | 48081 | 49510 | 50986 | $\pm 0.5$ |
| -10 | 27592 | 28050 | 28516 | $\pm 0.3$ |
| 0 | 16227 | 16480 | 17083 | $\pm 0.3$ |
| 10 | 9865 | 10010 | 10156 | $\pm 0.3$ |
| 20 | 6173 | 6258 | 6344 | $\pm 0.3$ |
| 25 | 4934 | 5000 | 5066 | $\pm 0.3$ |
| 30 | 3970 | 4023 | 4073 | $\pm 0.3$ |
| 40 | 2598.9 | 2656 | 2706 | $\pm 0.5$ |
| 50 | 1757.3 | 1794 | 1825.7 | $\pm 0.5$ |
| 60 | 1214.9 | 1239 | 1259.4 | $\pm 0.5$ |
| 70 | 857.4 | 872.1 | 887 | $\pm 0.5$ |
| 80 | 625.2 | 625.2 | 625.2 | NA |
| 100 | 337.6 | 337.6 | 337.6 | NA |
| 110 | 253.8 | 253.8 | 253.8 | NA |
| 125 | 169.8 | 169.8 | 169.8 | NA |

