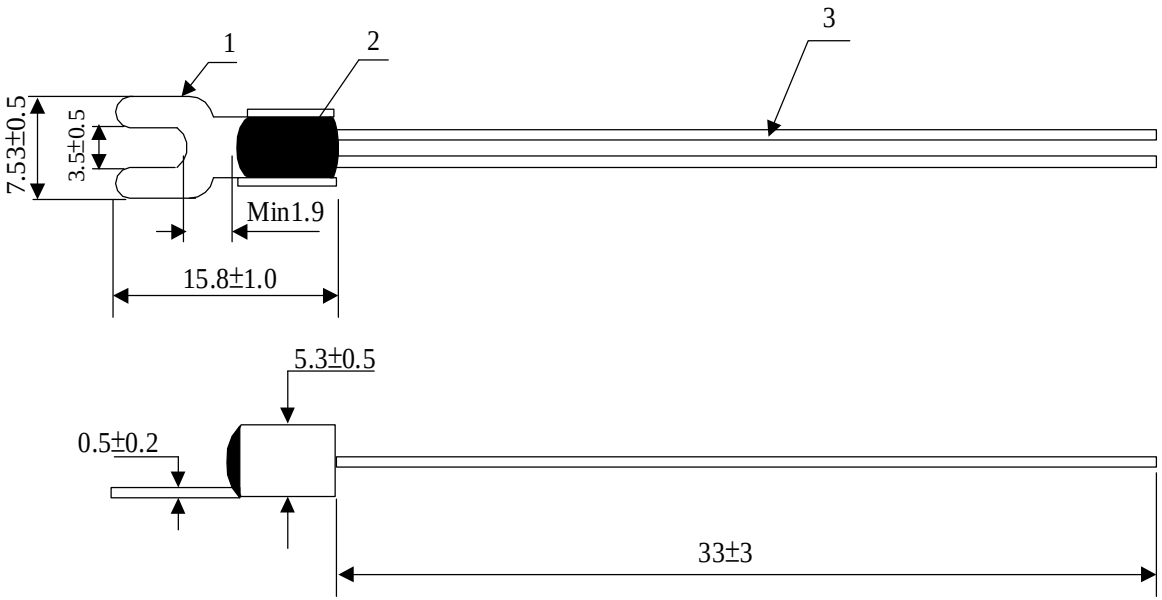


| A. Material List | | |
|---|---|---|
| NO. | ITEM | DESCRIPTION |
| 1 | TERMINAL | C50301BL-2 |
| 2 | COATING RESIN | BLACK EPOXY |
| 3 | WIRE | Φ0.5mm Tin-plated Copper wire |

| B. Electrical Characteristic | |
|---|---|
| ITEM | VALUE |
| R25 | 100KΩ±5% |
| B25/85 | 4529K+/-3% |

| | |
|---|---|
| Customer | ASYS |
| Customer P/N | |
| Thinking P/N | NTSA0104JZ084 |
| Drawing NO. | SA0308005 |
| Date | 2007.05.08 |

| Rev. | Subjects of Change | Scale: | | Tol: | ±mm | Unit: | mm |
|---|---|---|---|---|---|---|---|
| | | Approved by | | Checked by | | Designed by | |
| | | FM,CH | | JUN,WANG | | YU LIANG YANG | |

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# SUBJECT:CERTIFICATION OF MATERIALS

CUSTOMER:ASYS

THINKING P/N:NTSA0104JZ084

| NO | PART NAME | PART P/N | Q'TY | FLAMMABILITY SOLID BURNING CLASS | UL FILE NO |
|---|---|---|---|---|---|
| 1 | TERMINAL | C50301BL-2 | 1 | BRASS | |
| 2 | COATING RESIN | BLACK EPOXY | | | |
| 3 | LEAD WIRE | Φ0.5mm Tin-plated Copper wire | 2 | | |
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| REMARK | | | | | |
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Approved by: FM,CH Checked by: JUN,WANG Designed by: YU LIANG YANG

**Specification of NTC Thermistor for Temperature Measurement and Control**

**PART NO .** NTSA0104JZ084

**CUSTOMER P/N .** _____

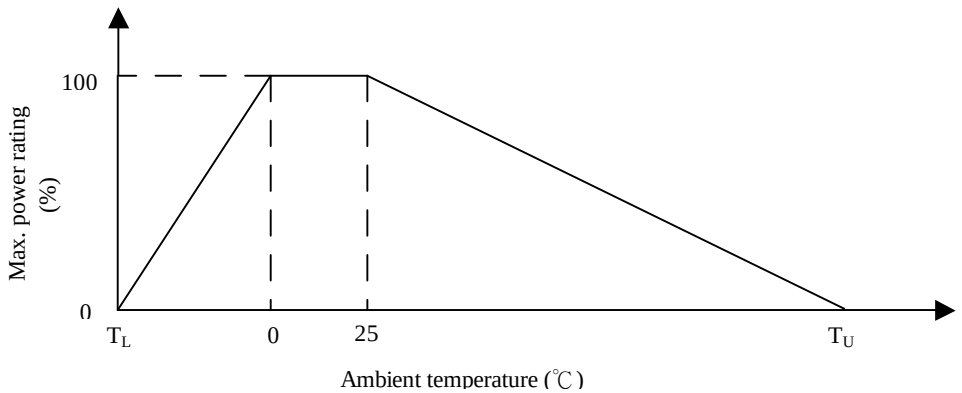
**1. Electrical characteristics**

| | Parameter | Symbol | Test Conditions | Min. | Nor. | Max. | Unit. |
|---|---|---|---|---|---|---|---|
| a. | Resistance At 25℃ | $R_{25}$ | Ta=25℃±0.05℃<br>$P_T \leqq 0.1$mW | 95.00 | 100 | 105.00 | KΩ |
| b. | Resistance At85℃ | $R_{85}$ | Ta=85℃±0.05℃<br>$P_T \leqq 0.1$mW | ----- | 7.850 | ----- | KΩ |
| c. | $R_{25}/R_{85}$ | K | ---------- | ----- | 12.741 | ----- | |
| d | B Constant | $B_{25/85}$ | (1779.707* LnK) | 4393 | 4529 | 4665 | K |
| e. | Thermal Dissipation Constant | $\delta$ | Ta=25℃±0.5℃ | 5 | ----- | ----- | mW/℃ |
| f. | Thermal Time Constant | $\tau$ | Ta=25℃±0.5℃ | ----- | 11 | | Sec |
| g. | Hi-Pot Test | ------- | 1000V AC 1 sec | ----- | ----- | 10 | mA |

**2.Maximun Ratings**

| | Parameter | Specification | Unit |
|---|---|---|---|
| a. | Operation Temperature Range | -20 ----- +125 | ℃ |
| b. | Maximum Power Rating (At 25℃) | 150 | mW |

## *Maximum power rating (Pmax)*




Note: $T_L$ = Minimum Temp. of Operating Temp. Range (℃)

$T_U$ = Maximum Temp. of Operating Temp. Range (℃)

**Specification of NTC Thermistor for Temperature Measurement and Control**

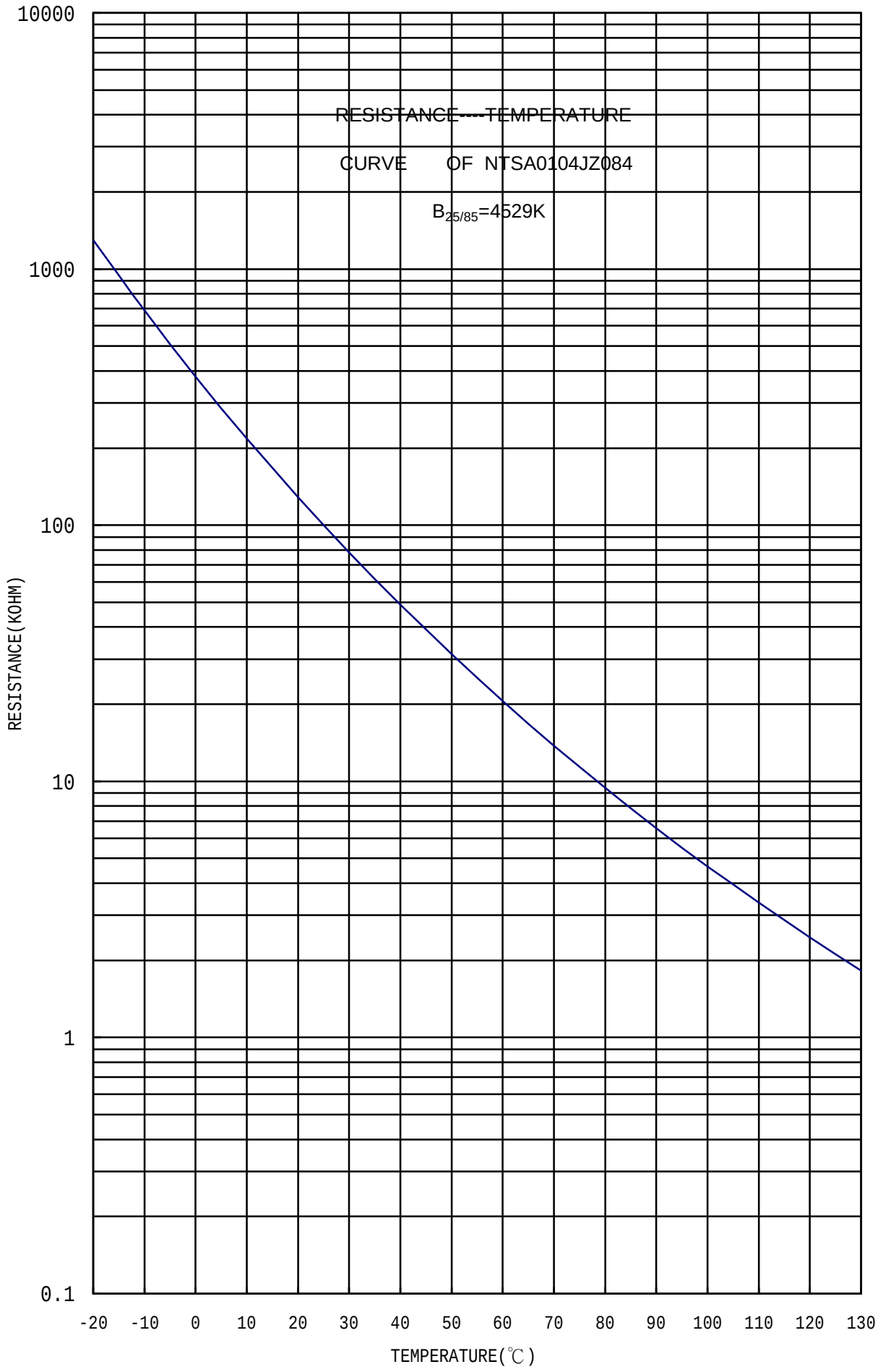
## 3. Mechanical Characteristics

### 3-1. Leads Terminal Tensile Strength

| Conditions | Test Result | |
|---|---|---|
| Fasten body with a Load Applied to each lead 1.0 kg for 10 sec. | No physical damage and electrical characteristic normal | OK |

## 4. Reliability Test

| Item | Test Conditions | Variable |
|---|---|---|
| Temp. cycle test | -20 ℃ X 30min → +25 ℃ X 5min<br>+125 ℃ X 30min → +25 ℃ X 5min X 5Cycles | Within ± 5 % |
| Humidity test | 40 ℃ 95 % RH X 1000 HRS | Within ± 5 % |


RESISTANCE----TEMPERATURE
CURVE OF NTSA0104JZ084
$B_{25/85}$=4529K
10000
1000
100
10
1
0.1
RESISTANCE(KOHM)
-20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130
TEMPERATURE(℃)