

DATA SHEET

PRODUCT SMD NTC Thermistor

SERIES JSN Automotive Series

PART NO.

**QUICK
REFERENCE
DATA**

| PARAMETER | VALUE | UNIT |
|----------------------|-----------------------|----------|
| Size | 0603(1608)~0805(2012) | Inch(mm) |
| Resistance Value R25 | 10~ 100 | KΩ |
| B25/50 | 3380~4250 | K |
| B25/85 | 3435~4360 | K |

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REFERENCE NO.

AEC-Q200 Qualified

RoHS COMPLIANCE ITEM

Halogen Free

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SMD NTC Thermistor JSN Automotive series



Features

1. RoHS / Halogen-Free (HF) compliant
2. Highly reliable structure
3. Operating temperature range: $-40^{\circ}\text{C} \sim +150^{\circ}\text{C}$
4. Qualified based on AEC-Q200
5. Agency recognition: UL / TUV

Applications

1. IT equipment
2. Mobile devices
3. Battery packs
4. Office automation equipment
5. Automotive

How to order

| Part Number Code | | | | | | | | | | | | | | | |
|------------------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| J | S | N | B | 1 | 0 | 3 | F | 3 | 4 | 4 | F | B | B | X | C |
| ① | | ② | | ③ | | | ④ | ⑤ | | | ⑥ | ⑦ | ⑧ | | |

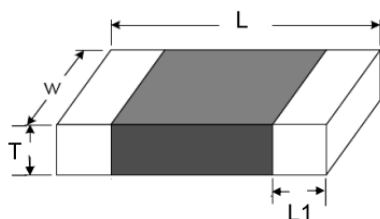
| | | | | | |
|---|--------------------------------------|--|---|-----------------------|--|
| ① | Product Type | JSN series | ⑤ | B Value | 344 = 3435 K 405 = 4050 K |
| ② | Size | B = 0603 (1608) C = 0805 (2012) | ⑥ | Tolerance of B Value | F = $\pm 1\%$ G = $\pm 2\%$ H = $\pm 3\%$ J = $\pm 5\%$ |
| ③ | Zero Power Resistance @25°C (R25) | 103 = 10K Ω 104 = 100K Ω | ⑦ | Definition of B Value | A = 25/50 B = 25/85 C = 25/100 |
| ④ | Tolerance of R25 | F = $\pm 1\%$ G = $\pm 2\%$ H = $\pm 3\%$ J = $\pm 5\%$ K = $\pm 10\%$ | ⑧ | Optional Suffix | Internal Control Code C= AEC-Q200 |

Safety Certification

| | | |
|-------------|----------|--|
| Standard NO | UL / CUL | TUV |
| | UL1434 | EN 60539-1:2016 EN 60539-2:2004 +A1 |
| File NO | E171531 | R 50236285 |

Structure and Dimension

Unit in mm



| Size | L | W | T | L1 |
|------------|-----------------|-----------------|----------|-----------------|
| JSNB(0603) | 1.60 \pm 0.15 | 0.80 \pm 0.15 | 1.00 Max | 0.30 \pm 0.20 |
| JSNC(0805) | 2.00 \pm 0.20 | 1.25 \pm 0.20 | 1.10 Max | 0.50 \pm 0.30 |

SMD NTC Thermistor JSN Automotive series

Electrical Characteristics

| Part No. | Zero Power Resistance at 25°C | Tolerance of R25 | B 25/50 Value | Tolerance of B Value | Dissipation Factor | Thermal Time Constant | Max. Power Rating at 25°C | Safety Approvals |
|---------------|-------------------------------|------------------|---------------|----------------------|--------------------|-----------------------|---------------------------|------------------|
| | R 25 (Ω) | (± %) | (K) | (± %) | δ(mW/°C) | τ(sec.) | (mW) | |
| JSNB103X338YA | 10,000 | 10,5,3,2,1 | 3380 | 5,3,2,1 | Approx. 2.1 | Approx. 3.1 | 210 | ■ |
| JSNC103X338YA | 10,000 | 10,5,3,2,1 | 3380 | 5,3,2,1 | Approx. 2.4 | Approx. 3.0 | 240 | ■ |

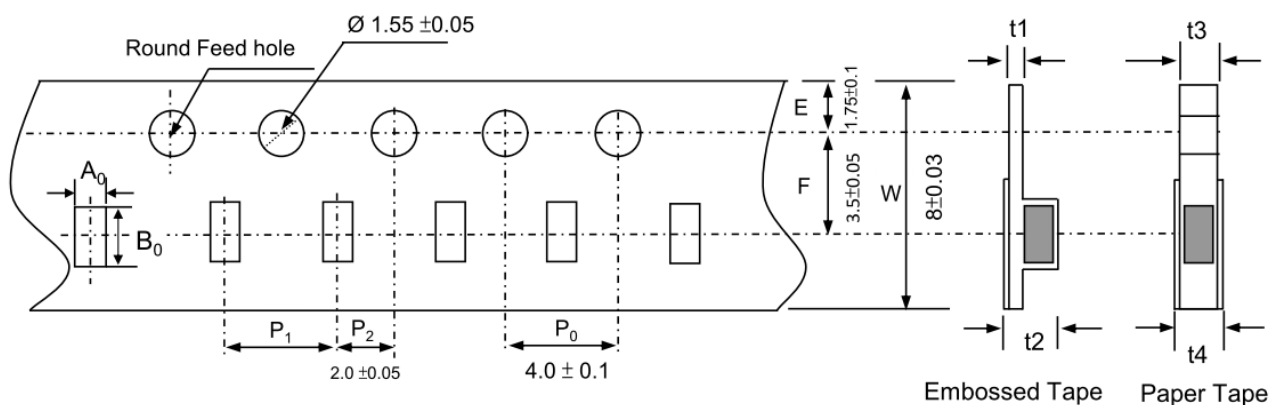
| Part No. | Zero Power Resistance at 25°C | Tolerance of R25 | B 25/85 Value | Tolerance of B Value | Dissipation Factor | Thermal Time Constant | Max. Power Rating at 25°C | Safety Approvals |
|---------------|-------------------------------|------------------|---------------|----------------------|--------------------|-----------------------|---------------------------|------------------|
| | R 25 (Ω) | (± %) | (K) | (± %) | δ(mW/°C) | τ(sec.) | (mW) | |
| JSNB103X344YB | 10,000 | 10,5,3,2,1 | 3435 | 5,3,2,1 | Approx. 2.1 | Approx. 3.1 | 210 | ■ ■ |
| JSNB104X405YB | 100,000 | 10,5,3,2,1 | 4050 | 5,3,2,1 | Approx. 2.1 | Approx. 3.1 | 210 | ■ |
| JSNC103X344YB | 10,000 | 10,5,3,2,1 | 3435 | 5,3,2,1 | Approx. 2.4 | Approx. 7.5 | 240 | ■ |
| JSNC104X405YB | 100,000 | 10,5,3,2,1 | 4050 | 5,3,2,1 | Approx. 2.4 | Approx. 7.5 | 240 | ■ ■ |

※ X : R Tolerance, Y : B Value Tolerance



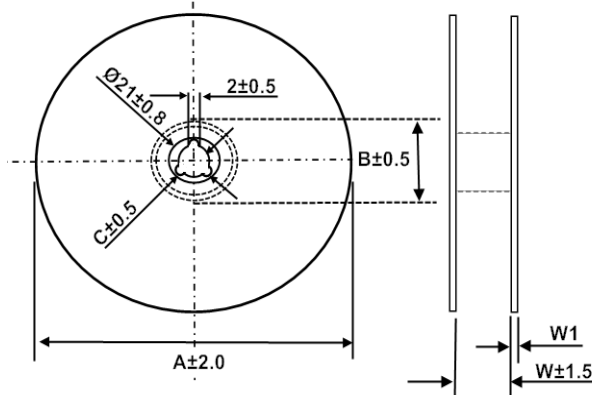
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Packing



Dimension of Paper Tape

| Size | $A_0 \pm 0.1$ (mm) | $B_0 \pm 0.1$ (mm) | $P_1 \pm 0.1$ (mm) | $t1 / t2$ (mm) | Quantity / Reel(Pcs) |
|-------------|--------------------|--------------------|--------------------|-----------------|----------------------|
| JSNB (0603) | 1.10 | 1.90 | 4 | 1.0max / 1.1max | 4000 |
| JSNC (0805) | 1.50 | 2.35 | 4 | 1.0max / 1.1max | 4000 |



Reel Specification

Unit in mm

| Size | A | B | C | W | W_1 |
|-------------|-----|----|----|----|-------|
| JSNB (0603) | 178 | 60 | 13 | 10 | 1.6 |
| JSNC (0805) | 178 | 60 | 13 | 10 | 1.6 |