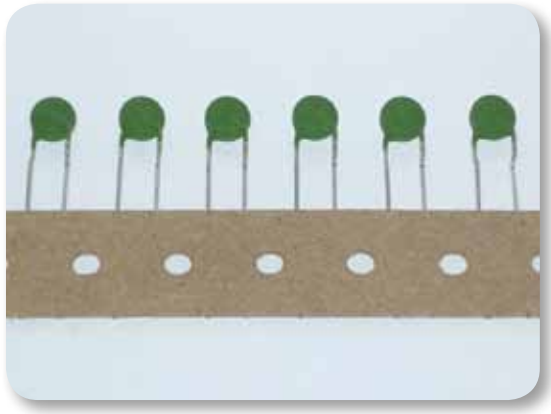
THERMOMETRICS
A COMMITMENT TO EXCELLENCE

# Type YQ Series

## Thermometrics RoHS-Compliant PTC Thermistors



### Features

- A range of radially-wired PTC disc thermistors with green silicone resin coating
- Designed for general purpose over-current, over-voltage and direct over-temperature protection
- Wide range of operating current and voltage levels
- Excellent stability
- Fail-safe operation
- Solid state
- High performance barium titanate ceramic
- Suitable for automatic PCB insertion insulated lead wires

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# Packaging

All types in the YQ range are available loose-packed, as shown in the drawing. Devices are also available on bandolier (tape & reel): types with diameter A<12mm comply with IEC 286-2. To identify the tape & reel packaging required, replace N in the product codes shown in the table as follows:

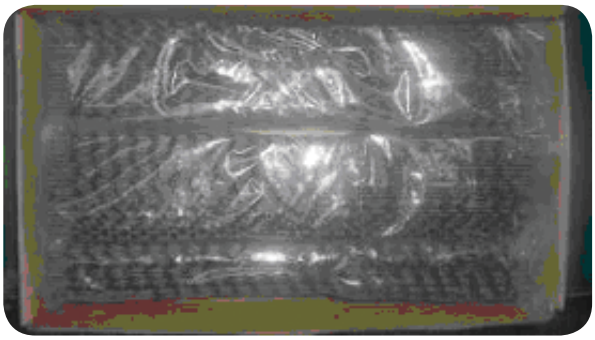
Bandoliered T

Loose-packed N

## Packing Method (Reference Only)

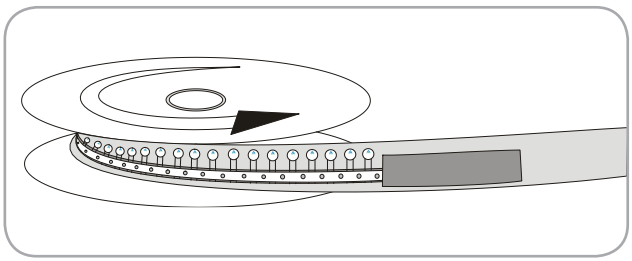
### Loose pack (N)

| | |
|---|---|
| D ≤ 5 mm | 2500 PCS/box |
| 5mm< D≤8mm | 2000 PCS/box |
| 8mm< D≤10mm | 1500 PCS/box |
| 10mm< D≤13mm | 750 PCS/box |
| D> 13mm | 500 PCS/box |

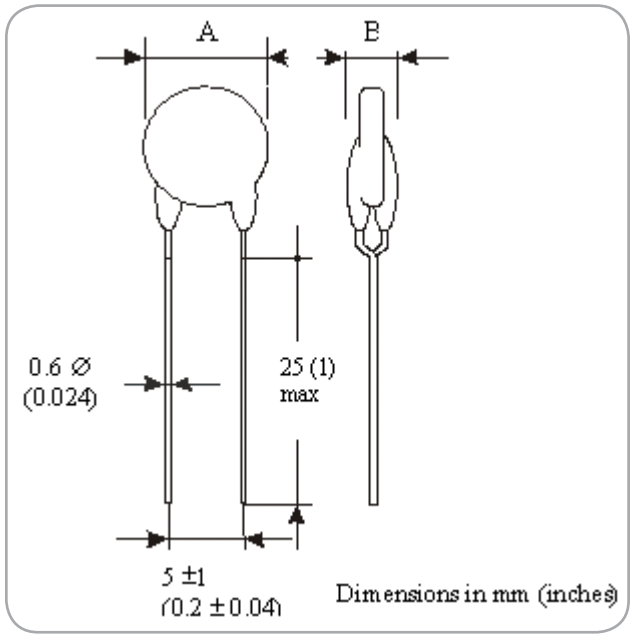


### Tape and reel pack (T)

| | | |
|---|---|---|
| D ≤ 5mm | 1500PCS/box | Tape and reel pack form |
| 5mm< D≤8mm | 1000PCS/box | Tape and reel pack form |
| 8mm< D≤10mm | 750PCS/box | Tape and reel pack form |
| 10mm< D≤13mm | 500PCS/box | Tape and reel pack form |
| D>13mm | 375 PCS/box | folding form |



Tape and Reel Form




Type TQ Dimensions

# Type YQ Specifications

### Tolerance on R25

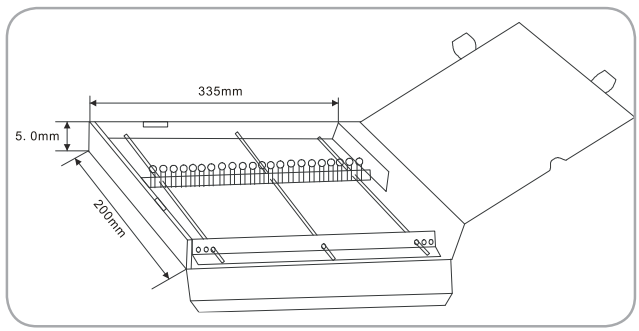
±25%

### Ambient temperature range

at maximum voltage 0° to +60°C
at zero voltage -25° to +125°C

### Lead wire material

Tin-coated copper Body coating
Green Silicone resin




Folding Form

# Ordering Information

| Group | Code | R25 (Ω) | Int (A) | It (A) | Imo (A) | A max | | B max | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | mm | inch | mm | inch |
| 265Vrms Tb=120°C | YQD120N0006 | 6 | 0.39 | 0.78 | 3.1 | 17.5 | 0.69 | 5 | 0.2 |
| | YQD120N0010 | 10 | 0.25 | 0.5 | 1.8 | 13.5 | 0.53 | 5 | 0.2 |
| | YQD120N0015 | 15 | 0.18 | 0.35 | 1.2 | 11 | 0.43 | 5 | 0.2 |
| | YQD120N0025 | 25 | 0.13 | 0.25 | 0.8 | 9 | 0.35 | 5 | 0.2 |
| | YQD120N0045 | 45 | 0.105 | 0.2 | 0.8 | 9 | 0.35 | 5 | 0.2 |
| | YQD120N0055 | 55 | 0.09 | 0.18 | 0.8 | 9 | 0.35 | 5 | 0.2 |
| | YQD120N0070 | 70 | 0.065 | 0.13 | 0.3 | 6.5 | 0.26 | 5 | 0.2 |
| | YQD120N0120 | 120 | 0.035 | 0.08 | 0.3 | 6.5 | 0.26 | 5 | 0.2 |
| 265Vrms Tb=100°C | YQD100N0150 | 150 | 0.038 | 0.08 | 0.3 | 6.5 | 0.26 | 5 | 0.2 |
| | YQD100N0300 | 300 | 0.027 | 0.055 | 0.3 | 6.5 | 0.26 | 5 | 0.2 |
| | YQD100N0600 | 600 | 0.02 | 0.04 | 0.2 | 6.5 | 0.26 | 5 | 0.2 |
| | YQD100N1000 | 1000 | 0.015 | 0.03 | 0.2 | 6.5 | 0.26 | 5 | 0.2 |
| 265Vrms Tb=80°C | YQD080N0025 | 25 | 0.085 | 0.17 | 0.8 | 9 | 0.35 | 5 | 0.2 |
| | YQD080N0050 | 50 | 0.06 | 0.12 | 1 | 9 | 0.35 | 5 | 0.2 |
| | YQD080N0100 | 100 | 0.05 | 0.1 | 0.6 | 8 | 0.32 | 5 | 0.2 |
| | YQD080N0150 | 150 | 0.022 | 0.045 | 0.2 | 4.5 | 0.18 | 5 | 0.2 |
| 140Vrms Tb=120°C | YQC120N4.70 | 4.7 | 0.425 | 0.85 | 3.1 | 17.5 | 0.69 | 5 | 0.2 |
| | YQC120N5.60 | 5.6 | 0.4 | 0.8 | 3.1 | 17.5 | 0.69 | 5 | 0.2 |
| | YQC120N6.80 | 6.8 | 0.3 | 0.6 | 1.8 | 13.5 | 0.53 | 5 | 0.2 |
| | YQC120N0010 | 10 | 0.225 | 0.45 | 1.2 | 11 | 0.43 | 5 | 0.2 |
| | YQC120N0022 | 22 | 0.135 | 0.27 | 0.8 | 9 | 0.35 | 5 | 0.2 |
| | YQC120N0033 | 33 | 0.09 | 0.175 | 0.3 | 6.5 | 0.26 | 5 | 0.2 |
| 80Vdc 60Vrms Tb=120°C | YQB120N2.30 | 2.3 | 0.55 | 1.1 | 8 | 17.5 | 0.69 | 4 | 0.16 |
| | YQB120N3.70 | 3.7 | 0.38 | 0.75 | 5.5 | 13.5 | 0.53 | 4 | 0.16 |
| | YQB120N5.60 | 5.6 | 0.3 | 0.6 | 4.3 | 11 | 0.43 | 4 | 0.16 |
| | YQB120N9.40 | 9.4 | 0.18 | 0.36 | 3 | 9 | 0.35 | 4 | 0.16 |
| | YQB120N0025 | 25 | 0.1 | 0.2 | 1 | 6.5 | 0.26 | 4 | 0.16 |
| | YQB120N0055 | 55 | 0.06 | 0.12 | 0.7 | 4 | 0.16 | 3.5 | 1.4 |
| 30Vrms Tb=120°C | YQA120N1.20 | 1.2 | 0.75 | 1.5 | 5.5 | 13.5 | 0.53 | 4 | 0.16 |
| | YQA120N1.8L | 1.8 | 0.5 | 1 | 5.5 | 13.5 | 0.53 | 4 | 0.16 |
| | YQA120N1.80 | 1.8 | 0.55 | 1 | 3 | 9 | 0.35 | 4 | 0.16 |
| | YQA120N4.2 | 4.2 | 0.28 | 0.56 | 3 | 9 | 0.35 | 4 | 0.16 |
| | YQA120N0010 | 10 | 0.17 | 0.34 | 1 | 6.5 | 0.26 | 4 | 0.16 |
| 18Vrms Tb=120°C | YQZ120N1.00 | 1 | 0.65 | 1.2 | 3 | 9 | 0.35 | 4 | 0.16 |
| | YQZ120N1.20 | 1.2 | 0.7 | 1.4 | 4.3 | 11 | 0.43 | 4 | 0.16 |
| | YQZ120N1.80 | 1.8 | 0.55 | 1 | 3 | 9 | 0.35 | 4 | 0.16 |
| | YQZ120N4.60 | 4.6 | 0.3 | 0.58 | 1 | 6.5 | 0.26 | 4 | 0.16 |
| | YQZ120N0013 | 13 | 0.14 | 0.28 | 0.7 | 4.5 | 0.18 | 4 | 0.16 |

| | | | |
|---|---|---|---|
| $V_{max}$ | Maximum operating voltage | $R_{25}$ | Resistance at 25°C |
| $T_b$ | Switching temperature | $I_{mo}$ | Maximum overload current |
| $I_{nt}$ | Maximum current without tripping (25°C ambient) | $I_t$ | Minimum trip current (25°C ambient) |

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