

QTS16 PTC RADIAL LEADED THERMISTORS

The QTS16 Series features precision PTC thermistors encapsulated in epoxy beads, with a radial lead configuration.



ENGINEERING INFORMATION

- Resistance values from 22 to 5.6k ohms
- Positive Temperature Coefficient: 0.7%/°C
- Operating temp range: -55°C to 125°C
- Storage temp range: -65°C to 150°C
- Typical Dissipation Constant: 1.25mW/°C in still air
- Thermal Time Constant: 10 seconds max in still air
- Power rating: 0.125 W at 25°C max, derate to 0 W at 125°C



Table 1: Derating curve for high ambient temps

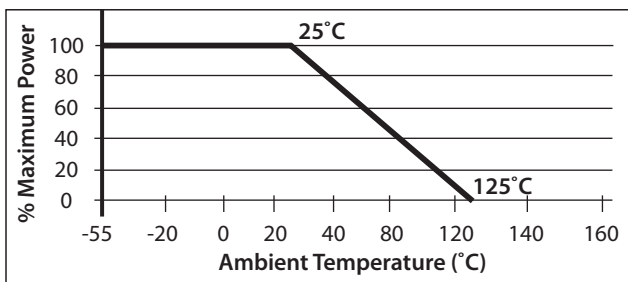


Table 2: Factors for determining resistance at various temps

| Temp (°C) | 22-27 Ω | 33-68 Ω | 82-330 Ω | 390-2.7k Ω | 3.3k-5.62k Ω |
|-----------|---------|---------|----------|------------|--------------|
| -55°C | 0.552 | 0.519 | 0.493 | 0.481 | 0.493 |
| -15°C | 0.739 | 0.728 | 0.716 | 0.709 | 0.717 |
| 0°C | 0.830 | 0.822 | 0.813 | 0.810 | 0.816 |
| 25°C | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 50°C | 1.190 | 1.201 | 1.208 | 1.211 | 1.205 |
| 75°C | 1.408 | 1.441 | 1.441 | 1.446 | 1.430 |
| 100°C | 1.651 | 1.669 | 1.706 | 1.709 | 1.660 |
| 125°C | 1.908 | 1.940 | 1.993 | 1.983 | 1.862 |

Table 3: Resistance tolerance at temps other than 25°C

| Temp (°C) | F % (+/-) | G % (+/-) | J % (+/-) | K % (+/-) |
|-----------|-----------|-----------|-----------|-----------|
| -55°C | 15 | 17 | 20 | 25 |
| -15°C | 9 | 10 | 13 | 18 |
| 0°C | 3 | 4 | 7 | 12 |
| 25°C | 1 | 2 | 5 | 10 |
| 50°C | 3 | 4 | 7 | 12 |
| 75°C | 5 | 6 | 9 | 14 |
| 100°C | 7 | 9 | 12 | 17 |
| 125°C | 10 | 12 | 15 | 20 |

QTI can customize this part for you. Contact us for available options.

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