

Type CJT Series

Key Features

- Modular versions available
- Environmental protection to IP54
- Up to 2000W power rating
- Aluminium enclosure
- Vibration resistant

Applications

- Power supplies
- Inverters
- Servo systems
- Electrical systems in difficult environments



TE Connectivity (TE) is a leading supplier of standard and custom-designed power resistors for industrial, control and general-purpose applications. The CJT Series of resistors are advantageous to conventional ceramic resistors in the terms of weather proofing, oscillation-resistance and safety. They are widely applied to a range of electrical circuits including power supplies, inverters and servo systems. With easy airtight fitting and the ability to fit a heatsink the resistor is highly suited to challenging environmental conditions.

Characteristics - Electrical

| Type | CJT60 | CJT80 | CJT100 | CJT120 | CJT150 | CJT200 | CJT300 |
|---|-------------------|-------|--------|--------|--------|--------|--------|
| Rated Power in Free Air (W) | 60 | 80 | 100 | 120 | 150 | 200 | 300 |
| Ohmic Value - Min | 1R0 | | | | | | |
| Ohmic Value Max | 2K7 | | | | | | |
| Tolerance | 5% | | | | | | |
| Temp. Coefficient of Resistance | 440ppm | | | | | | |
| Resistor Element Max Working Voltage | 1kV | | | | | | |
| Dielectric Voltage | AC2.5kV/1min 50Hz | | | | | | |
| Insulation Resistance (Megohm) | R≥100MΩ | | | | | | |
| Max. Surface Temp. at Rated Power Free Air (°C) | 206°C | 221°C | 254°C | 267°C | 286°C | 306°C | 334°C |
| Weight | 150g | 185g | 240g | 280g | 300g | 445g | 600g |
| Termination | Lead | | | | | | |
| Lead Length | 500mm | | | | | | |
| Lead Diameter | 1.5mm | | | | | | |
| Terminal Creep Distance | n/a | | | | | | |

| Type | CJT400 | CJT500 | CJT800 | CJT1000 | CJT1200 | CJT1500 | CJT2000 |
|---|-------------------|--------|--------|---------------|---------|---------|---------|
| Rated Power in Free Air (W) | 400 | 500 | 800 | 1000 | 1200 | 1500 | 2000 |
| Ohmic Value - Min | 1R0 | | | | | | |
| Ohmic Value Max | 2K7 | | | | | | |
| Tolerance | 5% | | | | | | |
| Temp. Coefficient of Resistance | 440ppm | | | | | | |
| Resistor Element Max Working Voltage | 1kV | | | | | | |
| Dielectric Voltage | AC2.5kV/1min 50Hz | | | | | | |
| Insulation Resistance (Megohm) | R≥100MΩ | | | | | | |
| Max. Surface Temp. at Rated Power Free Air (°C) | 370°C | 358°C | 311°C | 372°C | 406°C | 419°C | 453°C |
| Weight | 765g | 965g | 1.18kg | 3.46kg | 3.885kg | 4.31kg | 4.89kg |
| Termination | Lead | | | Lead/Terminal | | | |
| Lead Length | 500mm | | | | | | |
| Lead Diameter | 1.5mm | | | 4mm | | | |
| Terminal Creep Distance | n/a | | 30mm | 42mm | 42mm | 42mm | 42mm |

Type CJT Series

Derating Curve



Temperature Rise



Dimensions - CJT Series



| Rated Power (W) | Dimensions (mm) | | | |
|-----------------|-----------------|-----|----|-----|
| | A | B | C | D |
| 60 | 115 | 98 | 40 | 20 |
| 80 | 140 | 123 | 40 | 20 |
| 100 | 165 | 148 | 40 | 20 |
| 120 | 190 | 173 | 40 | 20 |
| 150 | 215 | 197 | 40 | 20 |
| 200 | 165 | 147 | 60 | 30 |
| 300 | 215 | 197 | 60 | 30 |
| 400 | 265 | 247 | 60 | 30 |
| 500 | 335 | 317 | 60 | 30 |
| 800 | 400 | 382 | 61 | 59 |
| 1000 | 400 | 384 | 50 | 107 |
| 1200 | 450 | 434 | 50 | 107 |
| 1500 | 485 | 470 | 50 | 107 |
| 2000 | 550 | 532 | 50 | 107 |

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Dimensions - CJTM Series



| Type | Rated Power (W) | Resistance (Ω) | | Dimensions (mm) | | | | | | Connecting Wire (mm ²) | Lead Length (mm) |
|--------|-----------------|----------------|------|-----------------|-----|-----|-----|----|----|------------------------------------|------------------|
| | | Min | Max | A | A1 | B | B1 | G | H | | |
| CJTM1U | 200 | 1 | 2K7 | 268 | 253 | 64 | 30 | 20 | 54 | 2.5 | 500 |
| CJTM1U | 300 | 1 | 2K7 | 318 | 303 | 64 | 30 | 20 | 54 | 2.5 | 500 |
| CJTM1U | 400 | 1 | 2K7 | 368 | 353 | 64 | 30 | 20 | 54 | 2.5 | 500 |
| CJTM1U | 500 | 1 | 2K7 | 438 | 423 | 64 | 30 | 20 | 54 | 2.5 | 500 |
| CJTM1U | 600 | 1 | 2K7 | 503 | 488 | 64 | 30 | 20 | 54 | 2.5 | 500 |
| CJTM2U | 800 | 2 | 5K4 | 372 | 355 | 84 | 49 | 20 | 84 | 2.5 | 500 |
| CJTM2U | 1000 | 2 | 5K4 | 442 | 425 | 84 | 49 | 20 | 84 | 2.5 | 500 |
| CJTM2U | 1200 | 2 | 5K4 | 507 | 490 | 84 | 49 | 20 | 84 | 2.5 | 500 |
| CJTM3U | 1200 | 3 | 8K1 | 372 | 355 | 134 | 75 | 20 | 84 | 2.5 | 500 |
| CJTM3U | 1500 | 3 | 8K1 | 442 | 425 | 134 | 75 | 20 | 84 | 2.5 | 500 |
| CJTM3U | 1800 | 3 | 8K1 | 507 | 490 | 134 | 75 | 20 | 84 | 2.5 | 500 |
| CJTM4U | 1600 | 4 | 10K8 | 372 | 355 | 184 | 125 | 20 | 84 | 2.5 | 500 |
| CJTM4U | 2000 | 4 | 10K8 | 442 | 425 | 184 | 125 | 20 | 84 | 4 | 500 |
| CJTM4U | 2400 | 4 | 10K8 | 507 | 490 | 184 | 125 | 20 | 84 | 4 | 500 |
| CJTM5U | 2000 | 5 | 13K5 | 372 | 355 | 234 | 175 | 20 | 84 | 4 | 500 |
| CJTM5U | 2500 | 5 | 13K5 | 442 | 425 | 234 | 175 | 20 | 84 | 4 | 500 |
| CJTM5U | 3000 | 5 | 13K5 | 507 | 490 | 234 | 175 | 20 | 84 | 4 | 500 |

How to Order

| | | | | |
|---|---|---|---|--------------------------|
| CJT | 60 | 1K0 | J | J |
| Common Part | Power Rating | Resistance Value | Tolerance | Connection |
| CJT - Single Aluminium Housed Power Resistors | 60 - 60 Watt 80 - 80 Watt 100 - 100 Watt 120 - 120 Watt etc. | 1 Ohm (1000 Milliohms) 1R0 10 Ohms (10 Ohms) 10R 100R Ohms (100 Ohms) 100R 1k Ohms (1000 Ohms) 1K0 | J - ±5% | M - Terminal J - Lead |
| CJTM | 1U | 200 | 1R0 | J |
| Common Part | No. of Units | Power Rating | Resistance Value | Tolerance |
| CJTM - Multi Aluminium Housed Power Resistors | 1U - 1 Unit 2U - 2 Units 3U - 3 Units 4U - 4 Units 5U - 5 Units | 200 to 3000 Watts | 1 Ohm (1000 Milliohms) 1R0 10 Ohms (10 Ohms) 10R 100R Ohms (100 Ohms) 100R 1k Ohms (1000 Ohms) 1K0 | J - ±5% K - ±10% |

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