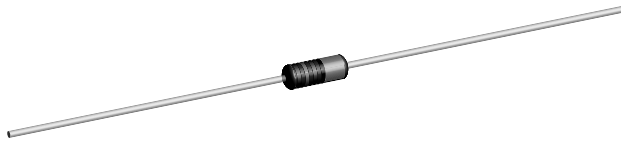


Metal Film Resistors, Industrial, $\pm 2\%$ and $\pm 5\%$ Tolerance



FEATURES

- 0.25 watt at + 70°C power rating. Dual rated for 0.5 watt.
- $\pm 2\%$ and $\pm 5\%$ tolerance
- $\pm 100\text{ppm}/^\circ\text{C}$ and $\pm 200\text{ppm}/^\circ\text{C}$ temperature coefficient
- Tape and reel packaging for automatic insertion (52.4mm inside tape spacing per EIA-296-E).
- Flame retardant epoxy conformal coating
- Standard 4 band color code marking for ease of identification after mounting

STANDARD ELECTRICAL SPECIFICATIONS

| MODEL | POWER RATING $P_{70^\circ\text{C}}$ W | LIMITING ELEMENT VOLTAGE MAX. V_{\cong} | TEMPERATURE COEFFICIENT $\text{ppm}/^\circ\text{C}$ | TOLERANCE % | RESISTANCE RANGE Ω | E-SERIES |
|--------|---|---|---|------------------|------------------------------|----------|
| CCF-07 | 0.25 / 0.5 | 250 | ± 100 | $\pm 2, \pm 5\%$ | 10R - 1M | 24 |
| CCF-07 | 0.25 / 0.5 | 250 | ± 200 | ± 5 | 1.1M - 2M | 24 |

TECHNICAL SPECIFICATIONS

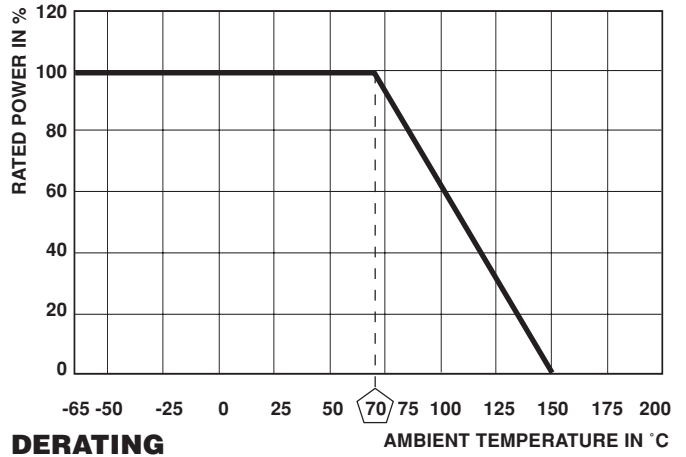
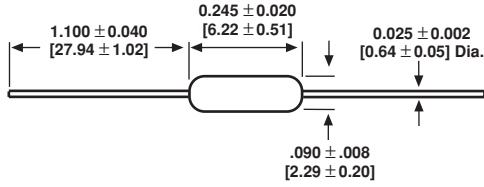
| PARAMETER | UNIT | CCF-07 |
|-------------------------------|------------------|----------------|
| Rated Dissipation at 70°C | W | 0.25 / 0.5 |
| Maximum Working Voltage | V_{\cong} | ≤ 250 |
| Insulation Voltage (1min) | V_{eff} | 500 |
| Dielectric Strength | VAC | 450 |
| Insulation Resistance | Ω | $\geq 10^{11}$ |
| Operating Temperature Range | $^\circ\text{C}$ | -65 / +150 |
| Terminal Strength (pull test) | lb | 2 |
| Weight | g | 0.35 max |

ORDERING INFORMATION

| CCF-07 MODEL | 241 RESISTANCE | G TOLERANCE |
|-----------------|---|--------------------------------|
| | First two digits are significant figures. Last digit specifies the number of zeros to follow. | G = $\pm 2\%$ J = $\pm 5\%$ |



DIMENSIONS in inches [millimeters]



| MARKING | |
|-------------|--|
| — Colorband | |

| RESISTANCE VALUES | | | |
|--|----|----|----|
| Vishay Dale Model CCF-07 is available in the standard 24 resistance values per decade. Values are obtained from the following decade table by multiplying by powers of 10. As an example: 24 can represent 24 ohm, 240 ohm, 2.4 kilohm, 24 kilohm or 240 kilohm. | | | |
| 10 | 18 | 33 | 56 |
| 11 | 20 | 36 | 62 |
| 12 | 22 | 39 | 68 |
| 13 | 24 | 43 | 75 |
| 15 | 27 | 47 | 82 |
| 16 | 30 | 51 | 91 |

| PERFORMANCE | |
|---------------------------------|-----------------------------|
| TEST* | MAX. ΔR (Typical Test Lots) |
| Thermal Shock | ± 1.0% |
| Short Time Overload | ± 0.5% |
| Low Temperature Operation | ± 0.5% |
| Moisture Resistance | ± 1.5% |
| Resistance to Soldering Heat | ± 0.5% |
| Shock | ± 0.5% |
| Vibration | ± 0.5% |
| Terminal Strength | ± 0.5% |
| Dielectric Withstanding Voltage | ± 0.5% |
| Life | ± 1.5%** |

* Test Methods per MIL-STD-202.
 ** Life ΔR is ± 2.0% for 1/2 watt rating.