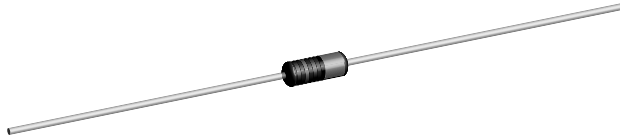


# Metal Film Resistors, Industrial, ± 2 % and ± 5 % Tolerance



## FEATURES

- 0.25 watt at + 70 °C power rating  
Dual rated for 0.5 watt
- ± 2 % and ± 5 % tolerance
- ± 100 ppm/°C and ± 200 ppm/°C temperature coefficient
- Tape and reel packaging for automatic insertion (52.4 mm inside tape spacing per EIA-296-E)
- Flame retardant epoxy conformal coating
- Standard 4 band color code marking for ease of identification after mounting
- Lead-(Pb)-free version is RoHS compliant



RoHS\*  
COMPLIANT

## STANDARD ELECTRICAL SPECIFICATIONS

GLOBAL MODEL	HISTORICAL MODEL	POWER RATING P <sub>70 °C</sub> W	LIMITING ELEMENT VOLTAGE MAX. V <sub>≅</sub>	TEMPERATURE COEFFICIENT ppm/°C	TOLERANCE %	RESISTANCE RANGE Ω	E-SERIES
CCF07	CCF-07	0.25 / 0.5	250	± 100	± 2, ± 5	10R - 1M	24
CCF07	CCF-07	0.25 / 0.5	250	± 200	± 5	1.1M - 2M	24

## TECHNICAL SPECIFICATIONS

PARAMETER	UNIT	CCF07
Rated Dissipation at 70 °C	W	0.25 / 0.5
Maximum Working Voltage	V <sub>≅</sub>	≤ 250
Insulation Voltage (1 min)	V <sub>eff</sub>	500
Dielectric Strength	VAC	450
Insulation Resistance	Ω	≥ 10 <sup>11</sup>
Operating Temperature Range	°C	- 65 / + 150
Terminal Strength (pull test)	lb	2
Weight	g	0.35 max

## GLOBAL PART NUMBER INFORMATION

New Global Part Numbering: CCF07240RGK R36 (preferred part numbering format)



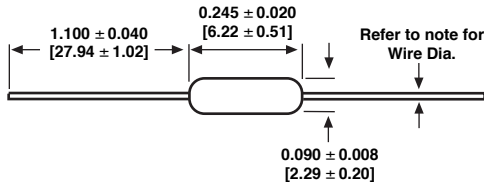
GLOBAL MODEL	RESISTANCE VALUE	TOLERANCE CODE	TEMPERATURE COEFFICIENT	PACKAGING	SPECIAL
CCF07	R = Decimal K = Thousand M = Million 10R0 = 10 Ω 680K = 680K Ω 2M00 = 2.0M Ω	G = ± 2 % J = ± 5 %	K = 100 ppm N = 200 ppm	E36 = Lead free, T/R (5000 pcs) R36 = Tin/Lead, T/R (5000 pcs)	Blank = Standard (Dash Number) (up to 3 digits) from 1-999 as applicable

Historical Part Number example: CCF-07241G (will continue to be accepted)



\* Pb containing terminations are not RoHS compliant, exemptions may apply

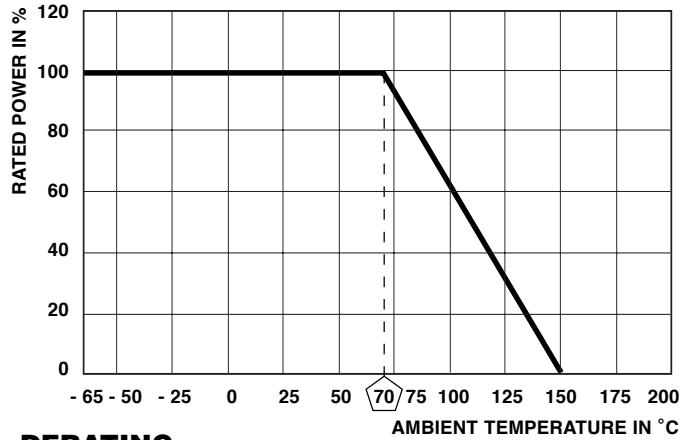
**DIMENSIONS** in inches [millimeters]



\*Note: Wire Dia.

CCF07 (Sn/Pb) = 0.025 ± 0.002 [0.64 ± 0.05]

CCF07 (Sn) = 0.023 ± 0.002 [0.60 ± 0.05]



MARKING	
- Color band	

RESISTANCE VALUES			
Vishay Dale Model CCF07 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 kohm, 24 kohm or 240 kohm.			
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 / Bump	± 0.5 %
Vibration	± 0.5 %
Terminal Strength	± 0.5 %
Dielectric Withstanding Voltage	± 0.5 %
Life	± 1.5 %**

\* Test Methods per MIL-STD-202G/IEC 60115/DIN EN 140000 (as applicable).

\*\* Life ΔR is ± 2.0 % for 1/2 watt rating.



## Disclaimer

All product specifications and data are subject to change without notice.

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