Vishay



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



FEATURES

• Dual power rating: $P_{70} = 0.25$ W with 1.5 % stability $P_{70} = 0.50$ W with 2.0 % stability

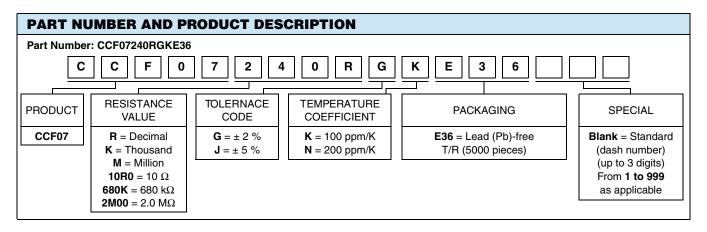


• \pm 2 % and \pm 5 % tolerance

- Temperature coefficient: ± 100 ppm/K and ± 200 ppm/K
- Tape and reel packaging for automatic insertion (52.4 mm inside tape spacing per EIA-296-E)
- Flame retardant epoxy conformal coating (red brown color)
- Standard 4 band color code marking for ease of identification after mounting
- Pure tin plating provides compatibility with lead (Pb)-free and lead containing soldering processes
- Compliant to RoHS directive 2002/95/EC

STANDARD ELECTRICAL SPECIFICATIONS								
PRODUCT	RATED DISSIPATION P ₇₀ W	LIMITING ELEMENT VOLTAGE MAX. V≅	TEMPERATURE COEFFICIENT ppm/K	TOLERANCE %	RESISTANCE RANGE Ω	E-SERIES		
CCF07	0.25/0.5	250	± 100	± 2, ± 5	10 Ω to 1 M Ω	E24		
CCF07	0.25/0.5	250	± 200	± 5	1.1 M Ω to 2 M Ω	E24		

TECHNICAL SPECIFICATIONS					
PARAMETER	UNIT	CCF07			
Rated Dissipation, P ₇₀	W	0.25/0.5			
Maximum Working Voltage, Umax.	V≅	≤ 250			
Insulation Voltage (1 Min)	V _{eff}	500			
Dielectric Strength	V _{AC}	450			
Insulation Resistance	Ω	≥ 10 ¹¹			
Operating Temperature Range	°C	- 65 to + 150			
Terminal Strength (Pull Test)	Ib	2			
Weight	g	0.35 max.			



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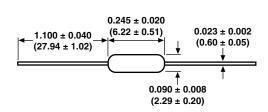
For technical questions, contact: filmresistorsleaded@vishav.com

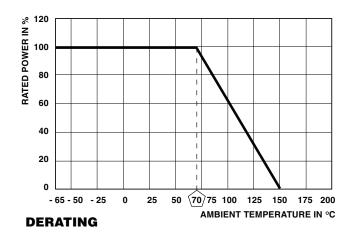
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DIMENSIONS in inches (millimeters)





MARKING

The nominal resistance and tolerance are marked on the resistor using four colored bands in accordance with IEC 60062, marking codes for resistors and capacitors.

RESISTANCE VALUES

Vishay 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 Ω , 240 Ω , 2.4 k Ω , 24 k Ω or 240 k Ω .

multiplying by powers of 10. As an example, 24 can represent 24 st, 240 st, 2.4 ks2 of 240 ks2.				
10	18	33	56	
11	20	36	62	
12	22	39	68	
13	24	43	75	
15	27	47	82	
16	30	51	91	

TECHNICAL SPECIFICATIONS				
TEST (1)	Max. ∆R (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 % ⁽²⁾			

Notes

(1) Test specifications as per IEC 60115-1

 $^{(2)}$ Life ΔR is ± 2.0 % for 1/2 W rating

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