

Metal Film Leaded 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

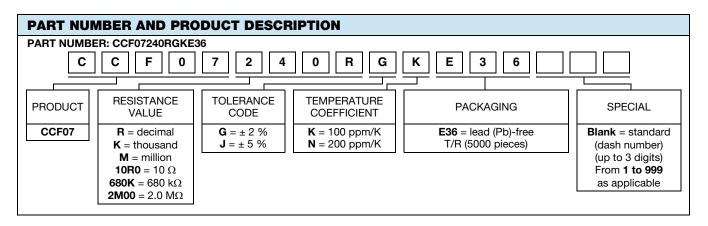


RoHS COMPLIANT

- ± 2 % and ± 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
- Material categorization: for definitions of compliance please see <u>www.vishav.com/doc?99912</u>

STANDARD ELECTRICAL SPECIFICATIONS						
PRODUCT	POWER RATING P ₇₀ W	LIMITING ELEMENT VOLTAGE MAX.	TEMPERATURE COEFFICIENT ± ppm/K	TOLERANCE ± %	$\begin{array}{c} \textbf{RESISTANCE} \\ \textbf{RANGE} \\ \Omega \end{array}$	E-SERIES
CCF07	0.25	250	100	2, 5	10 to 1M	E24
CCF07	0.5	250	100	2, 5	10 to 1M	E24
CCF07	0.25	250	200	5	1.1M to 2M	E24
CCF07	0.5	250	200	5	1.1M to 2M	E24

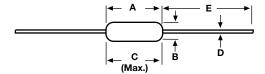
TECHNICAL SPECIFICATIONS				
PARAMETER	UNIT	CCF07		
Rated Dissipation, P ₇₀	W	0.25/0.5		
Maximum Working Voltage, U _{max.}	V≅	≤ 250		
Insulation Voltage (1 min)	V _{eff}	500		
Dielectric Strength	V _{AC}	450		
Insulation Resistance	Ω	≥ 10 ¹¹		
Operating Temperature Range	°C	-65 to +150		
Terminal Strength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



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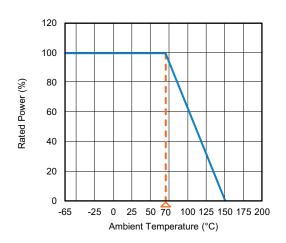


DIMENSIONS in inches (millimeters)



PRODUCT	Α	В	C (Max.)	D	E
CCF07	0.245 ± 0.020	0.090 ± 0.008	0.295	0.022 ± 0.002	1.100 ± 0.040
	(6.22 ± 0.51)	(2.29 ± 0.20)	(7.5)	(0.58 ± 0.05)	(27.94 ± 1.02)

DERATING



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 .

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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 (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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