

Metal Film Resistors, Industrial, ± 1 % and ± 5 % Tolerance



FEATURES

- 0.33 W power rating
- ± 100 ppm/°C standard, ± 50 ppm/°C available upon request
- Superior electrical performance
- Flame retardant epoxy conformal coating
- Standard 4 or 5 band color code marking for ease of identification after mounting
- Tape and reel packaging for automatic insertion (52.4 mm inside tape spacing per EIA-296-E)
- Lead (Pb)-free version is RoHS compliant



RoHS*
COMPLIANT

STANDARD ELECTRICAL SPECIFICATIONS							
GLOBAL MODEL	HISTORICAL MODEL	POWER RATING $P_{70^{\circ}\text{C}}$ W	LIMITING ELEMENT VOLTAGE MAX. V_{\equiv}	TEMPERATURE COEFF. (1) ppm/°C	TOLERANCE %	RESISTANCE RANGE Ω	E-SERIES
CCF50	CCF-50	0.33	200	± 100	± 1, ± 5	10R - 1M	96 for 1 % 24 for 5 %

Note:

(1) 50 ppm/°C on request

TECHNICAL SPECIFICATIONS		
PARAMETER	UNIT	CCF50
Rated Dissipation at 70 °C	W	0.33
Maximum Working Voltage	V_{\equiv}	≤ 200
Insulation Voltage (1 Min)	V_{eff}	> 500
Dielectric Strength	V_{AC}	450
Insulation Resistance	Ω	≥ 10 ¹¹
Operating Temperature Range	°C	- 65 to + 165
Weight	g	0.11 max.

GLOBAL PART NUMBER INFORMATION

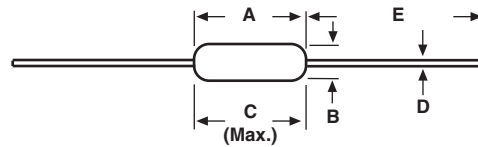
New Global Part Numbering: CCF50301RFK R 3 6 [] [] [] (preferred part numbering format)

C	C	F	5	0	3	0	1	R	F	K	R	3	6	[]	[]	[]
GLOBAL MODEL		RESISTANCE VALUE				TOLERANCE CODE		TEMPERATURE COEFFICIENT		PACKAGING			SPECIAL			
CCF50		R = Decimal K = Thousand M = Million 10R0 = 10 Ω 680K = 680 k Ω 1M00 = 1.0 M Ω				F = ± 1 % J = ± 5 %		H = 50 ppm K = 100 ppm		E36 = Lead (Pb)-free, T/R (5000 pieces) R36 = Tin/Lead, T/R (5000 pieces)			Blank = Standard (Dash Number) (up to 3 digits) From 1 - 999 as applicable			

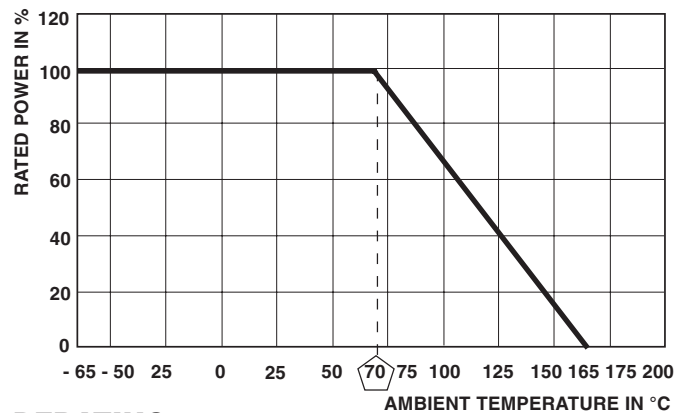
Historical Part Number example: CCF-503010F (will continue to be accepted)

CCF-50	3010	F	R36
HISTORICAL MODEL	RESISTANCE VALUE	TOLERANCE CODE	PACKAGING

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

DIMENSIONS in inches [millimeters]


DIMENSION	INCHES	MILLIMETERS
A	0.133 ± 0.010	[3.3 \pm 0.025]
B	0.062 ± 0.004	[1.57 \pm 0.10]
C (Max.)	0.143	[3.63]
D	0.020 ± 0.002	[0.51 \pm 0.05]
E	1.125 ± 0.040	[28.58 \pm 1.02]


DERATING
MARKING

- 5 band colorband for $\pm 1\%$
- 4 band colorband for $\pm 5\%$

PERFORMANCE

TEST (1)	TYPICAL ΔR
Thermal Shock	$\pm 0.1\%$
Short Time Overload	$\pm 0.1\%$
Low Temperature Operation	$\pm 0.1\%$
Moisture Resistance	$\pm 0.2\%$
Resistance to Soldering Heat	$\pm 0.05\%$
Shock	$\pm 0.1\%$
Vibration	$\pm 0.05\%$
Life	$\pm 0.5\%$
Terminal Strength	$\pm 0.1\%$
Dielectric Withstanding Voltage	$\pm 0.05\%$

Note:

(1) Tests per MIL-R-10509



Disclaimer

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

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