

Metal Film Resistors, Industrial, $\pm 1\%$, $\pm 5\%$ Tolerance



FEATURES

- 0.33 watt power rating
- $\pm 100\text{ppm}/^\circ\text{C}$ standard, $\pm 50\text{ppm}/^\circ\text{C}$ 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 (52.4mm inside tape spacing per EIA-296-E)

STANDARD ELECTRICAL SPECIFICATIONS

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

*50ppm/ $^\circ\text{C}$ on request

TECHNICAL SPECIFICATIONS

PARAMETER	UNIT	CCF50
Rated Dissipation at 70°C	W	0.33
Maximum Working Voltage	V_{max}	≤ 200
Insulation Voltage (1min)	V_{eff}	>500
Dielectric Strength	VAC	450
Insulation Resistance	Ω	$\geq 10^{11}$
Operating Temperature Range	$^\circ\text{C}$	- 65 / + 165
Weight	g	0.11 max

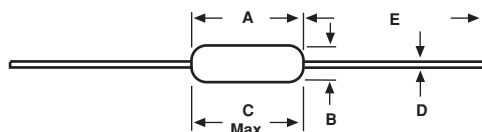
GLOBAL PART NUMBER INFORMATION

New Global Part Numbering: CCF50301RFRK36 (preferred part numbering format)

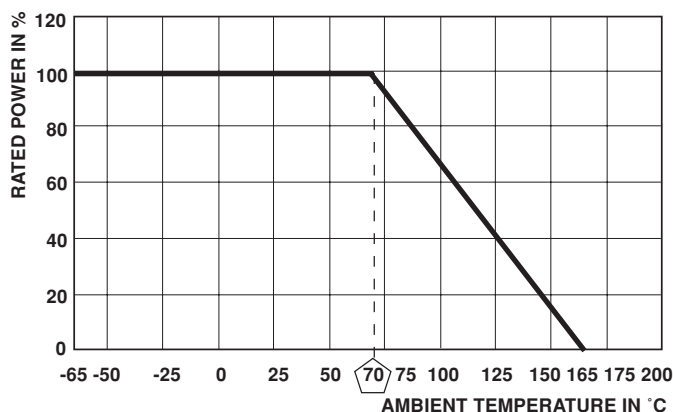
C	C	F	5	0	3	0	1	R	F	K	R	3	6			
GLOBAL MODEL		RESISTANCE VALUE				TOLERANCE CODE		TEMPERATURE COEFFICIENT		PACKAGING			SPECIAL			
CCF50		R = Decimal K = Thousand M = Million 10R0 = 10Ω 680K = 680KΩ 1M00 = 1.0MΩ				F = ± 1% J = ± 5%		H = 50ppm K = 100ppm		E36 = Lead Free, T/R (5000 pcs) R36 = Tin/Lead,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

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

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

DIMENSIONS in inches [millimeters]


DIMENSION	INCHES	MILLIMETERS
A	0.133 ± 0.010	$[3.38 \pm 0.025]$
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*	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	$\pm 0.05\%$

* Tests per MIL-R-10509.