

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



### FEATURES

- 0.33 watt power rating
- ± 100ppm/°C standard, ± 50ppm/°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 <sub>70°C</sub> W	LIMITING ELEMENT VOLTAGE MAX. V <sub>≅</sub>	TEMPERATURE COEFFICIENT* 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%

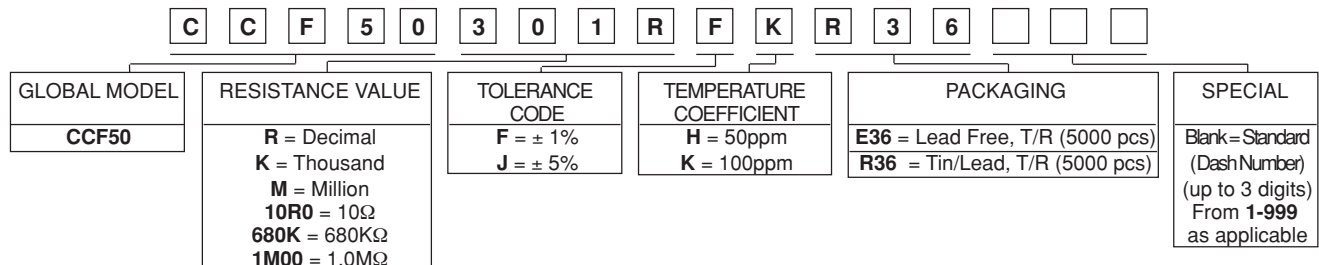
\*50ppm/°C on request

### TECHNICAL SPECIFICATIONS

PARAMETER	UNIT	CCF50
Rated Dissipation at 70°C	W	0.33
Maximum Working Voltage	V <sub>≅</sub>	≤ 200
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 / + 165
Weight	g	0.11 max

### GLOBAL PART NUMBER INFORMATION

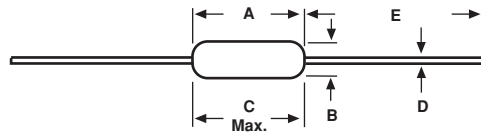
New Global Part Numbering: CCF50301RFKR36 (preferred part numbering format)



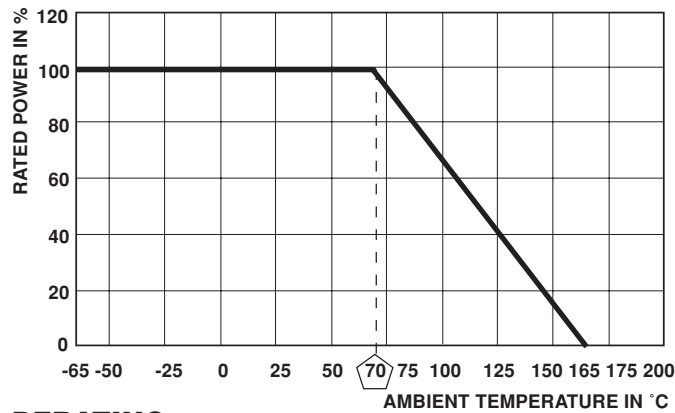
Historical Part Number example: CCF-503010F (will continue to be accepted)



**DIMENSIONS** in inches [millimeters]



DIMENSION	INCHES	MILLIMETERS
A	0.133 ± 0.010	[3.38 ± 0.025]
B	0.062 ± 0.004	[1.57 ± 0.10]
C(Max)	0.143	[3.63]
D	0.020 ± 0.002	[0.51 ± 0.05]
E	1.125 ± 0.040	[28.58 ± 1.02]



**DERATING**

**MARKING**

- 5 band colorband for ± 1%
- 4 band colorband for ± 5%

**PERFORMANCE**

TEST*	TYPICAL ΔR
Thermal Shock	± 0.1%
Short Time Overload	± 0.1%
Low Temperature Operation	± 0.1%
Moisture Resistance	± 0.2%
Resistance to Soldering Heat	± 0.05%
Shock	± 0.1%
Vibration	± 0.05%
Life	± 0.5%
Terminal Strength	± 0.1%
Dielectric Withstanding Voltage	± 0.05%

\* Tests per MIL-R-10509.