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 $P_{70°C}$ W	LIMITING ELEMENT VOLTAGE MAX. V≅	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≅	≤ 200
Insulation Voltage (1min)	V_{eff}	>500
Dielectric Strength	VAC	450
Insulation Resistance	Ω	≥10^{11}
Operating Temperature Range	°C	- 65 / + 165
Weight	g	0.11 max

GLOBAL PART NUMBER INFORMATION

New Global Part Numbering: CCF50301RFKR36 (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

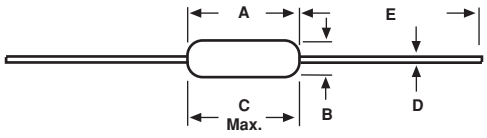
Historical Part Number example: CCF-503010F (will continue to be accepted)

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

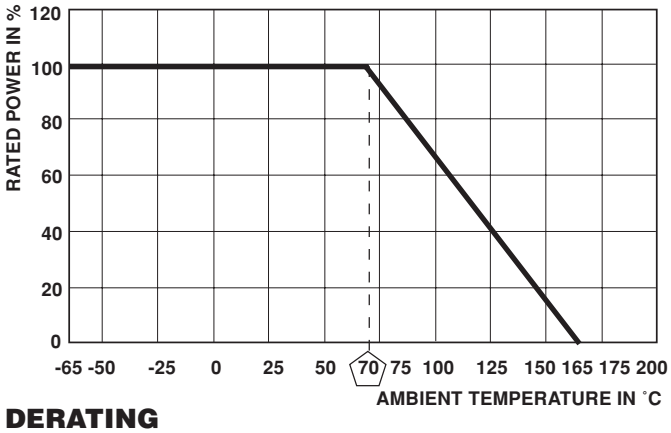
For Technical Questions, contact ff2bresistors@vishay.com

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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.