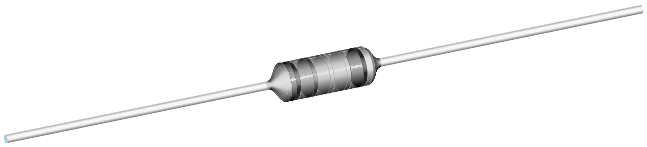
CCF-2

Vishay Dale

Metal Film Resistors, Industrial Power, Flameproof



FEATURES

- Small size suitable for 1/2, 1 and 2 watt applications
- High power rating, small size
- Flameproof, high temperature coating meets EIA RS-325-A
- Excellent high frequency characteristics
- Low noise
- Low voltage coefficient
- Tape and reel packaging for automatic insertion (52.4mm inside tape spacing per EIA-296-E)

STANDARD ELECTRICAL SPECIFICATIONS

MODEL	POWER RATING $P_{70°C}$ W	LIMITING ELEMENT VOLTAGE MAX. V≅	TEMPERATURE COEFFICIENT ppm/°C	TOLERANCE %	RESISTANCE RANGE Ω	E-SERIES
CCF-2	2.0	350	100	± 1, ± 5	4R99 - 1M	96 for 1% tolerance 24 for 5% tolerance

TECHNICAL SPECIFICATIONS

PARAMETER	UNIT	CCF-2
Rated Dissipation at 70°C	W	2.0
Maximum Working Voltage	V≅	≤350
Insulation Voltage (1min)	V_{eff}	>500
Dielectric Strength	VAC	900
Insulation Resistance	Ω	$\geq 10^{11}$
Operating Temperature Range	°C	-65 / +230
Terminal Strength (pull test)	lb	2
Failure Rate	10^{-9}/h	<1
Weight (max)	g	0.35

MATERIAL SPECIFICATIONS

Element:	Proprietary nickel-chrome film
Solderability:	Satisfactory per MIL-STD-202, Method 208.
Core:	Fire-cleaned high purity ceramic
Termination:	Standard lead material is solder-coated copper. Solderable and weldable per MIL-STD-1276, Type C.

MARKING

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

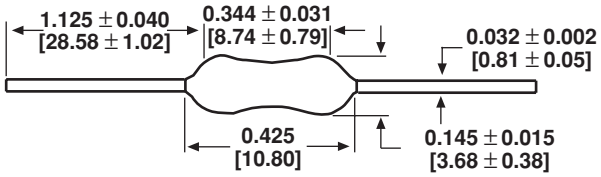
ORDERING INFORMATION

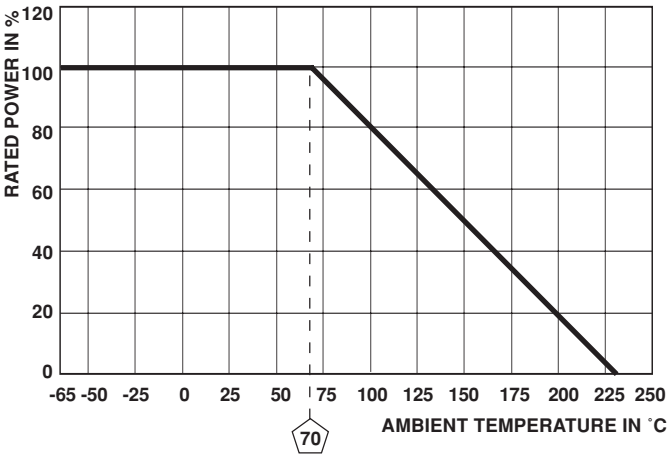
CCF-2	**3010**	**F**
MODEL	RESISTANCE	TOLERANCE
	± 1% = 3 significant digits and multiplier. ± 5% = 2 significant digits and multiplier. Examples: 49R9F =49.9Ω, ± 1% 5R1J = 5.1Ω, ± 5% 3011F = 3.01k, ± 1%	F = ± 1% J = ± 5%

For Technical Questions, contact ff2bresistors@vishay.com

Document Number: 31012
Revision 05-Aug-02

DIMENSIONS in inches [millimeters]

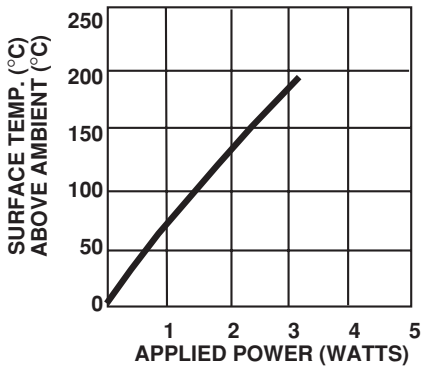




DERATING

Surface temperatures were taken with an infrared pyrometer in + 25°C still air.

Resistors were supported by their leads in test clips at a point 0.5" [12.70mm] out from the resistor body ends.



SURFACE TEMPERATURE vs POWER

PERFORMANCE	
TEST	**MAX. ΔR (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	± 0.5%
Vibration	± 0.5%
Terminal Strength	± 0.5%
Dielectric Withstanding Voltage	± 0.5%
Life	± 2.0%