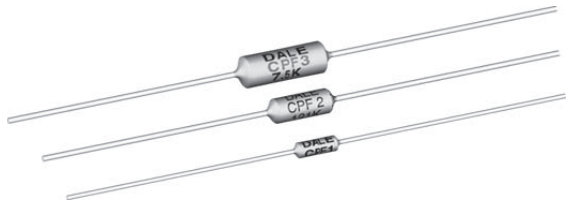
Metal Film Resistors, Industrial, Power, Flameproof



FEATURES

- High power rating, small size
- Flameproof, high temperature coating
- Special filming and coating processes
- Excellent high frequency characteristics
- Low noise
- Low voltage coefficient

STANDARD ELECTRICAL SPECIFICATIONS

MODEL	POWER RATING	LIMITING ELEMENT	RESISTANCE RANGE Ω VS BEST AVAILABLE TOLERANCE / TC				TOLERANCE	TEMPERATURE COEFFICIENT
	$P_{70°C}$ W	VOLTAGE MAX. V≅	±2% T - 00	±1% T - 0	±0.5% T - 1	±0.1% T-2 / T-9	±%	ppm/°C
CPF - 1	1	250	R1 - 150K	R5 - 150K	1R - 150K	5R - 150K	0.1, 0.25, 0.5, 1, 5	200, 150, 100, 50, 25
CPF - 2	2	350	R1 - 150K	R5 - 150K	1R - 150K	5R - 150K	0.1, 0.25, 0.5, 1, 5	200, 150, 100, 50, 25
CPF - 3	3	500	R1 - 150K	1R - 150K	1R - 150K	8R - 150K	0.1, 0.25, 0.5, 1, 5	200, 150, 100, 50, 25

- Marking: Print marked - DALE, Model, Resistance value, Tolerance / Temperature Coefficient, Date Code

TECHNICAL SPECIFICATIONS

PARAMETER	UNIT	CPF - 1	CPF - 2	CPF - 3
Rated Dissipation at 70°C	W	1	2	3
Limiting Element Voltage[1)]	V≅	250	350	500
Insulation Voltage	V-	900	900	900
Thermal Resistance	K/W	85	60	50
Insulation Resistance	Ω	10^{10}		
Category Temperature Range	°C	- 65°C / + 230°C		

[1)]Rated voltage $\sqrt{P \times R}$

ORDERING INFORMATION

CPF - 1	5620	F	T - 1
MODEL	RESISTANCE VALUE Ω	TOLERANCE	TEMPERATURE COEFFICIENT
CPF 1 CPF 2 CPF 3	First three digits are significant (two for a 5% tolerance). Last digit specifies number of zeros to follow Examples: 2211 = 2210 OHMs (1%) 1002 = 10000 OHMs (1%) 103 = 10000OHMs (5%)	B = ± 0.1% C = ± 0.25% D = ± 0.5% F = ± 1% G = ± 2% J = ± 5%	T - 00 = ± 200ppm°/C T - 0 = ± 150ppm°/C T - 1 = ± 100ppm°/C T - 2 = ± 50ppm°/C T - 9 = ± 25ppm°/C

For Technical Questions, contact ff2bresistors@vishay.com

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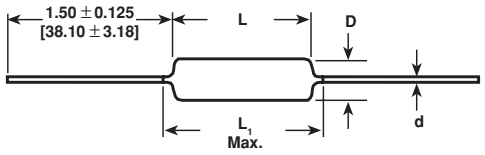
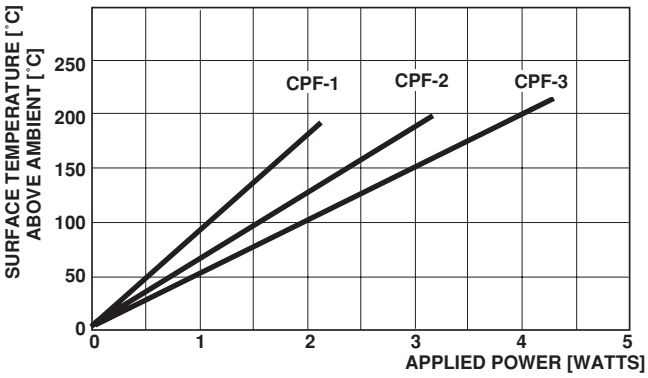
DIMENSIONS



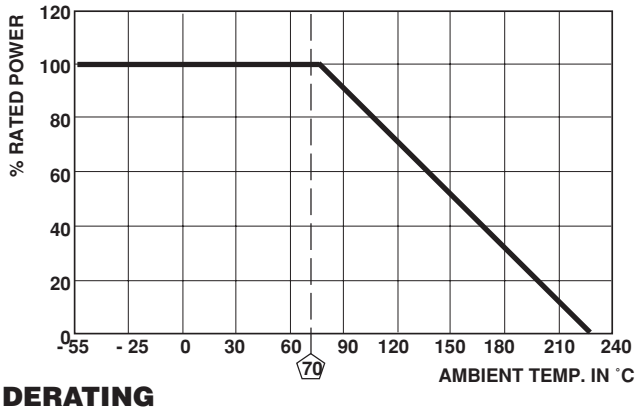
* 1.08 ± 0.125 [27.43 ± 3.18] IF TAPE AND REEL

MODEL	DIMENSIONS in inches [millimeters]			
	L	D	L_1 (max.)	d
CPF - 1	0.240 ± 0.020 [6.10 ± 0.51]	0.090 ± 0.008 [2.29 ± 0.20]	0.310 [7.87]	0.025 ± 0.002 [0.64 ± 0.05]
CPF - 2	0.344 ± 0.031 [8.74 ± 0.79]	0.145 ± 0.015 [3.68 ± 0.38]	0.425 [10.80]	0.032 ± 0.002 [0.81 ± 0.05]
CPF - 3	0.555 ± 0.041 [14.10 ± 1.04]	0.180 ± 0.015 [4.57 ± .381]	0.650 [16.51]	0.032 ± 0.002 [0.81 ± 0.05]

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 .500" [12.70mm] out from the resistor body ends.



SURFACE TEMPERATURE VS POWER



DERATING

MATERIAL SPECIFICATIONS	
Element:	Proprietary nickel - chrome alloy.
Core:	Cleaned high purity ceramic
Coating:	Special high temperature conformal coat.
Termination:	Standard lead material is solder - coated Solderable and weldable per MIL -STD-1276, Type C

MECHANICAL SPECIFICATIONS	
Terminal Strength:	2 pound pull test.
Solderability:	Continuous satisfactory coverage when tested in accordance with MIL -STD - 202, Method 208

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%