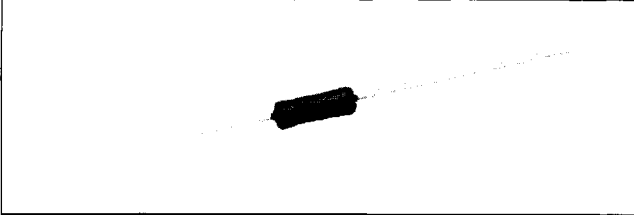


# MODEL CPF

## 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	WATTAGE RATING 70°C	VOLTAGE RATING	RESISTANCE RANGE 1% AND ABOVE (Ohms)
CPF-1	1	250	0.1-150k
CPF-2	2	350	0.1-150k
CPF-3	3	500	0.1-150k

Contact factory for resistance range in precision tolerance.

#### ELECTRICAL SPECIFICATIONS

**Resistance Tolerance:** .1%, .25%, .5%, 1%, 5%.

**Temperature Coefficient:** (-55°C to +125°C)  
± 100PPM/°C, ± 50PPM/°C, ± 25PPM/°C.

**Dielectric Strength:** 900 VAC.

**Insulation Resistance:** 10,000 Megohm, minimum.

**Operating Temperature Range:** -65°C to +230°C.

#### MATERIAL SPECIFICATIONS

**Element:** Proprietary nickel-chrome alloy.

**Core:** Fire-cleaned high purity ceramic.

**Coating:** Special high temperature conformal coat.

**Termination:** Standard lead material is solder-coated copper. Solderable and weldable per MIL-STD-1276, Type "C".

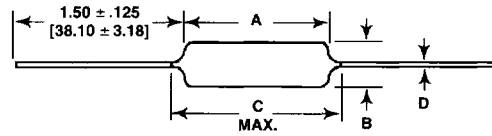
#### MECHANICAL SPECIFICATIONS

**Terminal Strength:** 2 pound pull test.

**Solderability:** Continuous satisfactory coverage when tested in accordance with MIL-STD-202, Method 208.

#### DIMENSIONAL CONFIGURATIONS

[Numbers in brackets indicate millimeters]



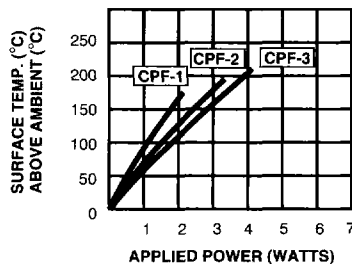
MODEL	A	B	C (Max.)	D
CPF-1	.240 ± .020 [6.10 ± .508]	.090 ± .008 [2.29 ± .203]	.310 [7.87]	.025 ± .002 [.635 ± .051]
CPF-2	.344 ± .031 [8.74 ± .787]	.145 ± .015 [3.68 ± .381]	.425 [10.80]	.032 ± .002 [.813 ± .051]
CPF-3	.555 ± .041 [14.10 ± 1.04]	.180 ± .015 [4.57 ± .381]	.650 [16.51]	.032 ± .002 [.813 ± .051]

#### ENVIRONMENTAL PERFORMANCE

TEST	MAX. ΔR (Typical Test Lots)
Thermal Shock	± 1.0%
Short Time Overload	± .5%
Low Temperature Operation	± .5%
Moisture Resistance	± 1.5%
Resistance To Soldering Heat	± .5%
Shock	± .5%
Vibration	± .5%
Terminal Strength	± .5%
Dielectric Withstanding Voltage	± .5%
Life	± 2.0%

#### SURFACE TEMPERATURE VS. POWER

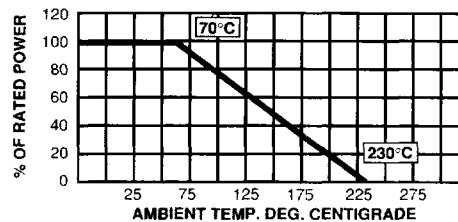
Surface temperatures were taken with an infrared pyrometer in +25°C still air. Resistors were supported by their leads in test clips at a point .500" [12.70] out from the resistor body ends.



#### PART MARKING

- Model
- Resistance
- Tolerance
- Date code

#### DERATING



#### HOW TO ORDER

CPF-1 MODEL	XXX or XXXX RESISTANCE	F TOLERANCE	T-1 TEMPERATURE COEFFICIENT
CPF-1 CPF-2 CPF-3	First three digits are significant (two for 5% tolerance). Last digit specifies number of zeros to follow.	B = ± 0.10% C = ± 0.25% D = ± 0.5% F = ± 1% J = ± 5%	T-00 = 200PPM/°C T-0 = 150PPM/°C T-1 = 100PPM/°C T-2 = 50PPM/°C T-9 = 25PPM/°C