

CF / CFM Series

Carbon Film Resistors

Stackpole Electronics, Inc.

Resistive Product Solutions

Features:

- ✓ General purpose resistor ideal for commercial/industrial applications
- ✓ Flame retardant coatings standard
- ✓ Flameproof version available as CFF
- ✓ Panasert available on selected sizes; contact factory
- ✓ Auto sequencing/insertion compatible
- ✓ CFM (mini) ideal choice when size constraints apply
- ✓ Cut and formed product is available on select sizes; contact factory
- ✓ Standard lead wire for CF/CFM is copper plated steel, with 100% tin over plate
- ✓ 100% tin plate on copper wire is available as type CFQ/CFQM
- ✓ RoHS compliant / lead-free



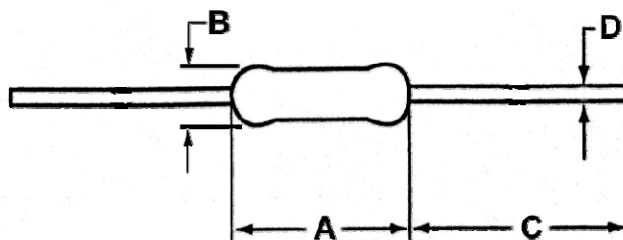
Electrical Specifications

Type / Code	Power Rating (Watts) @ 70°C	Maximum Working Voltage ①	Maximum Pulse Voltage	Dielectric Withstanding Voltage	Ohmic Range and Tolerance	
					2%	5%
CF 1/8	0.125W	250V	500V	300V	10Ω - 4.7MΩ	1Ω - 22MΩ
CF 1/4	0.250W	350V	600V	500V	1Ω - 4.7MΩ	1Ω - 22MΩ
CF 1/2	0.500W	350V	700V	700V	10Ω - 4.7MΩ	1Ω - 22MΩ
CF 1	1.000W	500V	1,000V	1,000V	1Ω - 10MΩ	1Ω - 22MΩ
CF 2	2.000W	500V	1,000V	1,000V	10Ω - 1MΩ	1Ω - 22MΩ
CFM 1/4	0.250W	250V	500V	500V	10Ω - 1MΩ	1Ω - 22MΩ
CFM 1/2	0.500W	350V	600V	500V	10Ω - 4.7MΩ	1Ω - 22MΩ

① Lesser of $\sqrt{PR}$ or maximum working voltage.

How to Order

SEI Type		Code		Nominal Resistance	Tolerance	Packaging			
CF		1/2		100K	5%	R			
Code	Description	Code	Wattage		Tolerance	SEI Types	Pkg Qty	Description	Code
CF	Standard	1/8	0.125W		2%	CF 1/8, CF 1/4, CF 1/2, CFM 1/4, CFM 1/2	5,000	Tape	R
CFF	Flameproof	1/4	0.250W		5%	CF 1	2,000		
CFM	Mini	1/2	0.500W			CF 2	1,000	Ammo	T
PCF	Panasert CF 1/4	1	1.000W			PCF 1/4, PCFM 1/2	2,000		
PCFM	Panasert CF 1/2	2	2.000W			CF 1/8, CF 1/4, CFM 1/4, CFM 1/2	5,000		
CFQ	Tin plating on copper wire					CF 1/2	2,000		
CFQM	Tin plating (mini)					CF 1, CF 2	1,000	Panasert	P
						PCF 1/4, PCFM 1/2	5,000	Bulk	A
						ALL	1,000		



Mechanical Specifications					
Type / Code	L Body Length	W Body Diameter	H Lead Length(Bulk)	D Lead Diameter	Units
CF 1/8	0.13 ± 0.01	0.07 ± 0.01	1.10 ± 0.12	0.018 ± 0.002	inches
	3.2 ± 0.2	1.8 ± 0.2	28 ± 3	0.45 ± 0.05	mm
CF 1/4	0.26 ± 0.02	0.09 ± 0.01	1.10 ± 0.12	0.022 ± 0.002	inches
	6.5 ± 0.05	2.3 ± 0.2	28 ± 3	0.56 ± 0.05	mm
CF 1/2	0.33 ± 0.02	0.11 ± 0.02	1.18 ± 0.12	0.024 ± 0.002	inches
	8.5 ± 0.5	2.7 ± 0.5	30.0 ± 3	0.60 ± 0.05	mm
CF 1	0.43 ± 0.04	0.18 ± 0.02	1.18 ± 0.12	0.031 ± 0.004	inches
	11.0 ± 1.0	4.5 ± 0.5	30.0 ± 3	0.80 ± 0.1	mm
CFM 1/4	0.13 ± 0.01	0.07 ± 0.01	1.10 ± 0.12	0.018 ± 0.002	inches
	3.2 ± 0.2	1.8 ± 0.2	28 ± 3	0.45 ± 0.05	mm
CFM 1/2	0.26 ± 0.02	0.09 ± 0.01	1.10 ± 0.12	0.022 ± 0.002	inches
	6.5 ± 0.5	2.3 ± 0.2	28 ± 3	0.56 ± 0.05	mm

Performance Characteristics		
Test	Standard / Method	Test Results
Short Time Overload	EIA-RS-172-B 3.2.6	$\pm 0.5\%$
Resistance to Solder Heat	MIL-STD 202 Method 210	$\pm 0.5\%$
Dielectric Withstanding Voltage	JIS C 5202 5.6	$\pm 0.5\%$
Load Life	MIL-STD 202 Method 108	$\pm 1\%$
Terminal Strength	MIL-STD 202 Method 211	$\pm 0.2\%$
Moisture Resistance	MIL-STD 202 Method 106	$\pm 0.5\%$

Operating Temperature Range: -55°C to +155°C