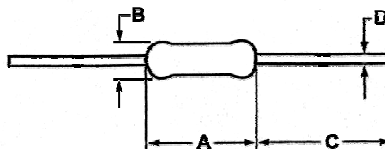


- Features:
- General purpose resistor ideal for commercial/industrial applications
 - Flame retardant coatings standard
 - Flameproof version available as CFF
 - Panasert available on selected sizes; contact factory
 - Auto sequencing/insertion compatible
 - CFM (mini) ideal choice when size constraints 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 Overload Voltage	Dielectric Withstanding Voltage	Resistance Temperature Coefficient per Ohmic Range	Ohmic Range (Ω) and Tolerance	
						2%	5%
CF18	0.125W	250V	500V	350V	$<10\Omega = \pm 400\text{ppm}/^\circ\text{C}$ $10\Omega \text{ to } 9.99\text{K}\Omega = 0 \sim -400\text{ppm}/^\circ\text{C}$ $10\text{K}\Omega \text{ to } 99\text{K}\Omega = 0 \sim -500\text{ppm}/^\circ\text{C}$ $100\text{K}\Omega \text{ to } 999\text{K}\Omega = 0 \sim -850\text{ppm}/^\circ\text{C}$ $1\text{M}\Omega \text{ and above} = 0 \sim -1500\text{ppm}/^\circ\text{C}$	10 - 1M	1 - 22M
CF14	0.25W	350V	600V	350V		1 - 1M	1 - 22M
CF12	0.5W	350V	700V	600V		10 - 1M	1 - 22M
CF1	1W	500V	1,000V	600V		1 - 1M	1 - 10M
CF2	2W	500V	1,000V	600V		10 - 1M	1 - 10M
CFM14	0.25W	250V	500V	350V		10 - 1M	1 - 10M
CFM12	0.5W	350V	600V	350V		10 - 1M	1 - 10M
CFM1	1W	600V	1,000V	600V		10 - 1M	1 - 10M

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

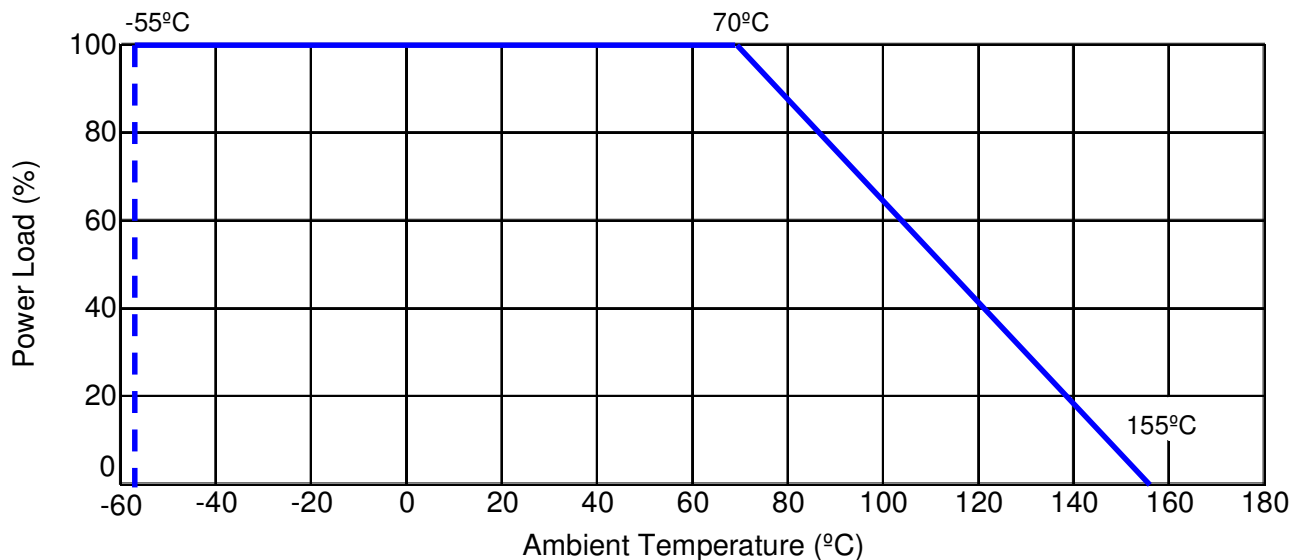


Mechanical Specifications					
Type / Code	A Body Length	B Body Diameter	C Lead Length(Bulk)	D Lead Diameter	Unit
CF18	0.130 ± 0.012	0.067 ± 0.012	1.102 ± 0.118	0.018 ± 0.003	inches
	3.30 ± 0.30	1.70 ± 0.30	28.00 ± 3.00	0.45 ± 0.08	mm
CF14	0.256 ± 0.020	0.091 ± 0.012	1.102 ± 0.118	0.022 ± 0.003	inches
	6.50 ± 0.50	2.30 ± 0.30	28.00 ± 3.00	0.55 ± 0.08	mm
CF12	0.335 ± 0.039	0.106 ± 0.020	1.181 ± 0.118	0.022 ± 0.002	inches
	8.50 ± 1.00	2.70 ± 0.50	30.00 ± 3.00	0.56 ± 0.05	mm
CF1	0.433 ± 0.039	0.177 ± 0.020	1.181 ± 0.118	0.028 ± 0.004	inches
	11.00 ± 1.00	4.50 ± 0.50	30.00 ± 3.00	0.70 ± 0.10	mm
CF2	0.591 ± 0.039	0.197 ± 0.020	1.339 ± 0.157	0.031 ± 0.004	inches
	15.00 ± 1.00	5.00 ± 0.50	34.00 ± 4.00	0.80 ± 0.10	mm
CFM14	0.130 ± 0.012	0.067 ± 0.012	1.102 ± 0.118	0.018 ± 0.003	inches
	3.30 ± 0.30	1.70 ± 0.30	28.00 ± 3.00	0.45 ± 0.08	mm
CFM12	0.256 ± 0.039	0.091 ± 0.012	1.102 ± 0.118	0.022 ± 0.003	inches
	6.50 ± 1.00	2.30 ± 0.30	28.00 ± 3.00	0.55 ± 0.08	mm
CFM1	0.354 ± 0.020	0.138 ± 0.020	1.102 ± 0.118	0.024 ± 0.002	inches
	9.00 ± 0.50	3.50 ± 0.50	28.00 ± 3.00	0.60 ± 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

Power Derating Curve:



How to Order

1	2	3	4	5	6	7	8	9	10
C	F	1	2	J	T	1	0	0	K

Product Series	Size	Power Rating	Tolerance	Code	Description	Size	Quantity	Resistance Value
CF	Standard	18 0.125W	Code Tol	B	Bulk	CF18, CFM14, CF14, CFM12 CF12, CFM1, CF1, CF2	1,000	Four characters with the multiplier used as the decimal holder.
CFF	Flameproof	14 0.25W	G 2%					
CFM	Mini	12 0.5W	J 5%					
PCF	Panasert CF14	1 1W		T	Tape and Reel	CF18, CFM14, CF14, CFM12, CF12, PCF14, PCFM12	5,000	10 ohm = 10R0 10.2 Kohm = 10K2 1 Mohm = 1M00
PCFM	Panasert CF12	2 2W						
CFQ	Tin plating on copper wire					CFM1	2,500	
CFQM	Tin plating (mini)					CF1	2,000	
PCFQ	Tin plating on copper wire Panasert					CF2	1,000	
				A	Ammo	CF18, CFM14, CF14, CFM12	5,000	
						CF12, CFM1, PCF14, PCFM12	2,000	
						CF1, CF2	1,000	

Legacy Part Number (before January 3, 2011):

SEI Type	Code	Nominal Resistance	Tolerance	Packaging
CF	1/2	100K	5%	R

Code	Description	Code	Wattage	Tolerance
CF	Standard	1/8	0.125W	2%
CFF	Flameproof	1/4	0.25W	5%
CFM	Mini	1/2	0.5W	
PCF	Panasert CF 1/4	1	1W	
PCFM	Panasert CF 1/2	2	2W	
CFQ	Tin plating on copper wire			
CFQM	Tin plating (mini)			
PCFQ	Tin plating on copper wire Panasert			

Code →	A	R	T
SEI Types	Bulk	Tape & Reel	Tape & Box (Ammo Box)
CF 1/8			
CFM 1/4			
CF 1/4	1,000	5,000	5,000
CFM 1/2			
CF 1/2	1,000	5,000	2,000
CFM 1	1,000	2,500	2,000
CF 1	1,000	2,000	1,000
CF 2	1,000	1,000	1,000
PCF 1/4			
PCFM 1/2	N/A	5,000	2,000