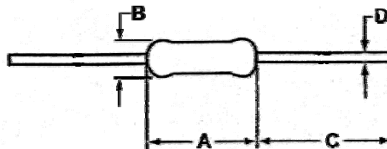


- Features:**
- General purpose resistor ideal for commercial/industrial applications
 - Flame retardant coatings standard
 - Flameproof version available as CFF
 - Panasert available on selected sizes; contact factory
 - Auto sequencing/insertion compatible
 - CFM (mini) ideal choice when size constraints 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.

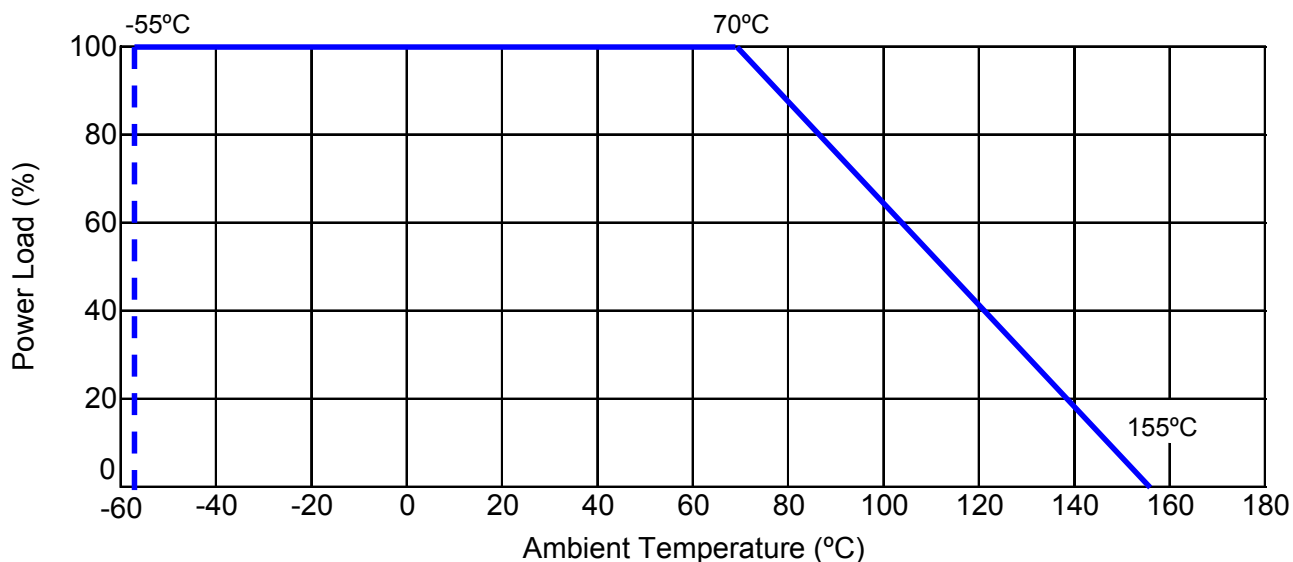


Mechanical Specifications					
Type / Code	A Body Length	B Body Diameter	C Lead Length(Bulk)	D Lead Diameter	Unit
CF18	0.130 ± 0.012	0.067 ± 0.012	1.102 ± 0.118	0.018 ± 0.003	inches
	3.30 ± 0.30	1.70 ± 0.30	28.00 ± 3.00	0.45 ± 0.08	mm
CF14	0.256 ± 0.020	0.091 ± 0.012	1.102 ± 0.118	0.022 ± 0.003	inches
	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	1.181 ± 0.118	0.031 ± 0.004	inches
	15.00 ± 1.00	5.00 ± 0.50	30.00 ± 3.00	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	± 0.5%
Resistance to Solder Heat	MIL-STD 202 Method 210	± 0.5%
Dielectric Withstanding Voltage	JIS C 5202 5.6	± 0.5%
Load Life	MIL-STD 202 Method 108	± 1%
Terminal Strength	MIL-STD 202 Method 211	± 0.2%
Moisture Resistance	MIL-STD 202 Method 106	± 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	CF18, CFM14, CF14, CFM12	1,000	Four characters with the multiplier used as the decimal holder.
CFF	Flameproof	14	0.25W	G	2%	CF12, CFM1, CF1, CF2	5,000	10 ohm = 10R0
CFM	Mini	12	0.5W	J	5%	CF18, CFM14, CF14, CFM12, CF12, PCF14, PCFM12	2,500	10.2 Kohm = 10K2
PCF	Panasert CF14	1	1W			CFM1	2,000	1 Mohm = 1M00
PCFM	Panasert CF12	2	2W			CF1	1,000	
CFQ	Tin plating on copper wire					CF2	1,000	
CFQM	Tin plating (mini)							
PCFQ	Tin plating on copper wire							
	Panasert							

Code	Description	Size	Quantity	Resistance Value
B	Bulk	CF18, CFM14, CF14, CFM12	1,000	
T	Tape and Reel	CF18, CFM14, CF14, CFM12, CF12, PCF14, PCFM12	5,000	
		CFM1	2,500	
		CF1	2,000	
		CF2	1,000	
A	Ammo	CF18, CFM14, CF14, CFM12, CFM1	5,000	
		CF12, 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	Code →	A	R	T
CF	Standard	1/8	0.125W	2%	SEI Types	Bulk	Tape & Reel	Tape & Box (Ammo Box)
CFF	Flameproof	1/4	0.25W	5%	CF 1/8	1,000	5,000	5,000
CFM	Mini	1/2	0.5W		CFM 1/4			
PCF	Panasert CF 1/4	1	1W		CF 1/4			
PCFM	Panasert CF 1/2	2	2W		CFM 1/2			
CFQ	Tin plating on copper wire				CF 1/2	1,000	5,000	2,000
CFQM	Tin plating (mini)				CFM 1	1,000	2,500	5,000
PCFQ	Tin plating on copper wire				CF 1	1,000	2,000	1,000
	Panasert				CF 2	1,000	1,000	1,000
					PCF 1/4	N/A	5,000	2,000
					PCFM 1/2			