

Carbon Film Resistors

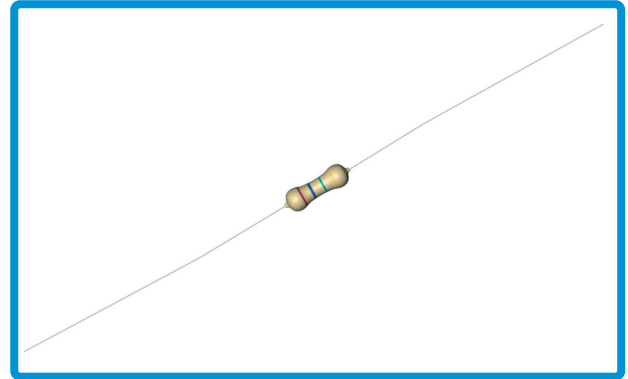


CF Series

MERITEK

FEATURES

- Economically priced for commercial and industrial applications
- Wide selection of power ratings and resistance values
- EIA color coding
- Resistance to industrial solvent
- Standard tape & reel package



PART NUMBERING SYSTEMS

CF 25 - 103 J TR

Meritek Series

Power Rating

CODE	12	25 (S)	50 (S)	100 (S)	200 (S)
	1/8W	1/4W	1/2W	1W	2W

Resistance

First 2 digits are significant

3rd digit is multiplier

"R" indicates decimal for values below 10 ohm

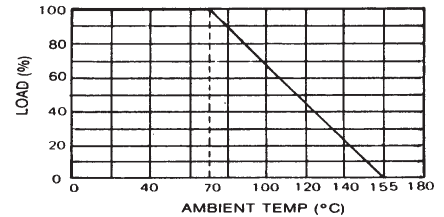
Tolerance

Code	G	J	K
	±2%	±5%	±10%

Tape & Reel

Note: "S" in "CFXXS-" denotes small body size

DERATING CURVE



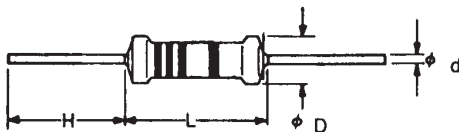
RATING AND AVAILABILITY

TYPE	CF12	CF25S	CF25	CF50S	CF50	CF100S	CF100	CF200S	CF200
Power rating @ 70°C	1/8W	1/4W	1/4W	1/2W	1/2W	1W	1W	2W	2W
Max working voltage	250V	250V	250V	300V	350V	400V	450V	500V	500V
Max overload voltage	500V	500V	500V	500V	700V	800V	1000V	1000V	1000V
Dielectric withstanding voltage	300V	400V	500V	500V	700V	800V	1000V	1000V	1000V

DIMENSIONS

TYPE	BODY		LEADWIRE	
	(L)	(D)	(H)	(d±0.03)
CF12	3.3 ±0.3	1.8 ±0.3	29±2	0.45
CF25S	3.3 ±0.3	1.8 ±0.3	29±2	0.45
CF25	6.3 ±0.5	2.3 ±0.3	28±2	0.55
CF50S	6.3 ±0.5	2.3 ±0.3	28±2	0.55
CF50	9.0 ±0.5	3.2 ±0.5	26±2	0.65
CF100S	9.0 ±0.5	3.2 ±0.5	26±2	0.65
CF100	11.5 ±1.0	4.5 ±0.5	35±2	0.78
CF200S	11.5 ±1.0	4.5 ±0.5	35±2	0.78
CF200	15.5 ±1.0	5.0 ±0.5	32±2	0.78

DIMENSIONS



REQUIREMENT		PERFORMANCE	
Operating Temp Range		-55 to 155°C (derated at 70°C/see chart)	
Temperature Cefficient (ppm/°C)	ppm/°C	1/4W	1/2W and over
	0 to -450	≤ 100K ohm	≤ 22K ohm
	0 to -700	110K ohm-1M ohm	24K ohm-470K ohm
	0 to -1000	1.1M ohm-2.2M ohm	510K ohm-2.2M ohm
Noise(uV/V)	0 to -1300	2.4M ohm-10M ohm	2.2M ohm-10M ohm
	uV/V	1/8W	1/4W and over
	0.1		1 ohm-10K ohm
	0.3	1 ohm-10K ohm	11K ohm-91K ohm
Moisture Resistance	0.5	11K ohm-91K ohm	100K ohm-1M ohm
	1.0	100K ohm	1.1M ohm-10M ohm
Short Time Overload	ΔR = ±(1% + 0.05 ohm)		
Temperature Cycling	ΔR = ±(0.5% + 0.05 ohm)		
Soldering Effect	ΔR = ±(1% + 0.05 ohm)		
Vibration	ΔR = ±(0.5% + 0.05 ohm)		
Load Life	R > 100K	ΔR = ±5%	
	R ≤ 100K	ΔR = ±(3% + 0.05 ohm)	
Resistance	R > 100K	ΔR = ±3%	
	R ≤ 100K	ΔR = ±(2% + 0.05 ohm)	