

Carbon Film Resistors

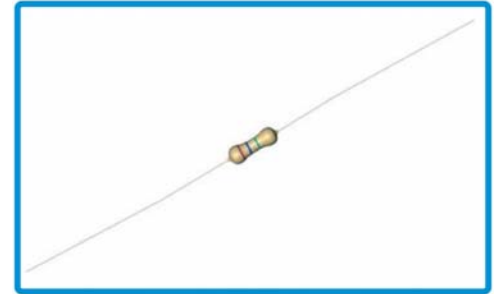


CF Series

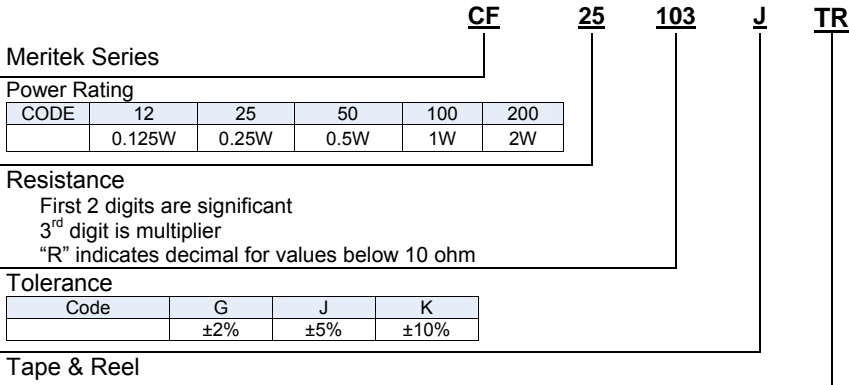
MERITEK

FEATURES

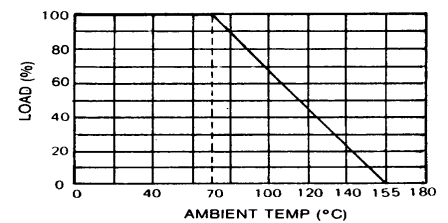
- Economically priced for commercial and industrial applications
- Wide selection of power ratings and resistance values
- EIA color coding
- Resistance to industrial solvent
- Standard tape & reel package



PART NUMBERING SYSTEMS



DERATING CURVE



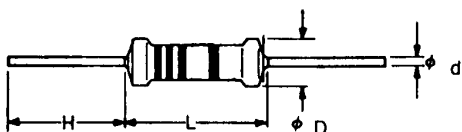
RATING AND AVAILABILITY

Type	CF12	CF25S	CF25	CF50S	CF50	CF100S	CF100	CF200S	CF200
Power rating @ 70°C	0.125W	0.25W	0.25W	0.5W	0.5W	1W	1W	2W	2W
Max working voltage	150V	200V	250V	300V	280V	400V	450V	500V	500V
Max overload voltage	300V	400V	500V	500V	500V	800V	1000V	1000V	1000V
Dielectric withstanding voltage	300V	400V	500V	500V	500V	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	CF100S and <1W	≥1W
	Under 100KΩ	±350ppm	+350ppm~-500ppm
	100KΩ - 1MΩ	0~-500ppm	0~-700ppm
	1MΩ - 4M7Ω	0~-1000ppm	0~-1500ppm
Noise(uV/V)	uV/V	0.125W	0.25W and over
	0.1	1 ohm-10K ohm	1 ohm-10K ohm
	0.3	11K ohm-91K ohm	11K ohm-91K ohm
	0.5	100K ohm-1M ohm	100K ohm-1M ohm
	1.0	100K ohm	1.1M ohm-10M ohm
Short Time Overload		ΔR ≤ ±(0.75% + 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)	
Moisture	R > 100K	ΔR ≤ ±5%	
Resistance	R ≤ 100K	ΔR ≤ ±(3% + 0.05 ohm)	
Load Life		±(3%+0.05 ohm)	