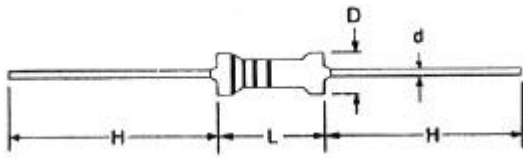


CARBON FILM FIXED RESISTORS

POWER RATING: Standard Type: 1/6W, 1/4W, 1/2W, 1W, 2W, 3W
 Miniature Type: 1/4WS, 1/2WS, 1WS, 2WS, 3WS
TOLERANCE: 2%, 5%

DIMENSIONS



TYPE		Dimensions (mm)			
		L	D	H	d
CF-1/4WS	CF-1/6W	3.2 ± 0.3	1.8 ± 0.2	28 ± 2	0.48 ± 0.03
CF-1/2WS	CF-1/4W	6.5 ± 0.5	2.3 ± 0.3	26 ± 2	0.60 ± 0.03
CF-1WS	CF-1/2W	9.0 ± 0.5	3.2 ± 0.5	26 ± 2	0.60 ± 0.03
CF-2WS	CF-1W	12 ± 1.0	4.5 ± 0.5	30 ± 3	0.80 ± 0.05
CF-3WS	CF-2W	16 ± 1.0	5.0 ± 0.5	28 ± 3	0.80 ± 0.05
---	CF-3W	18 ± 1.0	6.0 ± 0.5	26 ± 3	0.80 ± 0.05

CHARACTERISTICS

Terminal Strength	no damage $\Delta R_{max} \pm 0.3\%$ or 0.5Ω
Soldering	Good tinning no damage $\Delta R_{max} \pm 0.5\%$ or 0.5Ω
Temperature Cycling	$\Delta R_{max} \pm 0.5\%$
Vibration	no damage $\Delta R_{max} \pm 0.5\%$ or 0.5Ω
Moisture Resistance	$\Delta R_{max} \pm 3\%$
Load Life	$\Delta R_{max} \pm 2.5\%$
Temperature Coefficient	See Fig-1
Dielectric Strength	2x Work; Volt no breakdown $\Delta R_{max} \pm 0.5\%$
Insulation Resistance	min $10^{10}\Omega$
Short Time Overload	$\Delta R_{max} \pm 0.5\%$
Resistance to Solvents	no damage

DERATING CURVE

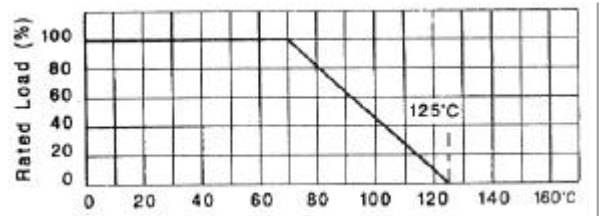


Fig-1 Temperature Coefficient

Maximum Value of Temperature Coefficient ppm/°C		
Under 100k	100k to 1m	1m and over
+350	+350	+350
-500	-700	-1000

GENERAL SPECIFICATIONS

Power Rating		Maximum Working Voltage	Maximum Overload Voltage	Resistance Range	
				±2%(G)	±5%(J)
---	CF-1/6W	200	400	10Ω - 5.1M	1Ω - 22M
CF-1/4WS	CF-1/4W	250	500	1Ω - 10M	0.5Ω - 22M
CF-1/2WS	CF-1/2W	350	700	1Ω - 10M	0.5Ω - 22M
CF-1WS	CF-1W	500	1000	1Ω - 10M	0.5Ω - 22M
CF-2WS	CF-2W	500	1000	1Ω - 10M	0.5Ω - 22M
	CF-3W	700	1200	1Ω - 10M	0.5Ω - 22M

REMARKS:

- ? Special lead length (H) on request.
- ? Special resistance on request.
- ? Flameproof type also available.