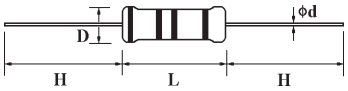
Carbon Film Fixed Resistors:

Feature

- High quality performance
- Great economy
- Flame retardant type available
- Automatically insertable

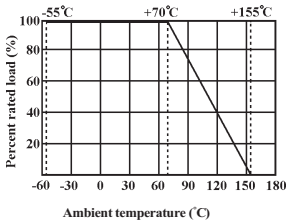


Specifications

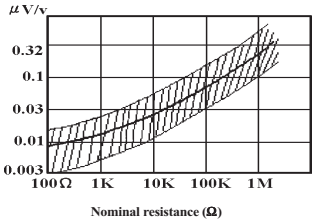
Part No.	Type	Power Rating At 70°C	Dimension (mm)				Max. Working Voltage	Max. Overload Voltage	Dielectric Withstanding Voltage	Resistance Range
			D Max.	L Max.	d +0.02 - 0.05	H ± 3				
Normal Size										
CFR0W8	CFR-12	1/8W	1.85	3.5	0.5	28	200V	400V	400V	1Ω ~ 1MΩ
CFR0W4	CFR-25	1/4W	2.5	6.8	0.6	28	250V	500V	500V	1Ω ~ 10MΩ
CFR0W2	CFR-50	1/2W	3.5	10	0.6	28	350V	700V	700V	1Ω ~ 10MΩ
CFR01W	CFR-100	1W	5.5	16	0.8	28	500V	1000V	1000V	1Ω ~ 10MΩ
CFR02W	CFR-200	2W	6.5	17.5	0.8	28	500V	1000V	1000V	1Ω ~ 10MΩ
Small Size & Extra Small Size										
CFR0S4	CFR-25-S	1/4W	1.85	3.5	0.5	28	200V	400V	400V	1Ω ~ 1MΩ
CFR0U2	CFR-50-SS	1/2W	2.5	6.8	0.6	28	250V	500V	250V	1Ω ~ 10MΩ
CFR0S2	CFR-50-S	1/2W	3	9	0.6	28	350V	700V	700V	1Ω ~ 10MΩ
CFR01S	CFR-100-S	1W	5	12	0.7	28	500V	1000V	1000V	1Ω ~ 10MΩ
CFR02S	CFR-200-S	2W	5.5	16	0.8	28	500V	1000V	1000V	1Ω ~ 10MΩ
CFR03S	CFR-300-S	3W	6.5	17.5	0.8	28	500V	1000V	1000V	1Ω ~ 10MΩ

- *Standard E-24 series values in ± 5% tolerance*
- *Standard Beige base color; Special Lavender base color for CFR01S, CFR02S & CFR03S*
- *Standard Grayish-green base color (Non-Flammable coating) for CFR0U2 (CFR-50-SS)*
- *For any special inquiry which including too low or high ohmic values is available on a case to case basis*

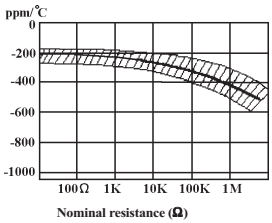
Derating Curve



Current Noise Level



Temperature Coefficient



Carbon Film Fixed Resistors:

Performance Specifications

Temperature coefficient	±300PPM/°C for ≤10Ω; ±450PPM/°C for 11Ω ~ 99KΩ; 0 ~ -700PPM/°C for 100KΩ ~1MΩ; 0 ~ -1500PPM/°C for 1.1MΩ ~10MΩ.
Short-time overload	ΔR/R ≤ ±(1%+0.05Ω), with no evidence of mechanical damage.
Insulation resistance	Min. 10,000Mega Ohm.
Dielectric withstanding voltage	No evidence of flashover, mechanical damage, arcing or insulation breakdown.
Terminal strength	No evidence of mechanical damage.
Resistance to Soldering heat	ΔR/R ≤ ±(1%+0.05Ω), with no evidence of mechanical damage.
Solderability	Min. 95% coverage.
Resistance to solvent	No deterioration of protective coating and markings.
Temperature cycling	ΔR/R ≤ ±(1%+0.05Ω), with no evidence of mechanical damage.
Load life in humidity	Normal type: ΔR/R ± 3% for <100KΩ, ±5% for ≥100KΩ; Flame retardant type: ΔR/R ± 5% for <100KΩ, ±10% for ≥100KΩ
Load life	Normal type: ΔR/R ±2% for <56KΩ, ±3% for ≥56KΩ; Flame retardant type: ΔR/R ±5% for <100KΩ, ±10% for ≥100KΩ

Ordering Procedure (Example: CFR 1/4W Small Size Non – Flame 5% 10KΩ T/B-5000)

Special Features:
0 = Standard product, F = Flame Retardant, I = Non - Inductive

Wattage: Normal size: W8 = 1/8W, W4 = 1/4W, W2 = 1/2W, 1W = 1W, 2W = 2W
Small size: S4 = 1/4W-S, S2 = 1/2W-S, 1S = 1W-S, 2S = 2W-S, 3S = 3W-S
Extra small size: U2 = 1/2W-SS

Tolerance: G = ± 2% , J = ± 5% , K = ± 10%

Packing Type: A = Tape/Box, T = Tape/Reel, B = Bulk/Box,
P = Tape/Box of PT-26 product

Resistance Value:
E-24 series:
The 1st digit will be "0"; the 2nd & 3rd digits are for the significant figures of the resistance and the 4th digit indicate the numbers of zeros following

Packing Quantity:
1 = 1,000pcs, 2 = 2,000pcs, 3 = 3,000pcs, 4 = 4,000pcs
5 = 5,000pcs, A = 500pcs, B = 2,500pcs,
0 = for Bulk/Box packing

Product Type:
CFR = Carbon Film Fixed Resistors

Additional Information: 0 = NIL

C F R F S 4 J 0 1 0 3 A 5 0