

# Carbon Film Fixed Resistor Axial Leded



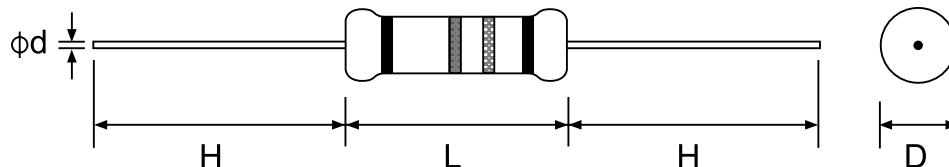
## Features

- Automatically insertable
- High quality performance
- Non-Flame type available
- Cost effective and commonly used
- Too low or too high values can be supplied on case to case basis

## Performance Specification

Temperature Coefficient	: $\leq 10\Omega$	: $\pm 350\text{PPM}/^\circ\text{C}$
	11 $\Omega$ to 99k $\Omega$	: 0 to $-450\text{PPM}/^\circ\text{C}$
	100k $\Omega$ to 1M $\Omega$	: 0 to $-700\text{PPM}/^\circ\text{C}$
	1.1M $\Omega$ to 10M $\Omega$	: 0 to $-1500\text{PPM}/^\circ\text{C}$
Short Time Overload	: $\pm(1\% + 0.05\Omega)\text{Max.}$ with no evidence of mechanical damage	
Insulation Resistance	: Min. 1,000M $\Omega$	
Dielectric Withstanding Voltage	: No evidence of flashover, mechanical damage, arcing or insulation breakdown.	
Terminal Strength	: No evidence of mechanical damage.	
Resistance to Soldering Heat	: $\pm(1\% + 0.05\Omega)\text{Max.}$ with no evidence of mechanical damage.	
Solderability	: Min. 95% coverage	
Resistance to Solvent	: No deterioration of protective coating and markings	
Temperature Cycling	: $\pm(1\% + 0.05\Omega)\text{Max.}$ with no evidence of mechanical damage	
Load Life in Humidity	Normal Type	: <100k $\Omega$ : $\pm(3\% + 0.05\Omega)\text{Max.}$ $\geq 100\text{k}\Omega$ : $\pm(5\% + 0.05\Omega)\text{Max.}$
	Non-Flame Type	: <100k $\Omega$ : $\pm(5\% + 0.05\Omega)\text{Max.}$ $\geq 100\text{k}\Omega$ : $\pm(10\% + 0.05\Omega)\text{Max.}$
Load Life	Normal Type	: <56k $\Omega$ : $\pm(2\% + 0.05\Omega)\text{Max.}$ $\geq 56\text{k}\Omega$ : $\pm(3\% + 0.05\Omega)\text{Max.}$
	Non-Flame Type	: <100k $\Omega$ : $\pm(5\% + 0.05\Omega)\text{Max.}$ $\geq 100\text{k}\Omega$ : $\pm(10\% + 0.05\Omega)\text{Max.}$

## Dimension



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Power Rating at 70°C	Dimension (mm)					Resistance Range	Max. Working Voltage	Max. Overload Voltage	Dielectric Withstanding Voltage
	D Max.	L Max.	H ±3	d ±0.05	PT				
1/8W (0.125W)	1.85	3.5	28	0.45	52	1Ω to 1MΩ	200	400	400
1/4W (0.25W)	2.5	6.8		0.54	52	1Ω to 10MΩ	250	500	500
1/2W (0.5W)	3.5	10		0.54	52		350	700	700
1W	5.5	16		0.7	64		500	1,000	1,000
2W	6.5	17.5		0.75	64		500	1,000	1,000

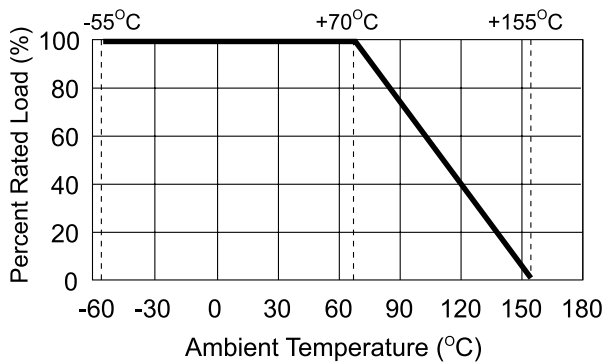
**Note:**

Standard beige base colour

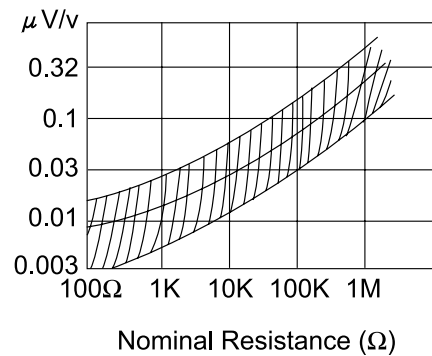
Standard grayish-green colour (Non-flammable coating) for CFRFU2 (CFR-50-SS) and CFRF1U (CFR-100-SS)

Ohmic values outside the standard range available on a case to case basis

**Derating Curve**



**Current Noise**



**Temp. Coefficient**

