

Feature

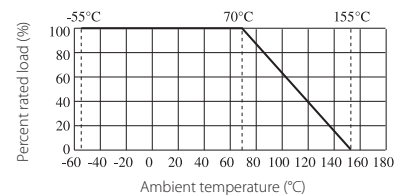
- High quality performance
- Great economy
- Flame Retardant available
- Automatically insertable



Dimension (mm)



Derating Curve



Specification

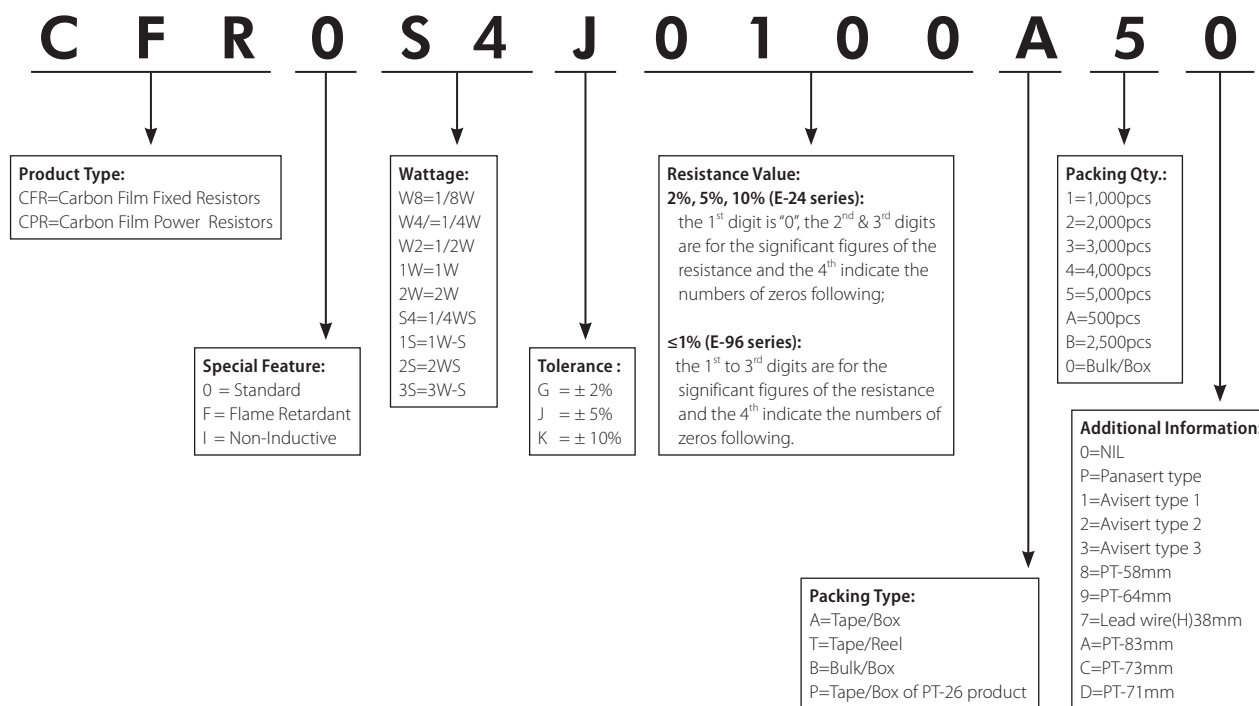
Part No	Type	Power Rating 70 °C	Dimension (mm)					MAX. Working Voltage	MAX. Overload Voltage	Dielectric Withstanding Voltage	Resistance Range	Tolerance
			D	L	d ±0.05	H±3	PT					
Ordinary Products												
CFR0W8	CFR-12	1/8W	1.9±0.3	3.3±0.3	0.45	28	52	200V	400V	400V	1Ω~1MΩ	±2% ±5% ±10%
CFR0S4	CFR-25-S	1/4W-S	1.9±0.3	3.3±0.3	0.45	28	52	200V	400V	400V	1Ω~1MΩ	
CFR0W4	CFR-25	1/4W	2.2±0.3	6.5±1.0	0.54	28	52	250V	500V	500V	1Ω~10MΩ	
CFR0W2	CFR-50	1/2W	3.0±0.6	9.5±1.0	0.54	28	52	350V	700V	700V	1Ω~10MΩ	
CFR01S	CFR-100-S	1W-S	4.5±0.6	11.5±1.0	0.70	25	52	500V	1000V	1000V	1Ω~10MΩ	
CFR01W	CFR-100	1W	5.0±0.6	15.5±1.0	0.70	28	64	500V	1000V	1000V	1Ω~10MΩ	
CFR02S	CFR-200-S	2W-S	5.0±0.6	15.5±1.0	0.70	28	64	500V	1000V	1000V	1Ω~10MΩ	
CFR02W	CFR-200	2W	6.0±0.6	17.5±1.0	0.75	28	64	500V	1000V	1000V	1Ω~10MΩ	
CFR03S	CFR-300-S	3W-S	6.0±0.6	17.5±1.0	0.75	28	64	500V	1000V	1000V	1Ω~10MΩ	
High Power Products												
CPR0W2	CPR-50	1/2W	2.2±0.5	6.5±1.0	0.54	28	52	300V	500V	700V	3Ω~10MΩ	±2% ±5% ±10%
CPR01W	CPR-100	1W	3.5±0.5	9.5±1.0	0.54	28	52	500V	700V	1000V	3Ω~10MΩ	
CPR02W	CPR-200	2W	4.5±0.5	11.0±1.0	0.70	25	52	500V	1000V	1000V	3Ω~10MΩ	

- Standard E-24 series values in ±5% ±10% & ±20% tolerance
- Standard: Beige color, CFR1WS, CFR2WS, CFR3WS with light brown color, High Power Products with Grey-green
- For any special inquiry such as too Low or too High ohmic values is available case by case.

Performance Specification

Temperature coefficient	$\leq 10\ \Omega$: $\pm 300\text{PPM}/^\circ\text{C}$
	$11\ \Omega \sim 99\text{k}\Omega$: $\pm 450\text{PPM}/^\circ\text{C}$
	$100\text{k}\Omega \sim 1\text{M}\Omega$: $0 \sim \sim 700\text{PPM}/^\circ\text{C}$
	$1.1\text{M}\Omega \sim 10\text{M}\Omega$: $0 \sim \sim 1500\text{PPM}/^\circ\text{C}$
Short-time Overload	CFR Products: $\Delta R/R \leq \pm(1\%+0.05\ \Omega)$
	CPR Products: $\Delta R/R \leq \pm(0.75\%+0.05\ \Omega)$
Dielectric withstanding voltage	With no evidence of flashover, mechanical damage, arcing or insulation breakdown
Terminal strength	No evidence of mechanical damage
Soldering heat	$\Delta R/R \leq \pm(1\%+0.05\ \Omega)$ with no evidence of mechanical damage
Solderability	Coverage must be over 95%.
Resistance to solvent	No deterioration of protective coating and markings
Rapid change of temperature	$\Delta R/R \leq \pm(1\%+0.05\ \Omega)$
	with no evidence of mechanical damage
Load life in humidity	CFR Ordinary Products: $\Delta R/R \pm 3\%$ for $< 100\text{k}\Omega$, $\pm 5\%$ for $\geq 100\text{k}\Omega$
	CFR Flame retardant type: $\Delta R/R \pm 5\%$ for $< 100\text{k}\Omega$, $\pm 10\%$ for $\geq 100\text{k}\Omega$
	High Power Products: $\Delta R/R \pm (3\%+0.05\ \Omega)$
Load life	CFR Ordinary Products: $\Delta R/R \pm 2\%$ for $< 56\text{k}\Omega$, $\pm 3\%$ for $\geq 56\text{k}\Omega$
	CFR Flame retardant type: $\Delta R/R \pm 5\%$ for $< 100\text{k}\Omega$, $\pm 10\%$ for $\geq 100\text{k}\Omega$
	High Power Products: $\Delta R/R \pm (3\%+0.05\ \Omega)$

Ordering Procedure (Example: CFR 1/4WS 5% 10 Ω T/B-5000)



Remark: For more details, please check page 135, Part No. System