

CFS Carbon Film Resistor

RoHS
COMPLIANT

■Features

- SMD style carbon resistor
- Free direction for mounting due to cylindrical design
- High solder ability due to specially plated electrodes
- Electrodes strength is higher than flat chip resistors
- Lower current noise than thick film flat chip resistors
- Suitable for reflow, flow and iron soldering

■Applications

- Automotive
- Telecommunication
- Medical Equipment
- Consumer Product



GENERAL SPECIFICATIONS(HIGH POWER)

Model	Power Rating at 70℃	Operating Temp. Range	Max. Operating Voltage	Max. Overload Voltage	Resistance Range	
					±2%	±5%
0204	1/4W	-55 ~ +155℃	250V	500V	1Ω -1MΩ	
0207	1/2W(1W)		300V(350V)	600V(700V)	1Ω -1MΩ	
0309	1W(2W)		350V	700V	1Ω -1MΩ	

CHARACTERISTICS

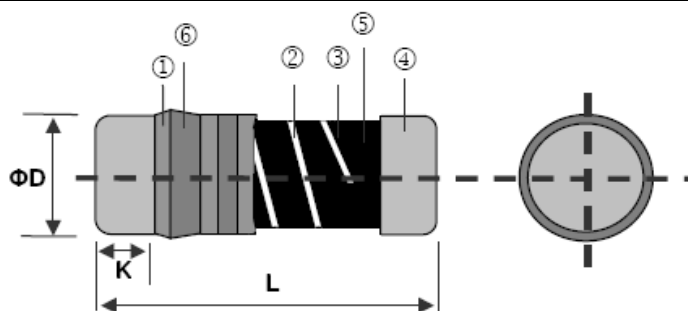
Short Time Overload	ΔR±1%	RCWV*2.5 or Max. overload voltage for 5 sec.
Endurance	ΔR±3%	70±2℃, Max. working voltage for 1000hrs with 1.5hrs "ON" and 0.5hrs "OFF"
Damp Heat with Load	ΔR±5%	40±2℃, 90~95% R.H. Max. working voltage for 1000hrs with 1.5hrs "ON" and 0.5hrs "OFF"
Dry Heat	ΔR±2%	At +155℃ for 1000hrs
Solderability	95% min. coverage	245±5℃ for 3sec.
Resistance to Soldering Heat	ΔR±1%	260±5℃ for 10sec.

*Reference Standard: JIS-C 5201-1

*Storage Temperature: 25±3℃; Humidity < 80%RH

DIMENSIONS

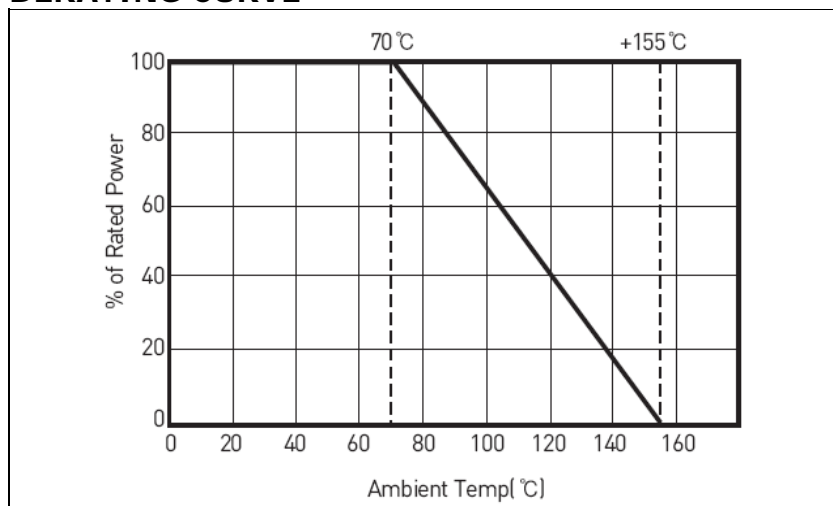
Unit : mm



①	Insulation Coating
②	Trimming Line
③	Ceramic Rod
④	Electrode Cap
⑤	Resistor Layer
⑥	Marking

Model	L	Φ D	K min.	Weight(g) (1000pcs)	Packaging	
					180mm 7"	330mm 13"
CFS0204	3.50±0.2	1.40±0.15	0.5	19	3000EA	-
CFS0207	5.90±0.2	2.20±0.20	0.5	81	2000EA	-
CFS0309	8.50±0.2	3.20±0.20	0.5	95	2500EA	2500EA

DERATING CURVE



ORDERING PROCEDURE EXAMPLE

CFS	0204	G	T	-	V	1000
Model #	Dimensions (L×ΦD)	Resistance Tolerance	Packing	TCR	Power Rating	Resistance
	0204: 3.5×1.4	G: ±2%	T: Taping Reel	-: No specified	S: 2W	0010: 1Ω
	0207: 5.9×2.2	J: ±5%	B: Bulk		T: 1W	1R20: 1.2Ω
	0309: 8.5×3.2				U: 1/2W	1000: 100Ω
					V: 1/4W	2201: 2200Ω
						1001: 1KΩ
						1004: 1MΩ