

# CFS

## Carbon Film Resistor (Melf)



### ■ 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

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

### ■ High Power Rating Electrical Specifications

Model	Power Rating at 70	Operating Temp. Range	Max. Operating Voltage	Max. Overload Voltage	Resistance Range[Ω]	
					±2%	±5%
0207	1W	-55 ~ +155℃	350V	700V	1Ω-1MΩ	
0309	2W					

### ■ CHARACTERISTICS

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

\*Reference Standard: JIS-C 5201-1

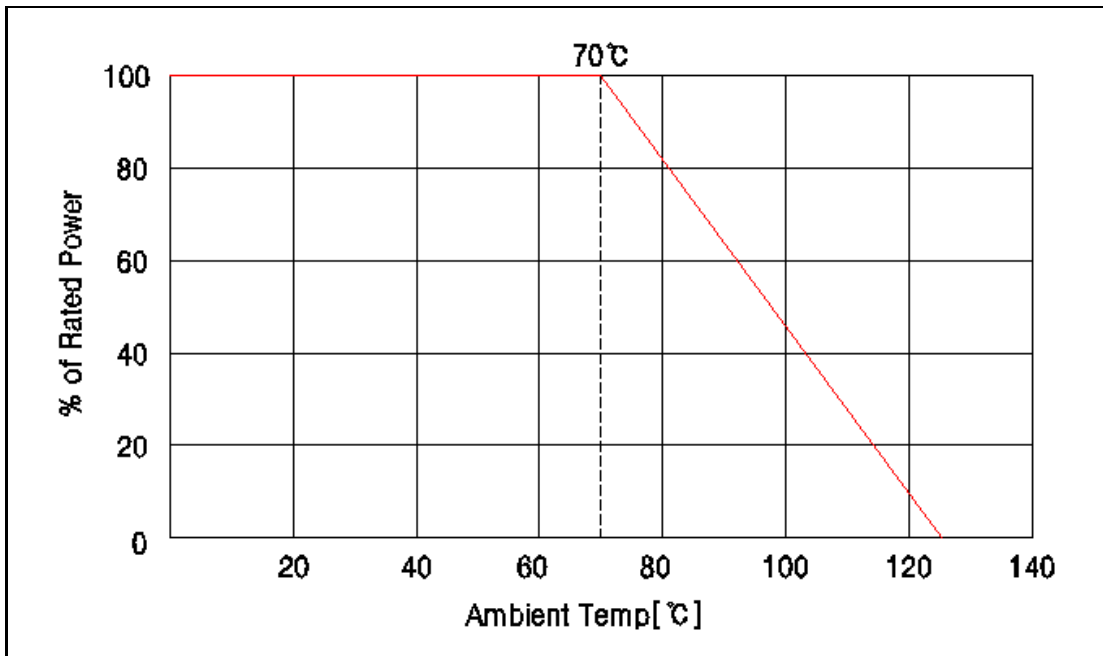
\*Storage Temperature: 25±3℃; Humidity < 80%RH

## ■ DIMENSIONS

Unit : mm

					①	Insulation Coating
					②	Trimming Line
					③	Ceramic Rod
					④	Electrode Cap
					⑤	Resistor Layer
					⑥	Marking
Model	L	ΦD	K min.	Weight(g) (1000pcs)	Packaging	
					180mm/7"	330mm/13"
CFS0204	3.5±0.2	1.4±0.15	0.5	19	3000EA	-
CFS0207	5.9±0.2	2.2±0.2		81	2000EA	
CFS0309	8.5±0.2	3.2±0.2		95	-	2500EA

## ■ DERATING CURVE



## ■ ORDERING PROCEDURE EXAMPLE

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