

# Automotive Thick Film Chip Resistors (CQ Series)

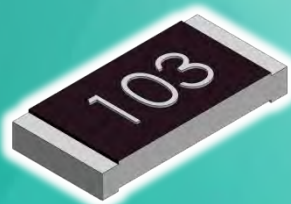


## Features:

- AEC-Q200 Compliant
- Suitable for reflow and wave soldering
- Anti Sulfuration
- Stable electrical capability, High reliability
- Available in KIT packaging 1% E24

## Application:

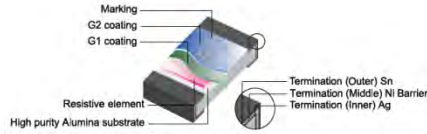
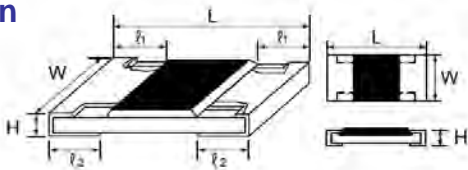
- Entertainment System
- Outdoor Electronic app
- Comfort & Safety Controls
- Lighting
- Batteries & Chargers
- Telecom
- Consumer Electronics
- General purpose



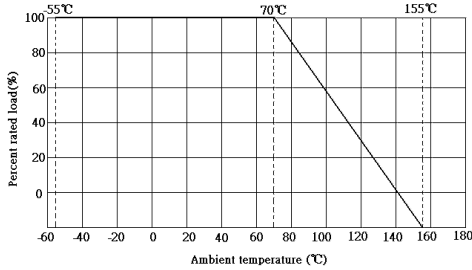
# Automotive Thick Film Chip Resistors (CQ Series)



## Dimension



## Derating Curve



Type	Max Working Voltage	Max Overload Voltage	Dielectric Withstanding Voltage	Operating Temperature Range
CQ02	50V	100V	100V	-55~+155°C
CQ03	75V	150V	300V	
CQ05	150V	300V	500V	
CQ06	200V	400V	500V	
CQ07	200V	500V	500V	
CQ10	200V	500V	500V	
CQ12	200V	500V	500V	

Type	Power (70°C)	L (mm)	W (mm)	H(mm)	l1 (mm)	l2 (mm)	Resistance Range 1%(E96)、5%(E24)
CQ02	1/16W	1.00±0.10	0.50±0.05	0.35±0.05	0.20±0.10	0.25±0.10	1Ω~10MΩ
CQ03	1/10W	1.60±0.10	0.80±0.10	0.45±0.10	0.30±0.20	0.30±0.20	
CQ05	1/8W	2.00±0.15	1.25+0.15 -0.10	0.55±0.10	0.40±0.20	0.40±0.20	
CQ06	1/4W	3.10±0.15	1.55+0.15 -0.10	0.55±0.10	0.45±0.20	0.45±0.20	
CQ07	1/2W	3.10±0.10	2.60±0.20	0.55±0.10	0.50±0.25	0.50±0.20	
CQ10	3/4W	5.00±0.10	2.50±0.20	0.55±0.10	0.60±0.25	0.50±0.20	
CQ12	1W	6.35±0.10	3.20±0.20	0.55±0.10	0.60±0.25	0.50±0.20	

## Characteristic

Test Item	Standard	Test Item	Standard
Temperature Coefficient	1Ω ~10Ω : ±400PPM/°C 10.1Ω ~100Ω : ±200PPM/°C > 100Ω : ±100PPM/°C	Resistance to Soldering Heat	±(1.0%+0.05Ω) Max
Short Time Overload	±1%:±(1.0%+0.1Ω)Max ±5%:±(2.0%+0.1Ω)Max	Temperature Cycling	±1%: ±(0.5%+0.1Ω) Max ±5%: ±(1.0%+0.1Ω) Max
Terminal Bending	±(1.0%+0.05Ω)Max	Biased Humidity	±1%: ±(1.0%+0.1Ω) Max ±5%: ±(3.0%+0.1Ω) Max
Solderability	Min. 95%coverage	Load Life	±1%: ±(1.0%+0.1Ω) Max ±5%: ±(3.0%+0.1Ω) Max
Dielectric Withstanding Voltage	No evidence of flashover, mechanical damage, arcing or insulation breakdown	Moisture Resistance	±1%: ±(0.5%+0.1Ω) Max ±5%: ±(3.0%+0.1Ω) Max

**Note: 0.1Ω ~ 0.97Ω : ±800PPM/°C can be supply on a case to case basis.**

Load Life test condition: 35% rated power at 125°C, 1000H.

Anti-sulfurized performance: H<sub>2</sub>S 3~5ppm, 50°C ±2°C, 91%~93RH, 1000H; Excellent stability



IATF 16949  
ISO 14001

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