High Power Chip Resistors

Model No.	WCR32	WCR50	WCR64
Size Code INCH	1206	2010	2512
Size Code mm	3216	5025	6432

■ Features

・Wide terminal made higher reliability of solder joint, compared to conventional chip resistor.
・Wide terminal made possible high power handling. (Rated power, WCR50 : 1W, WCR32 : 0.5W)
・High joint strengh against heat shock.
・Resistance ranging ～1MΩ.

■ Applications

・Automotive electronics such as E.C.U. ,etc.
・Circuits requiring high resistance to vibration.

■ Model Designation

WCR32　　102　　J　　V

①Model No.　②Resistance　③Tolerance　④Packaging

①Model No.
WCR32
WCR50
WCR64

②Resistance
3 digit or 4digit
(Resistance) → (Marking)
0Ω → 0
4.7Ω → 4R7
1kΩ → 102
1.02kΩ → 1021

③Tolerance	
Symbol	Tolerance(%)
F	± 1.0
J	± 5.0

0Ω type is no marking

④Packaging	
Symbol	Packaging
B	Bulk
V	Paper taping (WCR32)
E	Embossed taping (WCR50,WCR64)

■ Rating

Model No.	Rated Wattage (W)	Tolerance (%)	Resistance (Ω)	T.C.R. (ppm/℃)	Max. Working Voltage (V)	Max. Overload Voltage (V)
WCR32	0.5	J: ±5%	1～1M	±200	200	400
		F: ±1%	1～91	±200		
			100～9.1k	±100		
			10k～1M	±200		
WCR50	1.0	J: ±5%	1～1M	±200	200	400
		F: ±1%	1～91	±200		
			100～9.1k	±100		
			10k～1M	±200		
WCR64	2.0	J: ±5%	1～1M	±200	200	400
		F: ±1%	1～91	±200		
			100～9.1k	±100		
			10k～1M	±200		

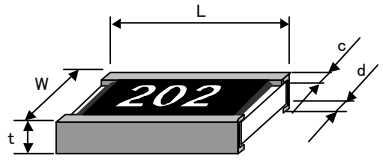
Operating Tempeature Range : -55℃～＋155℃

0Ω Type

Model No.	Rated Current (A)	Resistance
WCR32, WCR50, WCR64	2.0	Max. 50mΩ

High Power Chip Resistors

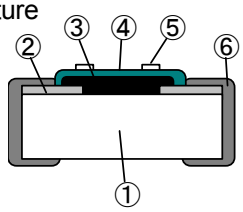
■ Dimensions



Unit : mm

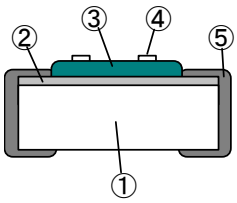
Model No.	L	W	c	d	t
WCR32	3.20±0.15	1.60±0.15	0.30±0.20	0.50±0.20	0.55 +0.15/-0.05
WCR50	5.00±0.20	2.50±0.20	0.50±0.20	0.60±0.20	0.56±0.15
WCR64	6.30±0.20	3.20±0.20	0.50±0.20	0.90±0.20	0.56±0.15

■ Structure



Symbol	Material List
①	Ceramic Substrate
②	Conductor
③	Resistor
④	Over coat
⑤	Marking
⑥	Side Electrode

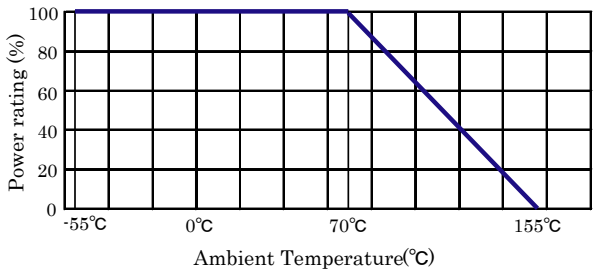
0Ω Type



Symbol	Material List
①	Ceramic Substrate
②	Conductor
③	Over coat
④	Marking
⑤	Side Electrode

■ Surface Temperature

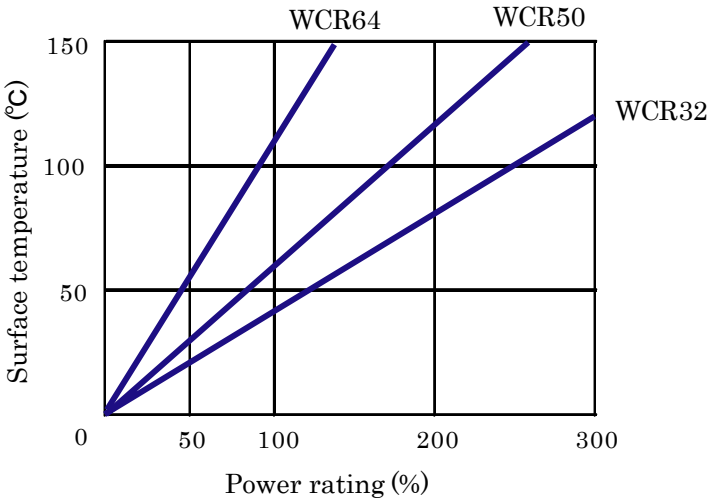
For resistors operated in ambient temperature above70 ℃, power rating must be derated in accordance with the derating curve.



■ Surface Temperature

Surface temperature rise is shown in this figure.

Condition : Measured by soldering on glass cloth base material epoxy resin (t=1.6mm).



■ Packaging

Refer "Dimension, Packaging, etc."