

# Wide Terminal Type High Wattage Chip Resistor

Hokuriku Electric Industry Co.,Ltd

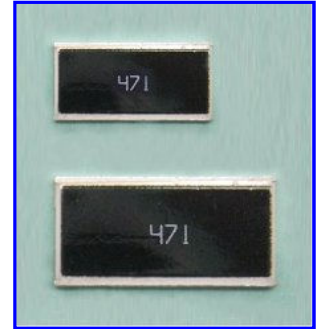


[Model No.]

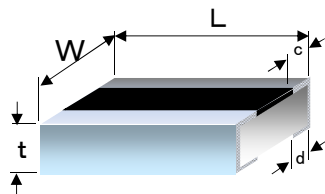
WCR110/160

[Features]

- Surface mount type, 3W , 5W rated of high wattage type
- Primary circuit of power supply is suitable application.
- Due to wide side terminal structure, solder joints hold high reliability.
- Wide side terminal structure has effect of suppressing heat generation.
- $1\Omega \sim 1M\Omega$ , wide resistance range is covered.
- Europe RoHS compliant product.



[Dimensions]



(Unit:mm)					
Model No.	L	W	t	c	d
WCR110	11.00±0.20	5.00±0.20	0.56±0.15	0.60±0.20	1.50±0.20
WCR160	16.00±0.20	8.00±0.20	0.56±0.15	0.70±0.20	2.50±0.20

[Specification]

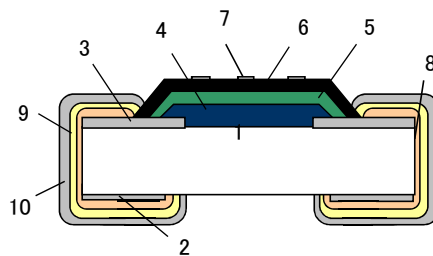
Model No.	Rated power (W)	Tolerance	Range ( $\Omega$ )	TCR (ppm/ $^{\circ}$ C)	Max. Working voltage	Max. Overload voltage
WCR110	<b>3.0 W</b>	<b>F (<math>\pm 1\%</math>)</b>	<b>1~91</b>	<b><math>\pm 200</math></b>	<b>200V</b>	<b>400V</b>
			<b>100~9.1k</b>	<b><math>\pm 100</math></b>		
			<b>10k~1M</b>	<b><math>\pm 200</math></b>		
WCR160	<b>5.0 W</b>	<b>J (<math>\pm 5\%</math>)</b>	<b>1~1M</b>	<b><math>\pm 200</math></b>	<b>250V</b>	<b>500V</b>

\*Specification in bold line is common to WCR110, WCR160.

\*Operating temperature range : -55~+155 $^{\circ}$ C

[Structure]

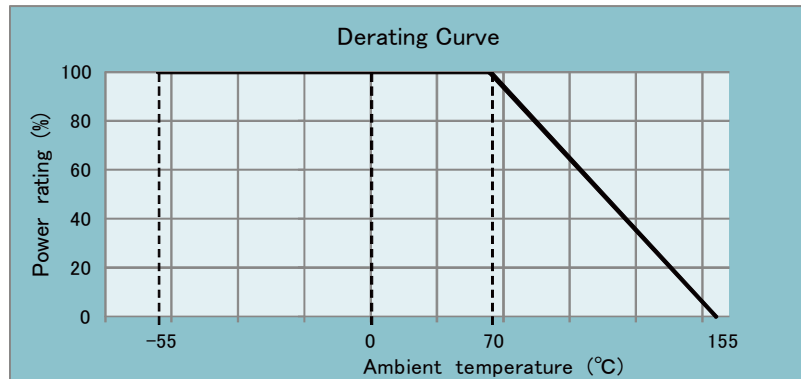
No.	Element Name
1	Ceramic substrate
2	Back electrode
3	Top electrode
4	Resistive element
5	Protective coat I
6	Protective coat II
7	Marking
8	Side electrode
9	Ni plating
10	Sn plating



\* Design\*specification are subject to change without prior notice. Please check before purchase and use.

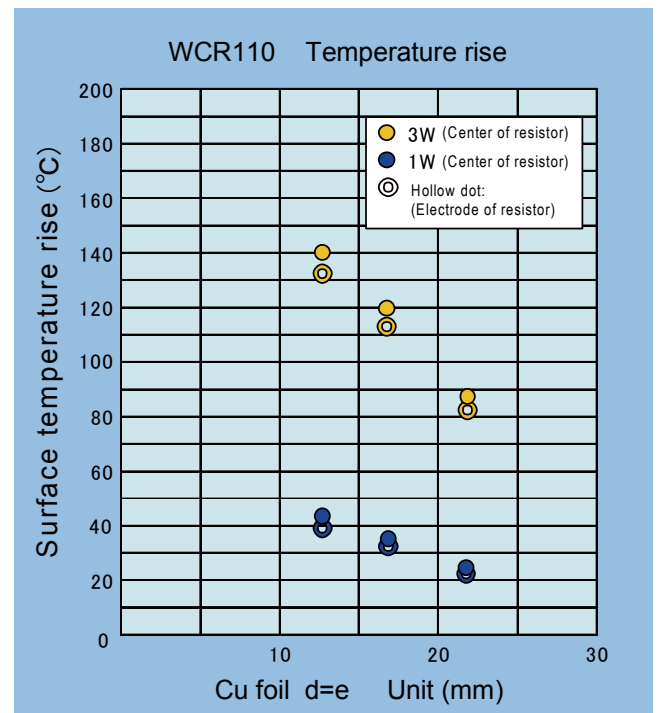
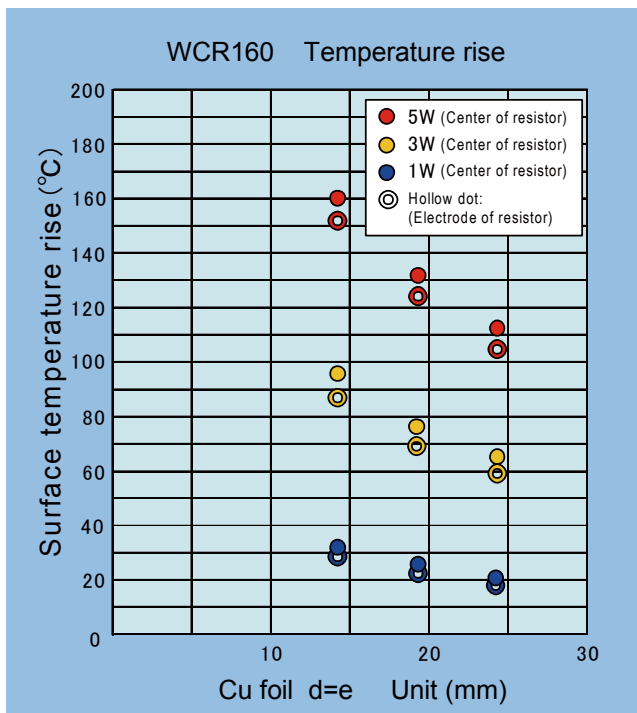
## [Power rating]

■ For resistors operated in ambient temperature above 70 °C, power rating must be derated in accordance with the derating curve.



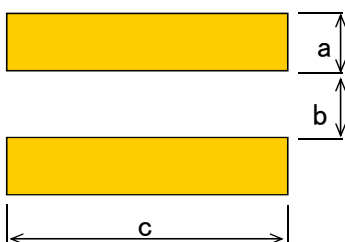
## [Surface temperature]

■ Please refer below, for relation between rated power ratio and surface temperature rise.  
 Condition: Measure by soldering to glass-fabric laminate epoxy resin (t=1.6mm Cu foil 35 μm)

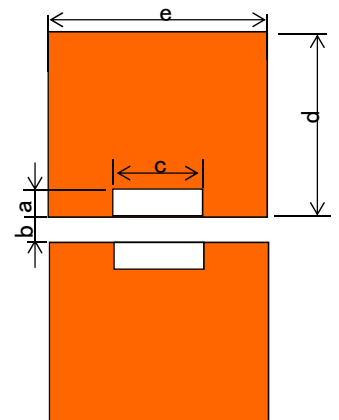


※ Please keep center temperature of the resistor not to exceed 155°C.

## [Recommended footprint]



	(mm)		
	a	b	c
WCR110	2.5	2.0	11.0
WCR160	3.5	3.2	16.0



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