

# Copper alloy (Line and Strip) for resistance material

Wide variety of resistor material

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Basic investigation finished	In marketing research	● In mass production
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We are able to offer various type of electrical resistivity and diameter of wire, Sheet thickness of material by full scale integrated manufacture according to your purpose.

## Features

- Adjustable to your desired hardness.
- Temperature-coefficient resistance (T.C.R.) and Thermo-electromotive force to copper (EMF) measurement is possible.

Alloy name	Alloy series	Electrical properties			Heat conductivity, W/m·K	Shape		JIS C2532 name
		Volume resistivity, $\mu\Omega\text{m}$	Temperature-coefficient of resistance, $10^{-6}/\text{K}$	Thermo-electromotive force to copper, $\mu\text{V}/\text{K}$		Strip or Board	Line or Bar	
CMR	Cu-Mn series	0.431	0*(20~60°C)	0.4*(JIS:±2)	16	○	○**	GCM44
30A	Cu-Ni series	0.300	(JIS:200)	(JIS:-32)	23	—	○	GCN30
HRR	Cu-Mn series	0.290	0*(20~60°C)	0.1*	24	○	○**	
R4	Cu-Si series	0.253	320*		28	△	○	
R6	Cu-Ni series	0.168	480*		40	△	○	
R6.7		0.150	(JIS:500)	(JIS:-25)	46	△	○	GCN15
R8		0.126	600*		56	△	○	
R10		0.100	710*	(JIS:-18)	68	△	○	GCN10
R12		0.084	870*		84	△	○	
R15	Cu-Zn series	0.067	1460*		104	○	○	
R20	Cu-Ni series	0.050	(JIS:1500)	(JIS:-13)	138	△	○	GCN5
R25	Cu-Zn series	0.040	1860*		172	○	○	
R25N	Cu-Ni series	0.040	2800*		172	△	○	
R38	Cu-Sn series	0.026	2960*		260	○	○	

\* Our company actual measured value  
\*\* Flat wire line-up (To be discussed)

○ : In production, △ : Please contact us, — : No production

