

Products Information

Features

- Equivalent electrical and thermal conductivity as C10200
- Higher strength compared to C10200, available in EH and SH temper
- High heat resistance applicable for high temperature environment
- Superior stress relaxation resistance property offering high reliability
- Suitable for heat dissipating, high current electronic devices and conductors

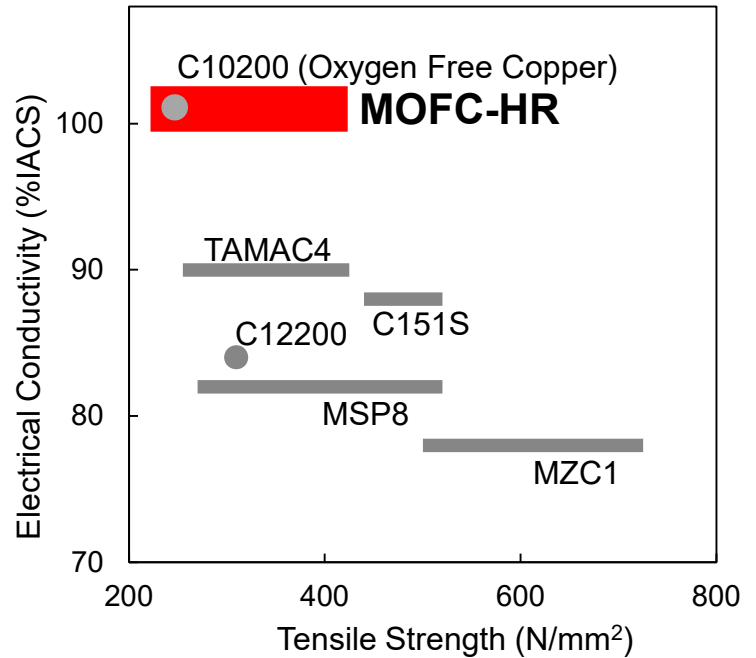
Chemical composition

(mass%)

Cu
99.96 Min.*

* Including inevitable impurities and trace additive elements

Positioning of Alloy



Physical properties

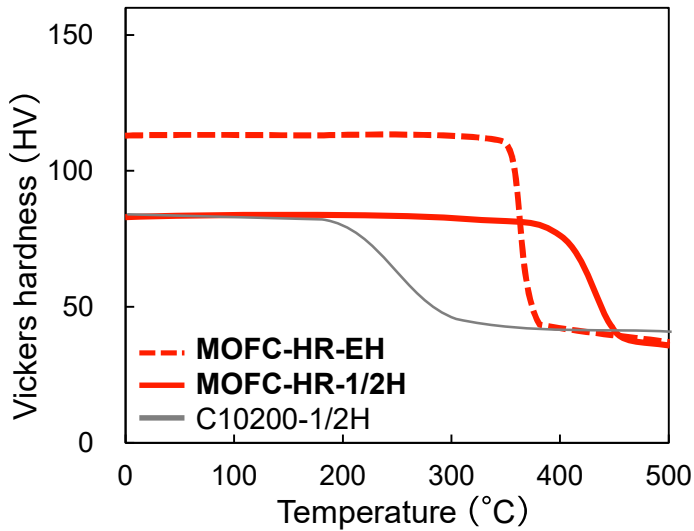
Property	Representative Value
Specific Gravity (293 K)	8.94
Coefficient of Thermal Expansion (/K : 293~573 K)	17.7×10 ⁻⁶
Thermal Conductivity (W/(m·K) : 293 K)	391
Electrical Conductivity (%IACS : 293 K)	101
Modulus of Elasticity (kN/mm² : 293 K)	119
Poisson's ratio (293 K)	0.31

Mechanical properties

	Temper				Typical Values			
	1/2H	H	EH	SH	1/2H t:3.0mm	H t:1.0mm	EH t:1.2mm	SH t:0.2mm
Tensile Strength (N/mm²)	245~315	275~345	315~415	355~455	246	302	356	403
0.2% Yield Strength (N/mm²)	—	—	—	—	226	300	351	389
Elongation (%)	15 Min.	—	—	—	38	13	4	4
Vickers Hardness **1 (HV)	(60~100)	(85~125)	(95~135)	(105~145)	81	102	113	123

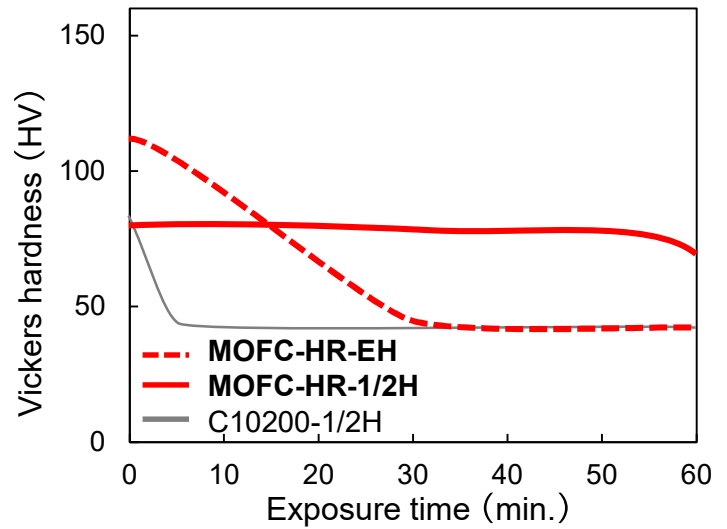
*1 Reference value

➤ Heat Resistance



Exposure time: 1hr

<JCBA T325>



Exposure temperature: 400°C

<JCBA T325>

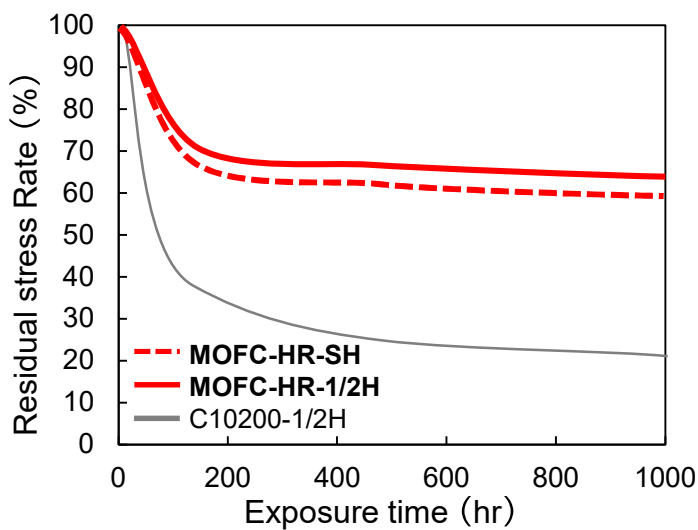
➤ Bendability

90° W-Bend, Specimen width=10mm, Load=9.8kN <JCBA T307>

Temper	Sampling direction (to the L.D.)	Bending radius (mm) R										R/t
		0.0	0.1	0.2	0.25	0.4	0.6	1.0	1.6	2.0	3.0	
1/2H t:3.0mm	0°: Good Way	△	△	△	△	△	△	○	○	○	○	0.0
	90°: Bad Way	△	△	△	△	△	△	○	○	○	○	0.0
H t:1.0mm	0°: Good Way	○	○	○	◎	◎	◎	◎	◎	◎	◎	0.0
	90°: Bad Way	○	○	○	◎	◎	◎	◎	◎	◎	◎	0.0

Criteria of evaluation: ◎Good(Acceptable), ○ Minor rough surface(Acceptable), △Rough surface(Acceptable),
▲Minor crack(Unacceptable), ×Major crack(Unacceptable)

➤ Stress relaxation resistance



Exposure temperature: 150°C

Sampling direction: L.D.

Bending stress: 80% of 0.2% yield strength

<JCBA T309>