

# C19210

## Cu-Fe ALLOY

### 1、Characteristic：

High strength, high electrical conductivity(85% IACS), fine crystal structure, strong corrosion resistance, good weldability, high softening resistance .

### 2、Application：

Lead frame, Connectors, Springs, Thermostat, Electrical Components terminals.

### 3、Physical Properties：

Alloy	C19210
Melting Point (°C)	1083
Solidifying Point (°C)	1067
Density (g/cm <sup>3</sup> )	8.94
Coefficient of Thermal Expansion×10 <sup>-6</sup> /°C	17.7
Thermal Conductivity (cal/cm <sup>2</sup> /cm/sec/°C)	0.83
Electrical Conductivity (IACS%)	85

### 4、Chemical Composition (%)

Material	Chemical Composition (%)		
	Cu	Fe	P
C19210	≥ 99.6	0.05~0.15	0.025~0.04

### 5、Mechanical Properties：

Alloy	Temper	Mechanical Properties		
		Tensile Strength Kgf/mm <sup>2</sup> (N/mm <sup>2</sup> )	Elongation %	Vicker's Hardness Hv Load 0.5Kg
C19210	O	255~335	≥ 30	≤ 90
	1/4 H	275~355	≥ 20	90~115
	1/2H	295~375	≥ 10	100~125
	H	330~415	≥ 5	110~135
	EH	≥ 370	—	≥ 115