

#### **Material Designation**

GB	1	
UNS	C17410	
EN	1	
JIS	/	

## **Chemical Composition**

Copper, Cu	Rem.
Beryllium, Be	0.15 – 0.50%
Cobalt, Co	0.35 – 0.60%

## **Physical Properties**

Density	8.80 g/cm3		
Electrical Conductivity	Min. 45 %IACS		
Thermal Conductivity	230 W/( m·K)		
Coefficiency of Thermal Expansion	17.6 μm/(m·K)		
Modulus of Elasticity	138 Gpa		

#### **Characteristics**

Beryllium copper is a copper alloy with beryllium as the main alloying element, also known as beryllium bronze. It is a high-grade elastic material with good performance in copper alloys. It has high strength, elasticity, hardness, fatigue strength, small elastic lag, corrosion resistance, wear resistance, cold resistance, high conductivity, non-magnetic, and no sparks when impacted. Series of excellent physical, chemical and mechanical properties.

CAMK17410 strip is low beryllium content. It contains only few alloy elements: Beryllium and cobalt. It combines outstanding electric conductivity with high mechanical strength, and provides high yield and fatigue strength with high electrical conductivity and good resistance to stress relaxation.

## **Application**

CAMK17410 is a mill hardened copper beryllium strip alloy designed for use in the Automotive, Appliance, and DataCom/TeleCom markets.

The typical applications include high reliability automotive terminals and spring contacts for switches and relays.

# **Mechanical Properties**

Specification mm (up to)	Туре	Temper	Tensile Strength Min. MPa	Yield Strength Min. MPa	Elongation Min. A%	Hardness Min.	Electrical Conductivity Min. % IACS
1	Strip	TH02 TH04	660 770	560 700	10 7	89 HRB 95 HRB	50 45

## **Advantage**

- 1. We actively respond to any questions from customers and provide shorter delivery times. If customers have urgent needs, we will fully cooperate.
- 2. We focus on controlling the production process so that the performance of each batch is as consistent as possible and the product quality is excellent.
- 3. We cooperate with the best domestic freight forwarders to provide customers with sea, rail and air transportation and combined transportation solutions, and have plans for transportation difficulties caused by natural disasters, epidemics, wars and other factors.