

# 锰铜电阻规格书

## (Constantan Resistor Specification)

产品名称: 锰铜电阻 (M 型)

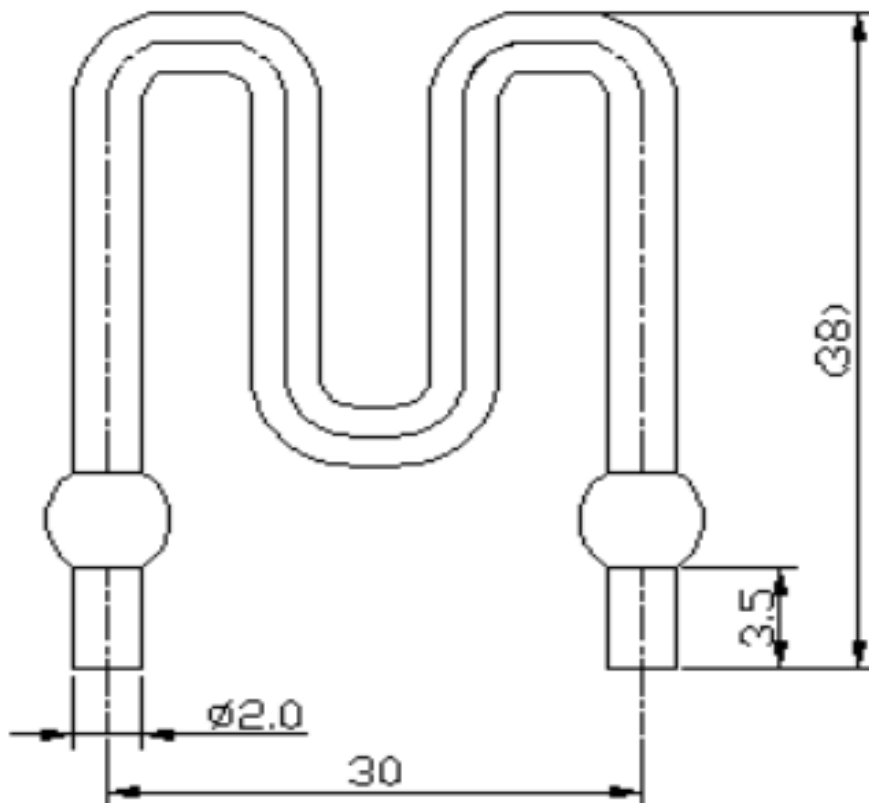
Product Name: Constantan Resistor (M type)

产品编号: φ 2.0\*30/22 毫欧

Product No.: φ2.0 \* 30 / 22 milliohm

### Product size

元件尺寸(mm)



### 电气参数 Electrical parameters

项目 ITEM	参数 PARAMETER
阻值 Resistance	22 毫欧 0.022 Oh
额定电流 Rated Current	20A
功率 Power	8.8W
表面处理 Surface treatment	无 Nothing
可焊性 Weldability	良好 Good

### 锰铜性能 Constantan properties

项目 ITEM	特点 Characteristic		
牌号 Alloy Name	6J13		
主要成份 Composition %	Cu	Mn	Ni
	余量 Allowance	11-13	2.0-5.0
电阻率 Resistivity $\mu\Omega \cdot m$	0.44±0.03		
电阻温度系数 PPM/°C	0~40		
对铜热电势 EMF VS Cu(0-100°C) uV/°C	≤2		
密度 Density g/cm <sup>3</sup>	8.9		
熔点 Melting Point °C	<950		
抗拉强度 Tensile Strength Mpa	-----		
伸长率 % Elongation L0=200mm	<15		
使用温度 Service Temperature	0-100		

## Specification

项目 ITEM	规格值 Value	试验方法(依据 JIS C 5202) Test method (according to JIS C 5202)
短时间负荷 Short time load	Within $\pm 2\%$	RCWV*2.5 or Max Overloading Voltage, 5 seconds
端子强度 Terminal strength	No evidence of mechanical damage	5Kg/10sec
浸锡试验 Tin immersion test	Within $\pm 1\%$	350 $\pm$ 10 $^{\circ}$ C, 3.5 $\pm$ 0.5s After test leave for 3h
可焊性试验 Weldability test	Covered with new solder by 95% at least	260 $\pm$ 5 $^{\circ}$ C, 10 $\pm$ 0.5seconds
温度循环试验 Temperature cycling test	Within $\pm 1\%$	-55 $\sim$ 200 $^{\circ}$ C 100cycles
耐湿负荷试验 Moisture load resistance test	Within $\pm 5\%$	40 $\pm$ 2 $^{\circ}$ C, 90 to 95%RH, 1000h Rated voltage (90 min on, 30 min off)
负荷寿命试验 Load life test	Within $\pm 5\%$	70 $\pm$ 2 $^{\circ}$ C, 1000h Rated voltage (90 min on, 30 min off)

## Purpose:

- ▶ Accuracy is required for current sampling within the range of  $\pm 5\%$
- ▶ Feedback circuit
- ▶ Low inductance circuit
- ▶ High current pulse circuit

## Packing

- ▶ In bulk, 200PCS per package