

# Polyimide Phosphor Bronze Insulated Wire (Cu94/Sn 6)

**Formula:** Cu94/Sn 6  
**Conductor Diameter:** 0.125mm  
**Insulation:** Polyimide  
**Insulation Thickness:** 0.01mm  
**Length:** 50m  
**UOM Code:** 049-106-88  
**SKU:** 1000006930-group  
**Product Code:** CU05-SW-000130

## Material Properties for Alloys

### Mechanical Properties

Element	Value
Hardness - Brinell	80-225
Elongation at break( % )	60
Modulus of elasticity( GPa )	90-120
Izod impact strength( J m <sup>2</sup> )	62
Shear strength( MPa )	250-430
Tensile strength( MPa )	320-740

### Electrical Properties

Element	Value
Electrical resistivity( μOhmcm )	11.0-16.0
Temperature coefficient( K <sup>-1</sup> )	0.0006-0.0007

### Thermal Properties

Element	Value
Melting point( C )	900-1050
Thermal conductivity( W m <sup>-1</sup> K <sup>-1</sup> )	50-75@23°C
Coefficient of thermal expansion( x10 <sup>-6</sup> K <sup>-1</sup> )	17@20-100°C

## Physical Properties

Element	Value
Density( gcm <sup>3</sup> )	8.9