

# Iron/Nickel Alloy Foil (Fe52/Ni48)

**Formula:** Fe52/Ni48

**Temper:** Annealed

**Thickness:** 0.75mm

**Length 1:** 100mm

**Length 2:** 100mm

**UOM Code:** 379-843-82

**SKU:** 1000108087-group

**Product Code:** FF01-FL-000100

## Material Properties for Alloys

### Mechanical Properties

Element	Value
Elongation at break( % )	30
Modulus of elasticity( GPa )	248
Tensile strength( MPa )	450-550

### Electrical Properties

Element	Value
Electrical resistivity( $\mu\text{Ohmcm}$ )	49
Temperature coefficient( $\text{K}^{-1}$ )	-

### Thermal Properties

Element	Value
Maximum use temperature in air( C )	450
Melting point( C )	1450
Specific heat( $\text{J K}^{-1} \text{kg}^{-1}$ )	502@23°C
Thermal conductivity( $\text{W m}^{-1} \text{K}^{-1}$ )	16.7@23°C
Coefficient of thermal expansion( $\times 10^{-6} \text{K}^{-1}$ )	8.5@20-100°C

### Physical Properties

Element	Value
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Density( gcm<sup>3</sup> ) 8.2