

1050 H18 Aluminum Sheet

General

Property	Temperature	Value
Density	23.0 °C	2.7 g/cm³

Mechanical

Property	Temperature	Value	Comment
Elastic modulus	23.0 °C	69 GPa	
Plane-Strain Fracture Toughnes	23.0 °C	22 - 35 MPa·√m	Typical for Wrought 1000 Series Aluminium
Poisson's ratio	23.0 °C	0.33 [-]	Typical for Wrought 1000 Series Aluminium
Shear modulus	23.0 °C	25.9 GPa	Typical for Wrought 1000 Series Aluminium
Tensile strength	23.0 °C	140 MPa	

Thermal

Property	Temperature	Value
Coefficient of thermal expansion	23.0 °C	2.4E-5 1/K
Melting point		650 °C
Specific heat capacity	23.0 °C	900 J/(kg·K)
	23.0 °C	230 W/(m·K)

Thermal
conductivity

Electrical

Property	Temperature	Value	Comment
Electrical conductivity	23.0 °C	3.30E+7 - 3.80E+7 S/m	Typical for Wrought 1000 Series Aluminium
Electrical resistivity	23.0 °C	2.7E-8 - 3E-8 Ω·m	Typical for Wrought 1000 Series Aluminium

Chemical properties

Property	Value
Aluminium	99.5 - 100 %
Copper	0 - 0.05 %
Iron	0 - 0.4 %
Magnesium	0 - 0.05 %
Manganese	0 - 0.05 %
Silicon	0 - 0.25 %
Titanium	0 - 0.03 %
Vanadium	0 - 0.05 %
Zinc	0 - 0.05 %

Technological properties

Property	
Brazing	Excellent
Workability	

Excellent workability.
