

Aluminum Data Sheet

	Aluminum 5052	Aluminum 6061
Physical Properties		
Density	2.68 g/cc	2.7 g/cc
Mechanical Properties		
Hardness, Brinell	60	95
Ultimate Tensile Strength	228 MPa	310 MPa
Tensile Yield Strength	193 MPa	276 MPa
Elongation at Break	12%	17%
Modulus of Elasticity	70.3 GPa	68.9 GPa
Poisson's Ratio	0.33	0.33
Fatigue Strength	117 MPa	96.5 MPa
Shear Modulus	25.9 GPa	26 GPa
Shear Strength	138 MPa	207 MPa
Electrical Properties		
Electrical Resistivity	4.99e-006 ohm-cm	3.99e-006 ohm-cm
Thermal Properties		
CTE, linear 68°F	23.8 μm/m-°C	23.6 μm/m-°C
CTE, linear 250°C	23.8 μm/m-°C	25.2 μm/m-°C
Specific Heat Capacity	0.88 J/g-°C	0.896 J/g-°C
Thermal Conductivity	138 W/m-k	167 W/m-k
Melting Point	607-649 °C	582-652 °C