

### Key Features

- High strength
- Good workability
- High resistance to corrosion

### Common Applications

- Aircraft fittings
- Camera lens mounts
- Marines fittings and hardwares
- Electrical fittings and connectors
- Hinge pins
- Magneto parts
- Brake pistons

### Material Description

Aluminum 6061 T6 is a high-strength, lightweight aluminum alloy known for its excellent mechanical properties and versatility. The "6061" designation refers to its alloying elements, primarily magnesium and silicon, which provide a good balance of strength, corrosion resistance, and weldability. The "T6" temper indicates that the material has been solution heat-treated and artificially aged to achieve its peak strength. This alloy is widely used in aerospace, automotive, and structural applications due to its favorable properties and ease of fabrication.

### Chemical Composition (%)

	Al	Cr	Cu	Fe	Mg	Mn	Si	Ti	Zn		
<b>Min.</b>	95.8	0.04	0.15		0.8		0.4				
<b>Max.</b>	98.6	0.35	0.4	0.7	1.2	0.15	0.8	0.15	0.25		

### Mechanical Properties

<b>Ultimate Tensile Strength</b>	45,000 PSI
<b>Tensile Yield Strength</b>	40,000 PSI
<b>Hardness</b>	Rockwell B60
<b>Elongation at Break</b>	17%

### Physical Properties

<b>Density</b>	0.0975 lb/in <sup>3</sup> (2.70 g/cm <sup>3</sup> )
<b>Thermal Conductivity</b>	167W/m.K
<b>Modulus of elasticity</b>	10,000 KSI (68.9 GPa)
<b>Melting Point</b>	1,080 - 1,205°F (582 - 651.7 °C)

### Technical Assistance

Our knowledgeable staff, supported by our in-house team of expert metallurgists and engineers, is ready to assist you with any technical inquiries.

### InstaVoxel™ - On-Demand Manufacturing Expert

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