

Aluminium - 6063A T6

Box Section Rectangular

Properties

Stock		Chemical Properties	
Size (in)	Weight/m (Kg)	Element	Chemical composition %
1 1/2 x 3/4 x 3/16	0.48	Manganese (Mn)	0.15 max
1 1/2 x 1 x 16G	0.53	Iron (Fe)	0.15 - 0.35
50 x 25 x 3mm	1.12	Magnesium (Mg)	0.60 - 0.90
1 1/2 x 1 x 10G	1.00	Silicon (Si)	0.30 - 0.60
2 x 1 x 10G	1.22	Zinc (Zn)	0.0 - 0.15
2 x 1 1/2 x 10G	1.45	Titanium (Ti)	0.10 max
3 x 1 x 10G	1.67	Chromium (Cr)	0.05 max
3 x 1 1/2 x 10G	1.90	Copper (Cu)	0.10 max
3 x 2 x 10G	2.11	Aluminium (Al)	Balance
4 x 1 x 10G	2.12		
4 x 1 3/4 x 10G	2.45		
4 x 2 x 10G	2.56		
6 x 2 x 10G	3.40		
6 x 3 x 3/8	10.80		

Mechanical Properties	
Property	Value
Proof Stress	90 MPa
Tensile Strength	150 MPa
Elongation	10%

Physical Properties	
Property	Value
Density	2.70 g/cm ³
Melting Point	600°C
Thermal Expansion	23.5 x 10 ⁻⁶ /K
Modulus of Elasticity	69.5 GPa
Thermal Conductivity	200 W/m.K
Electrical Resistivity	0.035 x 10 ⁻⁶ Ω.m

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