

Aluminium - 6063 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)	0.0 - 0.10
1 1/2 x 1 x 16G	0.53	Iron (Fe)	0.0 - 0.35
50 x 25 x 3mm	1.12	Magnesium (Mg)	0.45 - 0.90
1 1/2 x 1 x 10G	1.00	Silicon (Si)	0.20 - 0.60
2 x 1 x 10G	1.22	Zinc (Zn)	0.0 - 0.10
2 x 1 1/2 x 10G	1.45	Titanium (Ti)	0.0 - 0.10
3 x 1 x 10G	1.67	Chromium (Cr)	0.0 - 0.10
3 x 1 1/2 x 10G	1.90	Copper (Cu)	0.0 - 0.10
3 x 2 x 10G	2.11	Other (Each)	0.0 - 0.05
4 x 1 x 10G	2.12	Others (Total)	0.0 - 0.15
4 x 1 3/4 x 10G	2.45	Aluminium (Al)	Balance
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	170 Min MPa
Tensile Strength	215 Min MPa
Hardness Brinell	75 Typical HB
Elongation A	8 Min %

Physical Properties	
Property	Value
Density	2.70 g/cm ³
Melting Point	655°C
Thermal Expansion	23.5 x 10 ⁻⁶ /K
Modulus of Elasticity	69.5 GPa
Thermal Conductivity	201 W/m.K
Electrical Resistivity	0.033 x 10 ⁻⁶ Ω .m
Electrical Resistivity	52% IACS

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