

Aluminium - 6063 T6

Channel

Properties

Stock		Chemical Properties	
Size (in)	Weight/m (Kg)	Element	Chemical Composition %
3/8 x 3/8 x 1/8	0.11	Manganese (Mn)	0.0 - 0.10
1/2 x 1/2 x 1/16	0.15	Iron (Fe)	0.0 - 0.35
1/2 x 1/2 x 1/8	0.27	Magnesium (Mg)	0.45 - 0.90
5/8 x 5/8 x 1/16	0.19	Silicon (Si)	0.20 - 0.60
5/8 x 5/8 x 1/8	0.36	Zinc (Zn)	0.0 - 0.10
3/4 x 3/4 x 1/16	0.24	Titanium (Ti)	0.0 - 0.10
3/4 x 3/4 x 1/8	0.49	Chromium (Cr)	0.0 - 0.10
7/8 x 7/8 x 1/8	0.52	Copper (Cu)	0.0 - 0.10
1 x 1/2 x 1/8	0.38	Other (Each)	0.0 - 0.05
1 x 3/4 x 1/8	0.49	Others (Total)	0.0 - 0.15
1 x 1 x 1/16	0.31	Aluminium (Al)	Balance
1 x 1 x 1/8	0.60		
1 1/4 x 3/4 x 1/8	0.55	Mechanical Properties	
1 1/4 x 1 x 1/8	0.66	Property	Value
1 1/4 x 1 1/4 x 1/8	0.76	Proof Stress	170 Min MPa
1 1/2 x 3/4 x 1/8	0.60	Tensile Strength	215 Min MPa
1 1/2 x 1 x 1/8	0.71	Hardness Brinell	75 Typical HB
1 1/2 x 1 1/2 x 1/8	0.93	Elongation A	8 Min %
1 1/2 x 1 1/2 x 1/4	1.74		
1 1/2 x 1 1/2 x 3/16 x 3/16	1.35	Physical Properties	
1 3/4 x 1 x 1/8	0.76	Property	Value
2 x 1/2 x 1/8	0.60	Density	2.70 g/cm ³
2 x 1 x 1/8	0.82	Melting Point	655°C
2 x 1 x 3/16	1.22	Thermal Expansion	23.5 x 10 ⁻⁶ /K
2 x 1 x 1/4	1.52	Modulus of Elasticity	69.5 GPa
2 x 1 1/2 x 1/8	1.03	Thermal Conductivity	201 W/m.K
2 x 1 1/2 x 1/4	1.97	Electrical Resistivity	0.033 x 10 ⁻⁶ Ω .m
2 x 2 x 1/8	1.26	Electrical Resistivity	52% IACS
2 x 2 x 3/16	1.83		
2 x 2 x 1/4	2.40		
2 1/4 x 1 1/4 x 3/16	1.43		
2 1/2 x 1 x 1/8	0.93		
2 1/2 x 1 1/4 x 3/16	1.52		
3 x 1 x 1/8	1.04		
3 x 1 1/2 x 1/8	1.26		
3 x 1 1/2 x 3/16	1.84		
3 x 1 1/2 x 1/4	2.42		
3 x 1 1/2 x 1/4 x 5/16	2.66		
3 x 2 x 1/8	1.48		
3 x 2 x 3/16	2.17		
3 x 2 x 1/4	2.84		
3 1/2 x 1 1/2 x 1/4 x 5/16	2.90		

4 x 2 x 1/8	1.69
4 x 2 x 1/4	3.29
4 x 2 x 1/4 x 5/16	3.66
5 x 2 x 1/4 x 5/16	4.08
5 x 2 1/2 x 1/4 x 3/8	5.36
6 x 2 x 1/4 x 5/16	4.53
6 x 3 x 1/4 x 3/8	6.21
6 x 3 x 3/8 x 1/2	8.49
8 x 3 x 3/8 x 1/2	9.80

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