Aluminium - 6063 T6

Channel

Stock

Size (in)	Weight/m (Kg)
3/8 x 3/8 x 1/8	0.11
1/2 x 1/2 x 1/16	0.15
1/2 x 1/2 x 1/8	0.27
5/8 x 5/8 x 1/16	0.19
5/8 x 5/8 x 1/8	0.36
3/4 x 3/4 x 1/16	0.24
3/4 x 3/4 x 1/8	0.49
7/8 x 7/8 x 1/8	0.52
1 x 1/2 x 1/8	0.38
1 x 3/4 x 1/8	0.49
1 x 1 x 1/16	0.31
1 x 1 x 1/8	0.60
1 1/4 x 3/4 x 1/8	0.55
1 1/4 x 1 x 1/8	0.66
1 1/4 x 1 1/4 x 1/8	0.76
1 1/2 x 3/4 x 1/8	0.60
1 1/2 x 1 x 1/8	0.71
1 1/2 x 1 1/2 x 1/8	0.93
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
1 3/4 x 1 x 1/8	0.76
2 x 1/2 x 1/8	0.60
2 x 1 x 1/8	0.82
2 x 1 x3/16	1.22
2 x 1 x 1/4	1.52
2 x 1 1/2 x 1/8	1.03
2 x 1 1/2 x 1/4	1.97
2 x 2 x 1/8	1.26
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

Properties

Chemical Properties

Element	Chemical Composition %
Manganese (Mn)	0.0 - 0.10
Iron (Fe)	0.0 - 0.35
Magnesium (Mg)	0.45 - 0.90
Silicon (Si)	0.20 - 0.60
Zinc (Zn)	0.0 - 0.10
Titanium (Ti)	0.0 - 0.10
Chromium (Cr)	0.0 - 0.10
Copper (Cu)	0.0 - 0.10
Other (Each)	0.0 - 0.05
Others (Total)	0.0 - 0.15
Aluminium (Al)	Balance

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

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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