

# Aluminium - 5083 F

## Channel

Stock	Weight/m (Kg)
100 x 50 x 6	2.53

## Properties

Chemical Properties	
Element	Chemical Composition %
Manganese (Mn)	0.40 - 1.00
Iron (Fe)	0.40 typical
Copper (Cu)	0.10 typical
Magnesium (Mg)	4.0 - 4.90
Silicon (Si)	0.40 typical
Zinc (Zn)	0.25 typical
Chromium (Cr)	0.05 - 0.25
Titanium (Ti)	0.15 typical
Aluminium (Al)	Balance

Mechanical Properties	
Property	Value
Proof stress	145 MPa
Tensile strength	300 MPa
Elongation	23%
Shear strength	175 MPa
Hardness Vickers	75 HV

Physical Properties	
Property	Value
Density	2.65 g/cm <sup>3</sup>
Melting point	570°C
Thermal expansion	25 x 10 <sup>-6</sup> /K
Modulus of elasticity	72 GPa
Thermal conductivity	121 W/m.k
Electrical resistivity	0.058 x 10 <sup>-6</sup> Ω.m

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