


Aluminum 3004-H112

Categories: [Metal](#); [Nonferrous Metal](#); [Aluminum Alloy](#); [3000 Series Aluminum Alloy](#)

Vendors: No vendors are listed for this material. Please [click here](#) if you are a supplier and would like information on how to add your listing to this material.

Physical Properties	Metric	English	Comments
Density	2.72 g/cc	0.0983 lb/in ³	

Mechanical Properties	Metric	English	Comments
Tensile Strength, Ultimate	>= 160 MPa @Thickness 6.35 - 76.2 mm	>= 23200 psi @Thickness 0.250 - 3.00 in	
Tensile Strength, Yield	>= 62.0 MPa @Thickness 6.35 - 76.2 mm	>= 8990 psi @Thickness 0.250 - 3.00 in	
Elongation at Break	7.00 % @Thickness 6.35 - 76.2 mm	7.00 % @Thickness 0.250 - 3.00 in	
Modulus of Elasticity	70.0 GPa	10200 ksi	
Poissons Ratio	<= 0.350	<= 0.350	
Shear Modulus	25.0 GPa	3630 ksi	

Thermal Properties	Metric	English	Comments
CTE, linear 	21.5 µm/m-°C @Temperature -50.0 - 20.0 °C	11.9 µin/in-°F @Temperature -58.0 - 68.0 °F	
	23.2 µm/m-°C @Temperature 20.0 - 100 °C	12.9 µin/in-°F @Temperature 68.0 - 212 °F	
	24.1 µm/m-°C @Temperature 20.0 - 200 °C	13.4 µin/in-°F @Temperature 68.0 - 392 °F	
	25.1 µm/m-°C @Temperature 20.0 - 300 °C	13.9 µin/in-°F @Temperature 68.0 - 572 °F	
Specific Heat Capacity	0.893 J/g-°C	0.213 BTU/lb-°F	

Component Elements Properties	Metric	English	Comments
Aluminum, Al	95.5 - 98.2 %	95.5 - 98.2 %	
Copper, Cu	<= 0.250 %	<= 0.250 %	
Iron, Fe	<= 0.700 %	<= 0.700 %	
Magnesium, Mg	0.800 - 1.30 %	0.800 - 1.30 %	
Manganese, Mn	1.00 - 1.50 %	1.00 - 1.50 %	
Other, each	<= 0.0500 %	<= 0.0500 %	
Other, total	<= 0.150 %	<= 0.150 %	
Silicon, Si	<= 0.300 %	<= 0.300 %	
Zinc, Zn	<= 0.250 %	<= 0.250 %	

Some of the values displayed above may have been converted from their original units and/or rounded in order to display the information in a consistent format. Users requiring more precise data for scientific or engineering calculations can click on the property value to see the original value as well as raw conversions to equivalent units. We advise that you only use the original value or one of its raw conversions in

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