

### SPECIFICATIONS

Commercial	5052
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A medium strength alloy

### CHEMICAL COMPOSITION

SAE AMS QQ A 250/8 Alloy QQ A 250/8	
Element	% Present
Magnesium (Mg)	2.2 - 2.8
Iron (Fe)	0.4 max
Chromium (Cr)	0.15 - 0.35
Silicon (Si)	0.25 max
Others (Total)	0.15 max
Copper (Cu)	0.1 max
Manganese (Mn)	0.1 max
Zinc (Zn)	0.1 max
Other (Each)	0.05 max
Aluminium (Al)	Balance

### ALLOY DESIGNATIONS

Aluminium alloy QQ-A-250/8 has similarities to the following standard designations and specifications **but may not be a direct equivalent:**  
 Alloy 5052, UNS A95052, AA5052

### TEMPER TYPES

Alloy QQ-A-250/8 is supplied in a wide range of tempers

- O - Soft
- H34 - Stabilised - A low temperature thermal treatment or heat introduced during manufacture which stabilises the mechanical properties and relieves residual internal stress, plus usually improves ductility
- H112 - Alloys that have some tempering from shaping but do not have special control over the amount of work-hardening or thermal treatment.
- H24 - Work hardened by rolling then annealed to half hard
- H26 - Work hardened by rolling then annealed to three-quarter hard
- H32 - Work hardened by rolling then stabilised by low-temperature heat treatment to quarter hard
- T36 - Solution heat treated then cold worked by a reduction of 6%

### SUPPLIED FORMS

Alloy QQ-A-250/8 is supplied in plate and sheet

- Plate
- Sheet

### GENERIC PHYSICAL PROPERTIES

Property	Value
Density	2.63 g/cm <sup>3</sup>
Melting Point	650 °C
Thermal Expansion	23.7 x10 <sup>-6</sup> /K
Modulus of Elasticity	70 GPa
Thermal Conductivity	138 W/m.K
Electrical Resistivity	35 % IACS

## MECHANICAL PROPERTIES

Mechanical Properties shown are for H34 temper

Thickness (mm)	Proof Strength (Min)	Tensile Strength (MAX)	Elongation % (Min)
Over 0.2 up to & incl. 0.5	234	283	3
Over 0.5 up to & incl. 1.2	234	283	4
Over 1.2 up to & incl. 2.9	234	283	6
Over 2.9 up to & incl. 6.3	234	283	7

## CONTACT

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## REVISION HISTORY

Datasheet Updated 17 January 2014

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