



MAB42E RoHS Compliant, Lead-Free Machinable Brass

Introduction

MA42E is a RoHS compliant, lead-free copper alloy with good machinability, high strength, and excellent ductility. Lead content is limited amounts for compliance with a growing range of legislative and regulatory guidelines. MA42E is targeted for electronic applications, however the alloy is recommended for any machined brass part requiring lead-free product.

To learn more please contact our [sales department](#).

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Chemical Composition - Limits	Chemical Composition - Nominal	
Cu 57.0-58.5	Cu 58	
Pb 0.1 max	Zn 42	
Zn rem		
Fe 0.1-0.5		
Ni 0.1-0.5		
Sn 0.1-0.5		
Mn 0.1 max		
Si 0.1 max		
Specifications	Fabrication Index	
RoHS 2002/53/CE	Soldering	5 - Excellent
RoHS 2002/96/CE	Hot Worked	5 - Excellent
	Cold Worked	4 - Very Good
	Brazing	4 - Very Good
	Machinability	4 - Very Good

Physical Properties

Annealing Range (Min)	900 °F
Annealing Range (Max)	1075 °F
Density	0.306 lb/in ³
Electrical Resistivity (Annealed)	41.5 Ω-cir-mil/ft @ 68 °F
Electrical Conductivity (Annealed)	25% IACS @ 68 °F
Thermal Conductivity	65 Btu/ft ² /ft·hr/°F @ 68 °F
Coefficient of Thermal Expansion	11.1 per °F (68-572 °F)
Modulus of Elasticity (Tension)	15 ksi
Melting Point (Solidus)	1,700 °F

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Melting Point (Liquidus)

1,900 °F

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