

Schmolz + Bickenbach MoldMAX[®] SC Copper Alloy

Category : Metal , Nonferrous Metal , Copper Alloy

Material Notes:

Description: Brush Wellman's MoldMAX[®] SC is a high conductivity copper mold alloy with good strength. MoldMAX[®] SC is used as blow mold cavities, injection mold cores and cavities and hot runners. The alloy provides excellent toughness, and the highest conductivity of any alloy with tensile strength in excess of 100,000 psi. Information provided by Schmolz + Bickenbach

Order this product through the following link:

http://www.lookpolymers.com/polymer_Schmolz-Bickenbach-MoldMAX-SC-Copper-Alloy.php

Physical Properties	Metric	English	Comments
Density	8.83 g/cc	0.319 lb/in ³	

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell C	20	20	
Tensile Strength, Ultimate	724 MPa	105000 psi	
Tensile Strength, Yield	621 MPa @Strain 0.200 %	90000 psi @Strain 0.200 %	
Elongation at Yield	15 %	15 %	
Modulus of Elasticity	138 GPa	20000 ksi	
Fatigue Strength	>= 240 MPa @# of Cycles 1.00e+7	>= 34800 psi @# of Cycles 1.00e+7	(R=-1)
Impact Test	54.2 J	40.0 ft-lb	

Thermal Properties	Metric	English	Comments
CTE, linear	17.6 Åµm/m-Å°C	9.80 Åµin/in-Å°F	
Specific Heat Capacity	0.414 J/g-Å°C @Temperature 100 Å°C	0.0990 BTU/lb-Å°F @Temperature 212 Å°F	
Thermal Conductivity	20.9 W/m-K @Temperature 100 Å°C	145 BTU-in/hr-ftÅ²-Å°F @Temperature 212 Å°F	
Melting Point	>= 1040 Å°C	>= 1900 Å°F	approximate
Solidus	1040 Å°C	1900 Å°F	approximate

Component Elements Properties	Metric	English	Comments
-------------------------------	--------	---------	----------

Component Elements Properties	Metric 9.60 %	English 60 %	Comments
Copper, Cu	97.2 - 98.4 %	97.2 - 98.4 %	
Nickel, Ni	1.4 - 2.2 %	1.4 - 2.2 %	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China