C106
Technical Datasheet

Phosphorus Deoxidised Non Arsenical Copper

Typical Applications
- Connectors
- Transformers
- General electronics
- Busbars
- Motor components
- Building fascias
- Heatsinks
- Cable strips

Product Description
C106 is a phosphorus deoxidised non-arsenical copper. This is the preferred grade for non-electrical applications such as for fasteners, general engineering and construction. The metal is easily brazed or welded and has excellent formability. C106 can be used for plating and polishing and also has aesthetic value. It is used in architectural applications.

Key features:
- Good corrosion resistance
- Excellent formability and joining properties
- Non-magnetic & spark resistant
- Very good electrical and thermal conductivity
- Not susceptible to hydrogen embrittlement

Related material specifications
- BS2874: C106
- BS EN 13601: CW024A
- C12200
- Cu-DHP

Availability
Bar and sheet

Chemical Composition (weight %)

<table>
<thead>
<tr>
<th>Weight (%)</th>
<th>Cu</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min</td>
<td>Bal</td>
<td></td>
</tr>
<tr>
<td>Max</td>
<td>Bal</td>
<td>0.10</td>
</tr>
</tbody>
</table>

Mechanical Properties

<table>
<thead>
<tr>
<th>Physical Properties</th>
<th>Tensile Strength (MPa)</th>
<th>Proof Stress 0.2% (MPa)</th>
<th>Elongation A5 (%)</th>
<th>Hardness VPN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density</td>
<td>8.92 g/cm³</td>
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<tr>
<td>Melting Point</td>
<td>1083 °C</td>
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<tr>
<td>Modulus of Elasticity</td>
<td>117 GPa</td>
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<tr>
<td>Electrical Resistivity</td>
<td>0.0203 x10⁶ Ω.m</td>
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<tr>
<td>Thermal Conductivity</td>
<td>391.2 W/m.K</td>
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<tr>
<td>Thermal Expansion</td>
<td>16.9 x10⁵ /K</td>
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</table>

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Technical Assistance
Our knowledgeable staff backed up by our resident team of qualified metallurgists and engineers, will be pleased to assist further on any technical topic.