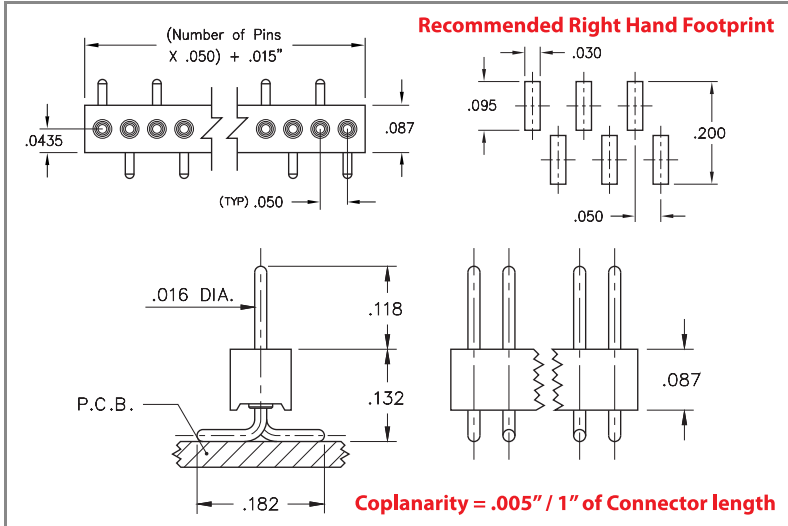


PRODUCT NUMBER: 850-90-012-30-002000



DESCRIPTION

Interconnect Machined Pin Header
 Surface Mount Pin Header

.016" (0,406mm) Pin Head

Rows: Single Row (1)

Pitch: .050" (1,270mm)

Clip Grid: 30

Pin Window Pattern 002

Plating Code: 90

Shell: 200 μ " Tin/Lead(93/7) over 100 μ " Nickel

Insulator Pin Clip Type: 000

Mounting Type: Surface Mount

Insulator Information:

Nylon 46 High Temperature

Pins

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LOOSE PIN/RECEPTACLE USED:

4006 (Brass Alloy)

BRASS ALLOY 360 per ASTM B 16, or 385 per ASTM B455

Properties of BRASS ALLOY360 ASTM B 16:

- Chemical composition: Cu 63% (max), Pb 3.7% (max)†, Fe .35% (max), Zn remainder
- Temper as machined: H02/H04
- Yield Strength: 25-45 ksi
- Tensile strength: 57-80 ksi
- Hardness as machined: 80-90 Rockwell B
- Electrical conductivity: 26% IACS*
- Melting point: 1000 °C/840 °C (liquidus/solidus)

Properties of BRASS ALLOY385 ASTM B 455:

- Chemical composition: Cu 60% (max), Pb 3.5% (max)†, Fe .35% (max), Zn remainder
- Temper as machined: H02/H04
- Yield Strength: 16 ksi(min)
- Tensile strength: 48 ksi(min)
- Hardness as machined: 80-90 Rockwell B
- Electrical conductivity: 28% IACS*
- Melting point: 1000 °C/840 °C (liquidus/solidus)

After machining, brass parts are often annealed (softened) for subsequent bending, swaging or crimping. A partial anneal

down to 60 ± 10 RB is recommended for 90° bends, a full anneal down to 35 ± 15 RB is recommended for pins or terminals that are swaged (riveted) to a circuit board or crimped to a wire.

Note: Plated Brass parts need a barrier plate to prevent zinc diffusion, $50 \mu\text{m}$ min. nickel or $100 \mu\text{m}$ min. copper is recommended by ASTM B 545 and 579. ASTM B 488 also recommends a $50 \mu\text{m}$ min. nickel barrier plate beneath gold to prevent copper diffusion inherent with all copper alloy products.

†RoHS-2 directive 2011/65/EU, exemption 6c allows up to 4% lead as an alloy agent in copper.

*International Annealed Copper Standard, i.e. as a % of pure copper.

INSULATOR MATERIAL:

Nylon 46 (Injection Molded)


Properties:

- High Temp. {30% glass filled} or {45% glass filled}, (black). Flammability rating UL 94 V-0
- Material Heat Deflection Temp. (per ASTM D 648): 554°F (290°C) @ 264 psi

Note: Materials with HDT above 446°F (230°C) are considered suitable for "eutectic" reflow soldering. For "lead-free" reflow soldering, choose materials with an HDT above 500°F (260°C).

ADDITIONAL NOTES & SPECIFICATIONS

In the interest of improved design, quality and performance, Mill-Max reserves the right to make changes in its specifications without prior notice. Specifications and tolerances are provided wherever possible. Due to the wide variety of interconnects Mill-Max offers, the specific tolerances vary from product to product. If you need information regarding the tolerance of a particular part, please contact Technical Services.

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