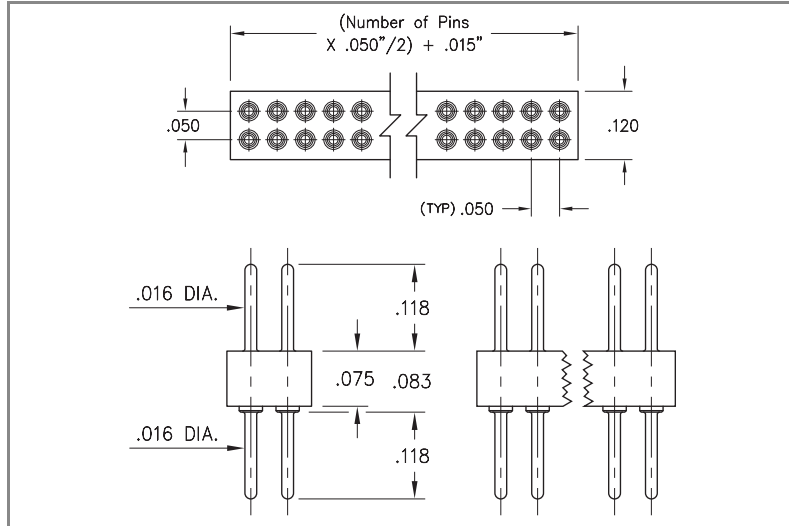


## PRODUCT NUMBER: 852-90-038-10-001000



### DESCRIPTION

Interconnect Machined Pin Header

Standard Pin Header

.016" (0,41mm) Pin Head

**Rows:** Double Row (2)

**Pitch:** .050" (1,270mm)

**Clip Grid:** 10

**Pin Window Pattern** 001

**Plating Code:** 90

**Shell:** 200  $\mu$ " Tin/Lead(93/7) over 100  $\mu$ "

Nickel

**Insulator Pin Clip Type:** 000

**Mounting Type:** Through Hole Solder Mount

**Insulator Information:**

Nylon 46 High Temperature

### # Pins

38

### 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  $60 \pm 10$  RB is recommended for  $90^\circ$  bends, a full anneal down to  $35 \pm 15$  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,  $50\mu$ " min. nickel or  $100\mu$ " min. copper is recommended by ASTM B 545 and 579. ASTM B 488 also recommends a  $50\mu$ " 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):  $554^\circ\text{F}$  ( $290^\circ\text{C}$ ) @ 264 psi

Note: Materials with HDT above  $446^\circ\text{F}$  ( $230^\circ\text{C}$ ) are considered suitable for "eutectic" reflow soldering. For "lead-free" reflow soldering, choose materials with an HDT above  $500^\circ\text{F}$  ( $260^\circ\text{C}$ ).

## 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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