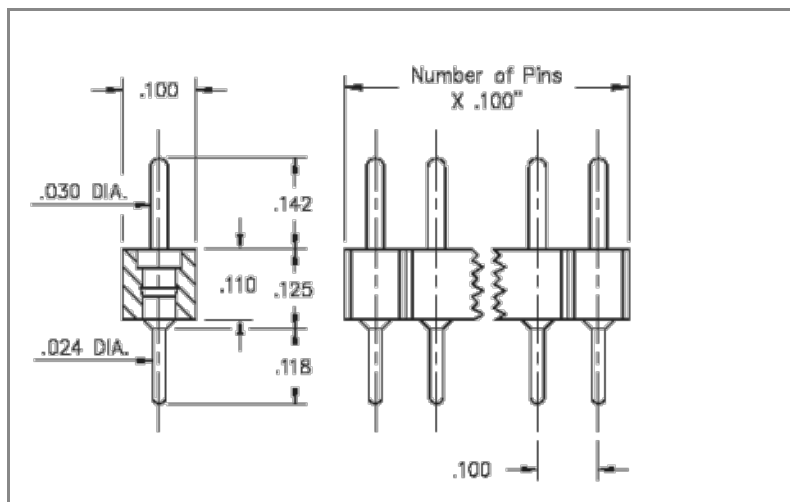


**PRODUCT NUMBER: 800-40-048-10-002000**



## DESCRIPTION

Interconnect Machined Pin Header

Low Profile Solder Tail Header

.030" (0,762mm) Pin Head

**Rows:** Single Row (1)

**Pitch:** .100" (2,540mm)

**Clip Grid:** 10

**Pin Window Pattern** 002

**Plating Code:** 40

**Shell:** 200  $\mu$ " Tin (matte finish) over 100  $\mu$ " Nickel

**Insulator Pin Clip Type:** 000

**Mounting Type:** Through Hole Solder Mount

**Insulator Information:**

PCT High Temperature

| # Pins | ROHS Compliant |
|--------|----------------|
|--------|----------------|

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## LOOSE PIN/RECEPTACLE USED:

5016 (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:

### PCT Polyester (Injection Molded)

Properties:

- Polyester {30% glass filled}, High Temp., (black). Flammability rating UL 94 V-0
- Rated voltage: 100 VRMS/150 VDC
- Insulation resistance: 10,000 Megaohms min.
- Material Heat Deflection Temp (per ASTM D 648):  $529^\circ\text{F}$  ( $276^\circ\text{C}$ ) @ 66 psi
- Dielectric strength: 1000 VRMS min. (700 VRMS min. for series 117 Shrink DIP)

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  $500^\circ\text{F}$  ( $260^\circ\text{C}$ ). PCT is the standard plastic used with RoHS "lead-free" plated pins.

## 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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