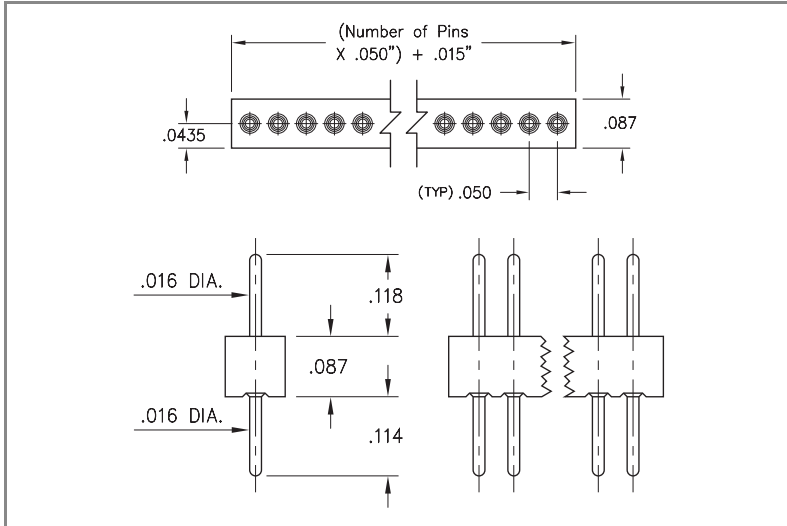


**PRODUCT NUMBER: 850-10-050-10-001000**



**DESCRIPTION**

Interconnect Machined Pin Header  
 Standard Pin Header

**.016" (0,41mm) Pin Head**

**Rows:** Single Row (1)

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

**Clip Grid:** 10

**Pin Window Pattern** 001

**Plating Code:** 10

**Shell:** 10  $\mu$ " Gold over 100  $\mu$ " Nickel

**Insulator Pin Clip Type:** 000

**Mounting Type:** Through Hole Solder Mount

**Insulator Information:**

Nylon 46 High Temperature

|               |                       |
|---------------|-----------------------|
| <b># Pins</b> | <b>ROHS Compliant</b> |
|---------------|-----------------------|

50



**LOOSE PIN/RECEPTACLE USED:**

4006 (Brass Alloy)

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

**Properties of BRASS ALLOY 360 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 ALLOY 385 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 circuitboard 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°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.

---

 © 2020 Mill-Max Mfg. Corp.  
190 Pine Hollow Rd, Oyster Bay, NY 11771, USA  
Phone: 516.922.6000