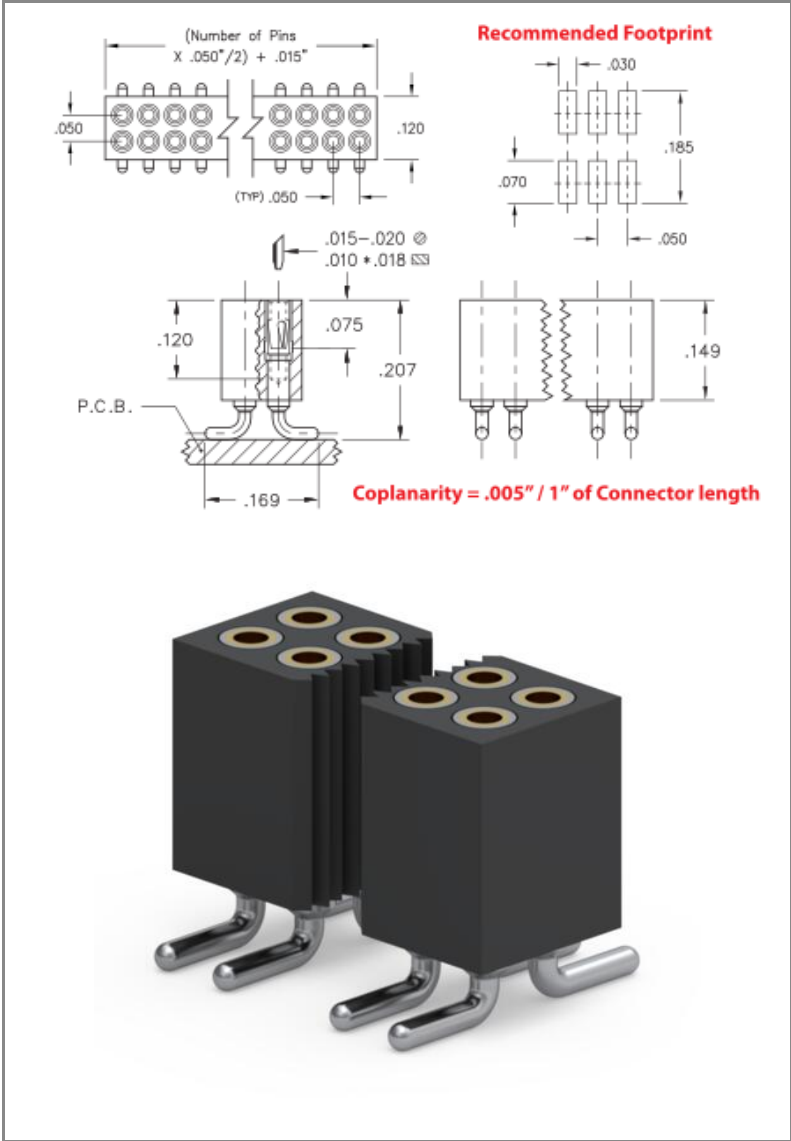




PRODUCT NUMBER: 853-41-090-30-001000

www.mill-max.com
DATA SHEET



General Info

Description¹: Surface Mount Socket
Accepts .015"-.020" (0,381-0,508mm) dia leads

Type: Interconnect

Category: Machined Pin Socket

Mounting Style: Surface Mount

Tail Type: Gull Wing Tail

Pins: 90

Packaging²: Packaged in Box or Tube

Rows: Double Row

ECCN: Contact Factory

HTSUS: 8536.90.4040

Product Lifecycle: Active

Country Of Origin: USA

853-41-090-30-001000- SPECIFICATIONS

Environmental Specs	
Temperature Range ³ :	-55/+125° C
Shock ⁴ :	No Elect. Discontinuity > 1µs @ 50g
Vibration ⁵ :	No Elect. Discontinuity > 1µs @ 10-2000HZ, 15 G
RoHS ⁶ :	Yes
Moisture Sensitivity Level (MSL):	1 (Unlimited)
REACH Status:	REACH Unaffected

Mechanical Specs	
Mechanical life (Durability) ⁷ :	1,000 Cycles Minimum

Materials	
Loose Pin/Receptacle # (Material):	4890 (Brass Alloy)
Shell Plating:	200 µ" Tin (matte finish) over 100 µ" Nickel
Inner Contact #:	11
# Contact Fingers:	3
Inner Contact Material:	Beryllium Copper
Inner Contact Plating:	10 µ" Gold over 50 µ" Nickel
Insulator Material:	Nylon 4/6

Technical Specs	
Pitch:	.050" (1,270mm)
SMT Pad Size:	.030" (0,762mm)

Electrical Specs	
Rated Voltage:	100 VRMS/150 VDC
Insulation Resistance:	10,000 MΩ min.
Dielectric Withstanding Voltage:	1,000 VRMS min.

NOTES:

1. Standard Tolerances

Assembly tolerance: $\pm .010"$ (.25mm)

Connector Length "L"

Connector Length "L"	Tolerance
$L \leq 2"$ ($L \leq 50.8$ mm)	$\pm .005"$ ($\pm .127$ mm)
$2 < L \leq 3"$ ($50.8 < L \leq 76.2$ mm)	$+ .007 / - .006"$ ($+ .178 / - .152$ mm)
$3 < L \leq 4"$ ($76.2 < L \leq 101.6$ mm)	$+ .009 / - .007"$ ($+ .229 / - .178$ mm)
$4 < L \leq 5"$ ($101.6 < L \leq 127$ mm)	$+ .011 / - .008"$ ($+ .279 / - .203$ mm)
$5 < L \leq 6.4"$ ($127 < L \leq 162.56$ mm)	$+ .013 / - .009"$ ($+ .330 / - .229$ mm)

Insulator width: $\pm .005$ (.13mm)

Insulator height: $\pm .005$ (.13mm)

Co-planarity of SMT connectors: .005" (.13mm) up to 1" (25.4mm) in connector length

Insulator Flatness: .005" (.13mm) up to 1" (25.4mm) in connector length

Pin Length: $\pm .005$ (.13mm)

Pin Diameter: $\pm .002$ (.051mm)

Pin Angle: $\pm 2^\circ$

- Not all part numbers in the series may be packaged in tubes. Some specific part numbers may be packaged in a box.
- Per IEC 60512-11-(4,-9,-10,-12)
- For discrete pin only. Per IEC 60512-6-3: Test 6c: Shock
- For discrete pin only. Per IEC 60512-6-4: Test 6d: Vibration (sinusoidal)
- Mill-Max products labeled with the RoHS symbol are compliant with all three ROHS Directives. All of our products previously described as RoHS (2002/95/EC) and RoHS-2 (2011/65/EC) are also compliant with RoHS-3 (2015/863/EU).
- Receptacles are capable of 1,000 Minimum insertion/extraction cycles for a broad range of applications. Mating pin size, shape and finish, along with application specific variables, will affect the life of a receptacle contact.

ADDITIONAL NOTES AND 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. The tolerance on dimensions of critical to function features is typically held tighter than the stated standard tolerances, such as press-fits, holes and lengths affecting the coplanarity of SMT products. 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.

RELATED LINKS AND DOCUMENTS

- Engineering Notebook: [Introduction to Machined Pin PCB Connectors & Interconnects](#)
- Environmental Compliance: <https://www.mill-max.com/rohs>