# ZIERICK

#### ENGINEERED INTERCONNECTION SOLUTIONS

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### FEATURES & BENEFITS

- For SMT or THT applications;
- Applicable for SMT reflow process or THT wave soldering;
- Designed for high volume automated placement;
- High retention forces;
- Shoulder on the part provides a stand-off for the mating part from the PCB;
- Retains typical throughhole Quick Disconnect Tab features;
- Tabs don't float during reflow;
- Designed for automation using the customer's existing pick and place equipment and a special feeder;
- Ideal for demanding applications.

#### SURFACE MOUNT / THROUGH HOLE TAB PART NUMBERS 6284 AND 6291

These hybrid tabs were designed for high volume automated placement on a Surface Mount PCB using the customer's existing pick and place equipment and a special feeder.

For Surface Mount use, a placement machine gripper picks up the hybrid tab and places the legs into the plated through-holes of a pre-pasted board. The hole size is important for solder flow.

When the board is sent through the reflow oven, the solder is drawn down into the plated through-hole by capillary action, creating a solder connection between the legs and the pth. At the same time, the wings of the tab are soldered to the surface mount pads on the PC board.

The resulting terminal retention force

exceeds any single through hole or surface mount terminal force. Table 1 shows the strength of the soldered hybrid tab using this surface mount soldering technique. It is ideal for very demanding applications where the terminal is exposed to shock, vibration, and elevated temperatures.

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The Zierick hybrid tabs are also at home on a Through Hole PCB and can be automated with any of our high speed Automatic Insertion machines, such as the 9700 and the 9700 XY machines. The legs can be splayed for additional board retention. The terminal legs are slip-fit into the PCB holes and can be wave soldered. As with the SMT process, the wing feature of the base is placed over a matching solder pad on the PCB and can be surface mounted using the SMT process.

SPECIFICATIONS				
Reeled Part Number	6284	6291		
Hole Diameter	0.070" (1.78mm)	0.055" (1.40mm)		
Material Thickness	0.032" (0.81mm)			
Material Type	Brass			
Standard Finish	100% Tin over Copper			
Feeder System (SMT)	Surf-Shooter SMT Continuous Strip Feeder			
Feeder System (THT)	Models 9700, 9700 XY			
U.S. Patent No.	5,695,348 and other U.S. and International Patents			

## SURFACE MOUNT / THROUGH HOLE TAB PART NUMBERS 6284 AND 6291 (continued)



#### **APPLICATION DRAWING: PN 6291** - .187 [4.75] .055 Ø [1.40] .260 .245 .050 -[1.27] . 125 [3.18] 6.32 6.12 .355 REF [9.02] .150 .045 - .050 [1.02 - 1.22] .10 J [2.54] [3.B1] - .042 - .048 [0.97 - 1.17] - .14Z [3.61] - .200 -[5.08] .312 REF [7.92]

TABLE 1: TAB/QUICK DISCONNECT STRENGTH TESTS Based on .250" Tabs				
Type of Tab	Soldering Process	Average Tensile Strength	Average Bend Force	
THT Tab w/o Stable-Lok®	Wave Soldered	58 Lb / 26.4 Kg	8 Lb / 3.6 Kg	
THT Tab w/ Stable-Lok®	Wave Soldered	58 Lb / 26.4 Kg	13 Lb / 5.9 Kg	
SMT Tab	Surface Mount Soldered	80 Lb / 36.4 Kg	24 Lb / 10.9 Kg	
SMT/THT Tab	Surface Mount Soldered	166 Lb / 75.4 Kg	26 Lb / 11.0 Kg	