

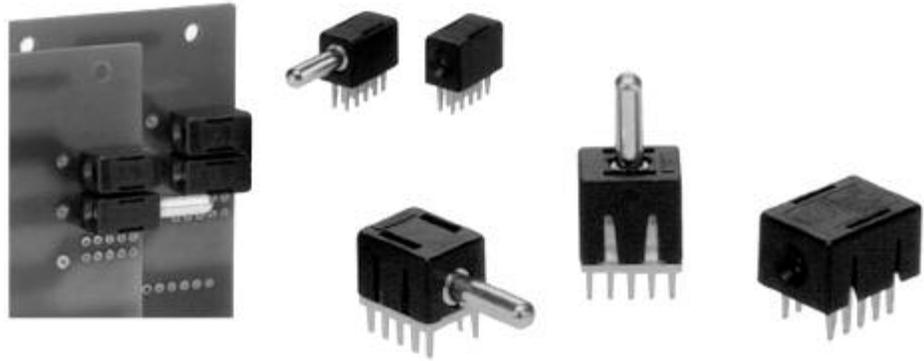
## ICCON Single Pole Power Connectors

### Product Facts

- Uses high-performance Crown contact
- 35A current rating
- True compliant press-fit and solder tails
- Pin locking feature option
- Standard DIP footprint .300 x .100 and ICCON SLIMLINE Connector .100 x .100
- Insulator rated at 105°C, UL 94V-0
- Meets safety regulatory requirements
- #8 AWG wire size
- Parallel and perpendicular
- Sequencing capability
- All ICCON Products in this section are RoHS compliant

### Typical Applications

- Power distribution
- Board-to-board interconnection
- Board-to-busbar interconnection
- Board-to-wire interconnection
- High-density power designs
- Board stacking



ICCON connectors provide a reliable high current power interconnection with quick connect/disconnect function for space constrained motherboard-daughterboard, cable-board and board-busbar power delivery applications.



### Product Highlights

#### High Performance Contact

ICCON connectors use ELCON CROWN BAND Contact, a multifingered spring which provides a greater surface contact area, thus ensuring small millivolt drop, minimum heat generation and very low insertion and extraction forces.

#### Optional Locking Feature

The optional locking feature provides minimum 5 lbs. (2.21kg) retention force to improve connection integrity, securing against accidental unmating in harsh mechanical conditions.

#### Support for Multiple Mounting Styles

ICCON connectors are available with press-fit or solder tails for mounting on both PC boards and bus bars. Tyco Electronics uses eye of the needle true compliant tails for the most reliable mounting using solderless techniques.

Each ICCON connector has a 10 pin DIP footprint for convenient industry standard mounting. Through hole socket connectors can be used in "bottom entry" applications.

#### Mating with Discrete Contracts

For further versatility, ICCON connector products can mate with discrete contacts, available in a variety of termination types.

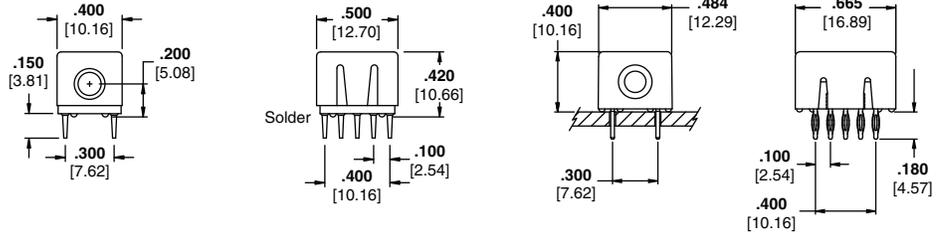
#### ICCON SLIMLINE Connectors

With a footprint close to 30% smaller than the standard ICCON connector products, the ICCON SLIMLINE connector products allow integrating more components in less board real estate, providing substantial space savings compared to connectors of this type in the same performance range.

**ICCON Standard DIP Connectors (.300 x .100 footprint)**

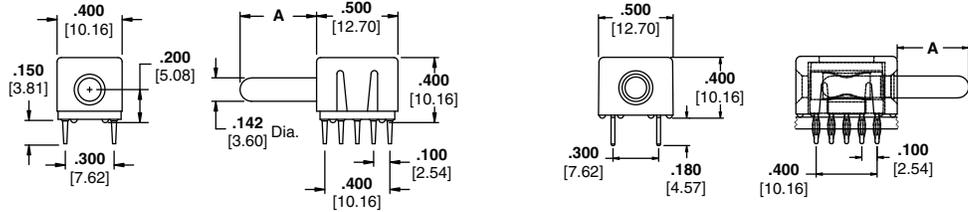
**Right Angle Receptacle**

Part Number 6643232-1 Solder  
Part Number 6643272-1 Compliant



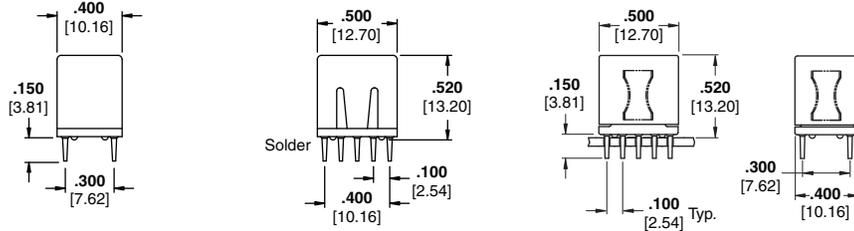
**Right Angle Pin**

For Part Numbers and "A" Dimension  
See Table Below



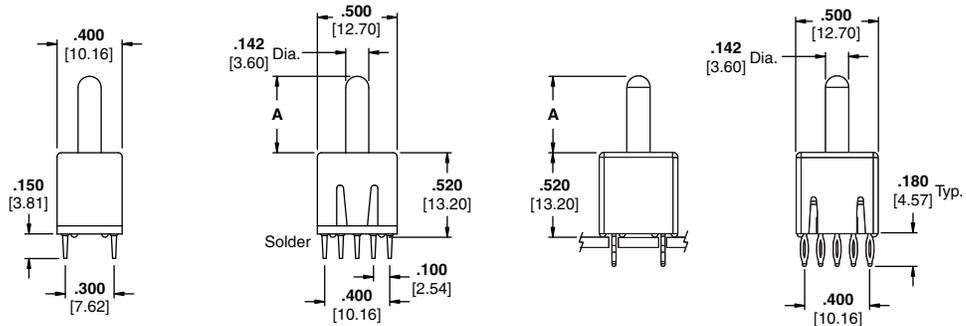
**Vertical Receptacle**

Part Number 6643264-1 Through Hole, Solder  
Part Number 6643247-1 Closed, Solder  
Part Number 6643269-1 Through Hole, Compliant



**Vertical Pin**

For Part Numbers and "A" Dimension  
See Table Below



Right Angle Pins Solder Tail	Compliant	Locking Style	Length "A"
6643281-1	6643275-1	Non-Lock	.470 [11.93]
6643276-1	6643273-1	Lock	.470 [11.93]
6643431-1	6643442-1	Non-Lock	.570 [14.48]
6643432-1	6643443-1	Non-Lock	.750 [19.05]
6643433-1	6643444-1	Non-Lock	1.000 [25.40]
6643434-1	6643445-1	Non-Lock	1.250 [31.75]
6650785-1	6643446-1	Non-Lock	1.500 [38.10]
6643435-1	6643447-1	Non-Lock	1.750 [44.45]

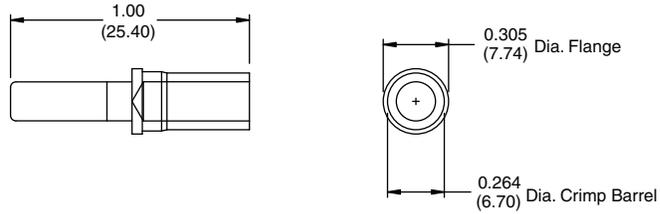
Vertical Pins Solder Tail	Compliant	Locking Style	Length "A"
6643283-1	6643274-1	Non-Lock	.470 [11.93]
6643266-1	6643271-1	Lock	.470 [11.93]
6643436-1	6643449-1	Non-Lock	.570 [14.48]
6643437-1	6643450-1	Non-Lock	.750 [19.05]
6643438-1	6643451-1	Non-Lock	1.000 [25.40]
6643439-1	6766439-1	Non-Lock	1.250 [31.75]
6643440-1	6766440-1	Non-Lock	1.500 [38.10]
6643441-1	6766441-1	Non-Lock	1.750 [44.45]

**Note:** All part numbers are RoHS compliant.

**ICCON Discrete Contacts**

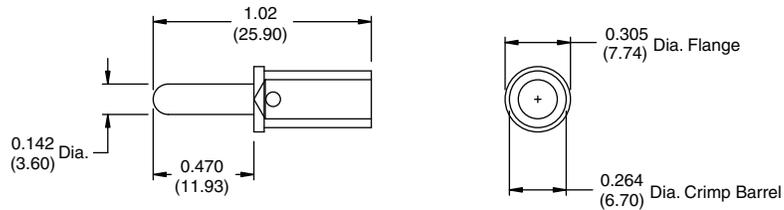
**Crimp Socket**

Part Number 6648317-1 #8 AWG



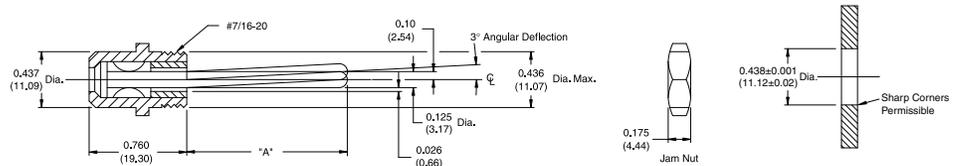
**Crimp Pins**

Part Number 1766163-1  
#8 AWG Non-Lock  
Part Number 1766160-1  
#8 AWG Lock  
Part Number 1766816-1  
#10 AWG Non-Lock  
Part Number 1766161-1  
#10 AWG Lock



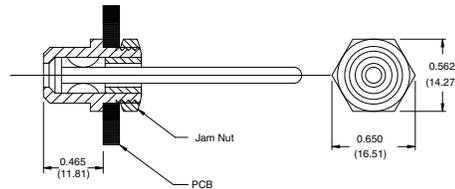
**Board Mount Pin — Floating**

Part Number 6643252-1  
"A" = 1.250 (31.75)  
Part Number 6643253-1  
"A" = 1.350 (34.29)



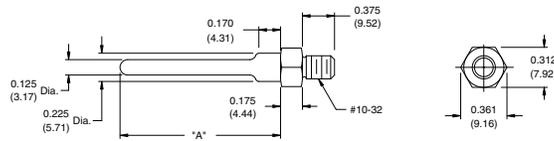
**Mounting Requirements**

**Mounted Example:**



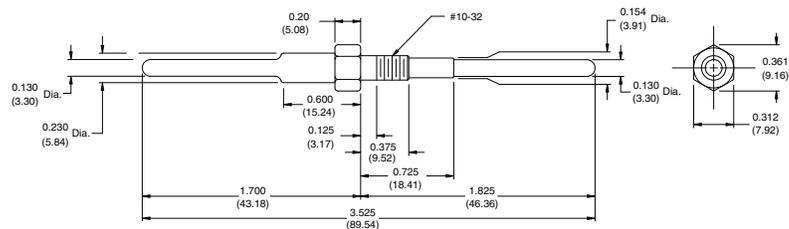
**Board Mount Pin**

Part Number 1766815-1  
"A" = 1.250 (31.75)  
Part Number 1766157-1  
"A" = 1.350 (34.29)



**Double-Ended Board Mount Pin**

Part Number 1766817-1



**Note:** All part numbers are RoHS compliant.

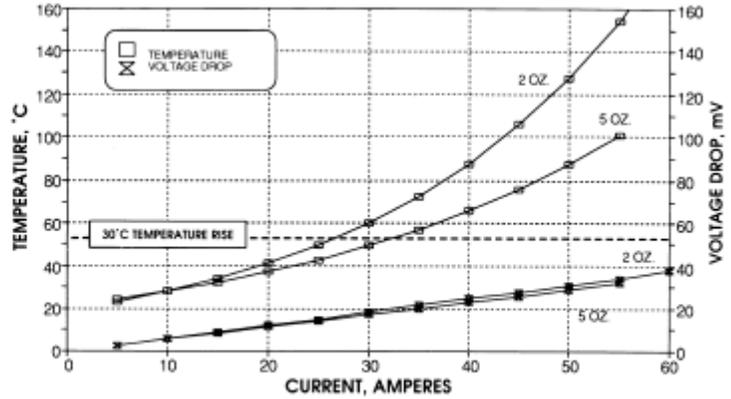
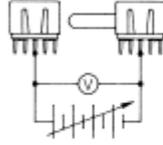
## ICCON Connector Electrical Performance

### Right Angle Socket

Part Number 6643232-1

### Right Angle Pin

Part Number 6643281-1

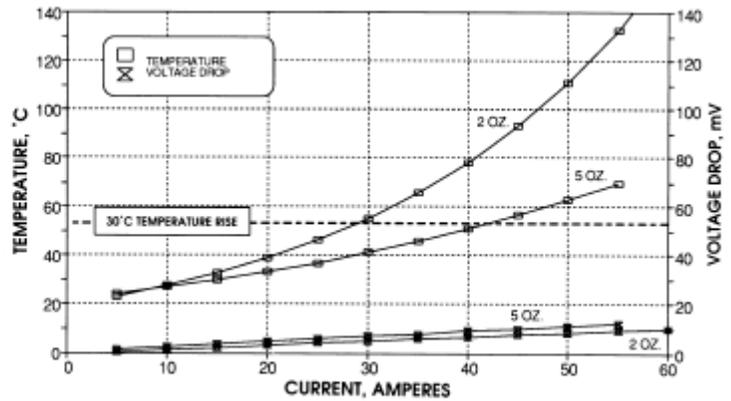
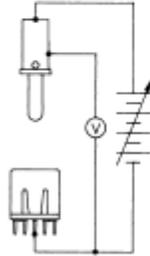


### Vertical Socket

Part Number 6643264-1

### Discrete Pin

Part Number 1766163-1



### Specifications

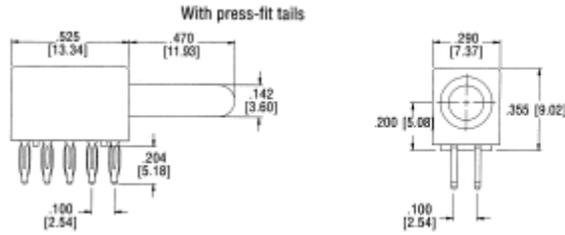
Finishes	
Crowns	30 microinches Gold plated over nickel
Pin Contacts	Silver over nickel
Material	
Housing	Polyester, 30% glass-filled, UL 94V-0 black
Body	Metal Alloy
Pin Contacts	Brass
Crowns	Beryllium Copper
Electrical	
Ratings	UL (USR) 35A at 250V
	UL (CNR) 25A at 250V

**Note:** All part numbers are RoHS compliant.

**ICCON SLIMLINE Connectors (.100 x .100 Footprint)**

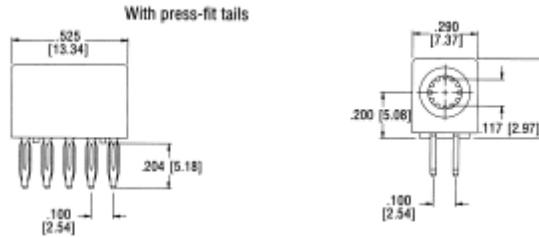
**Parallel Pin**

Part Number 6643228-1 Solder  
 Part Number 6643227-1 Solder w/Locking Feature  
 Part Number 6643222-1 Compliant  
 Part Number 6643223-1 Compliant w/ Locking Feature



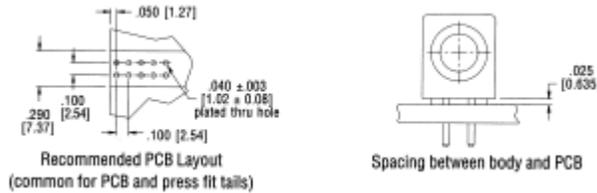
**Parallel Socket**

Part Number 6643229-1 Solder  
 Part Number 6643220-1 Press-Fit



**Connector Mounting**

The ICCON SLIMLINE Connector is optimized for a board thickness of .093" (2.38 mm), but can be successfully used on boards from .062" to .125" (1.58 mm to 3.17 mm)

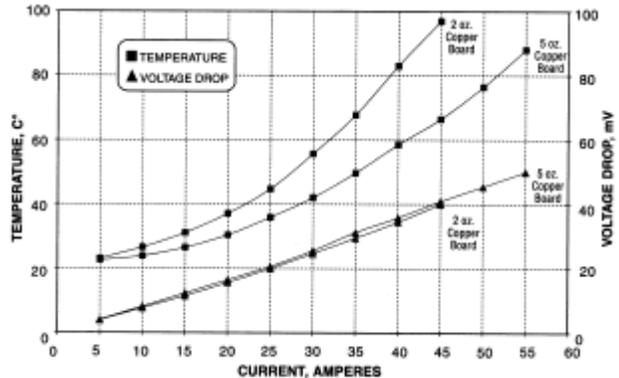


**Specifications**

<b>Finishes</b>	
Crowns	30 microinches Gold plated over nickel
Pin Contacts	Silver over nickel
<b>Material</b>	
Housing	Polyester, 30% glass-filled, UL 94V-0 black
Body and pin contacts	Brass
Crowns	Beryllium Copper
<b>Electrical</b>	
Ratings	UL (USR) 35A at 250V
	UL (CNR) 25A at 250V
Voltage drop at UL rating	27.2mV

**Contact System Performance, ICCON SLIMLINE Connector  
 Current Ratings vs. mV Drop/Temperature Rise**

Non-locking version, mounted on 2 oz. and 5 oz. copper boards



**Note:** All part numbers are RoHS compliant.