

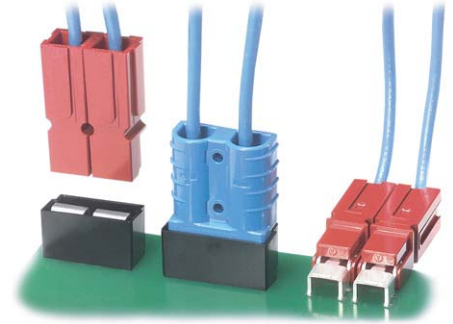
The innovative design of our Powerclaw family of connectors for the power electronics market makes connecting and disconnecting a snap, enabling safe and convenient "hot swapping*" during equipment maintenance without the need to power down. Compact and robust, they're rated at 55 amps for single pole and 50 amps for multipole connections.

Our mini horizontal and vertical Powerclaw contacts offer the same high current capacity as our original Powerclaws while providing the design engineer more options when board real estate is at a minimum.

* Contact factory for ratings

FEATURES

- Quick disconnect**
Avoids the need for unfastening ring type terminals
- Snap-On interface**
Ensures foolproof assembly and proper connection
- Vertical mini-powerclaw UL rated**
For current interruption (hot-plug) so that equipment can be hot swapped
- Anti-static packaging**
Meets electronics industry PCB requirements
- Vacuum packaging**
Prevents tarnishing of contacts during shelf life



PRODUCT SPECIFICATIONS

Product Information	PP Powerclaw	SB Powerclaw Powerclaw	Locking Mini-Powerclaw	Vertical & Horizontal
Maximum Current (per Tin Contact)	55 amps	50 amps	55 amps	55 amps
Maximum Voltage (AC or DC)	600 volts	600 volts	600 volts	600 volts
Housing Material	Polycarbonate	Polycarbonate	Polycarbonate	Polycarbonate for vertical guide housings
Contact Material	Copper Alloy	Copper Alloy	Copper Alloy	Copper Alloy
Contact Plating: Tin	100 microinches Sn over 50 microinches Ni	100 microinches Sn over 50 microinches Ni	100 microinches Sn over 50 microinches Ni	100 microinches Sn over 50 microinches Ni
Contact Plating: Silver	100 microinches Ag over 50 microinches Ni	100 microinches Ag over 50 microinches Ni	100 microinches Ag over 50 microinches Ni	100 microinches Ag over 50 microinches Ni
Mating/Unmating Forces	7 lb. Average (31 Newtons)	15 lb. Average (66 Newtons)	7 lb. Average (31 Newtons)	4 lb. per contact (17 Newtons)
Suggested Board Thickness	.150" max.	.150" max.	.150" max.	.250" max.

High Power PCB Contacts		High Power PCB Contacts	
Test Condition	Specification Tested to and Met:	Test Condition	Specification Tested to and Met:
Mechanical		Environmental	
Sine Vibration	MIL-STD-1344, Method 2005, Test Condition I.	Temperature Cycling	MIL-STD-1344, Method 1003, Test Condition A.
Mechanical Shock	MIL-STD-1344, Method 2004, Test Condition I.	Humidity	MIL-STD-1344, Method 3001, Type 1.
Mating Force	APP Specification, 7 lb average mating force.	Flammability	
Durability	10,000 cycles, APP Specification	PP-, LP-, SB-series	UL 94V0.
Electrical			
Temperature Rise at rated current	UL1977		
Dielectric Voltage Withstand	MIL-STD-1344, Method 3001, Type 1.		
Contact Resistance	MIL-STD-1344, Method 3004, Type 1		

ORDERING INFORMATION

Standard Powerclaw

Position Definition	PC	XXX	X	XX
	(Powerclaw)	(Color)	(Plating)	(Housing)
		BLK-Black	T-Tin	PP-Powerpole 75
		RED-Red	S-Silver	LP-Locking Powerpole 75
		BLU-Blue		SB-SB50
		WHT-White		
		GRA-Gray		
		GRN-Green		

Example: Blue 75 locking Powerclaw with tin plating (PC-BLU-T-LP)

Individual Contacts and Guide Housings*

Part No.	Description
PC5930S	Std PC horizontal mount contact – Silver (Ag)
PC5930T	Std PC horizontal mount contact – Tin (Sn)
PC5933T	Mini-PC vertical contact – Tin (Sn)
PC5933S	Mini-PC vertical contact – Silver (Ag)
PC5934T	Mini-PC horizontal contact – Tin (Sn)
PC5934S	Mini-PC horizontal contact – Silver (Ag)
PC-HSG-SB	Guide housing for SB50 (Black)
PC-HSG-PP	Guide housing for PP75 (Black)

* For non-ESD bulk packaged product, add -BK to part number when ordering.

Packaging Quantity

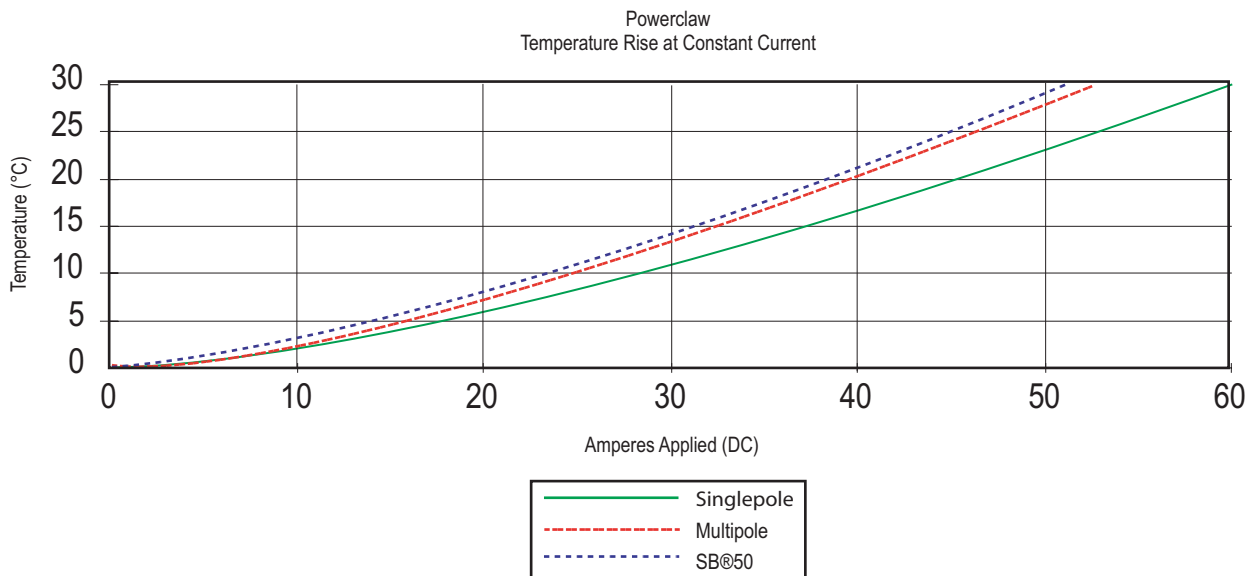
APP's Powerclaw® contacts and connectors are packaged in ESD plastic and foam. This prevents our contacts and connectors from carrying any electrostatic charge that could damage ICs and other sensitive components on a PC board during assembly. The vacuum-sealed package also prevents tarnishing or adverse environmental reactions to occur on the contact. Contacts and housings are also available in bulk quantities, packaged in non-ESD cartons.

Packaging	Quantity
PP Powerclaw	20 per bag
Locking PP Powerclaw	20 per bag
SB Powerclaw	10 per bag
Mini-Powerclaw contacts	20 per bag
Guide Housings	10 per bag or bulk

TEMPERATURE RISE CHARTS CHARTSCONNECTOR

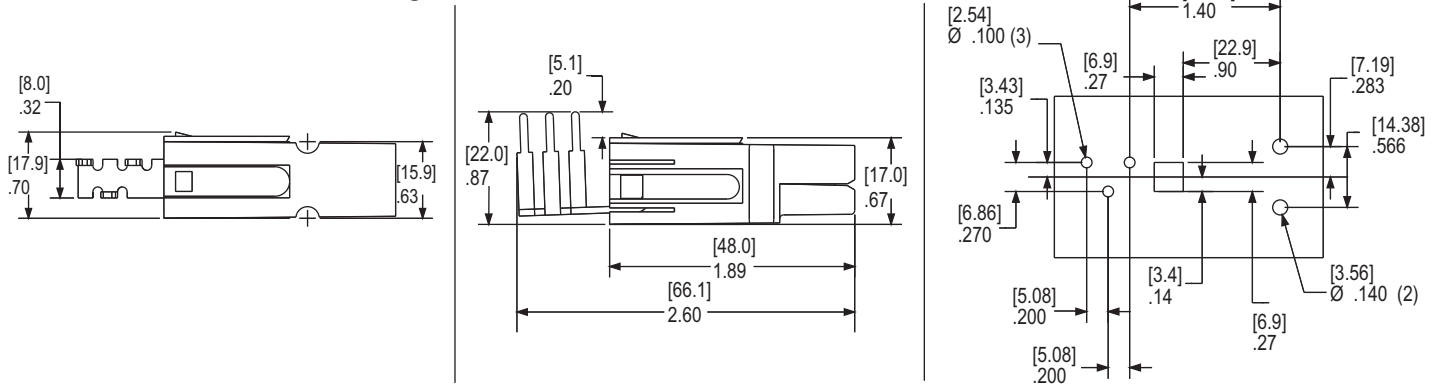
Temperature Rise at Constant Currents

Powerclaw® Tested in Accordance with EIA 364-70, No enclosure, 25+/-5 deg. C. ambient (#8 AWG Foil on Board Side, #6 AWG conductor on wire side, Contact Cat. No. 5900).
Temperature Rise of Contact at exit from Housing Interface (No Air Flow over Test Loop)

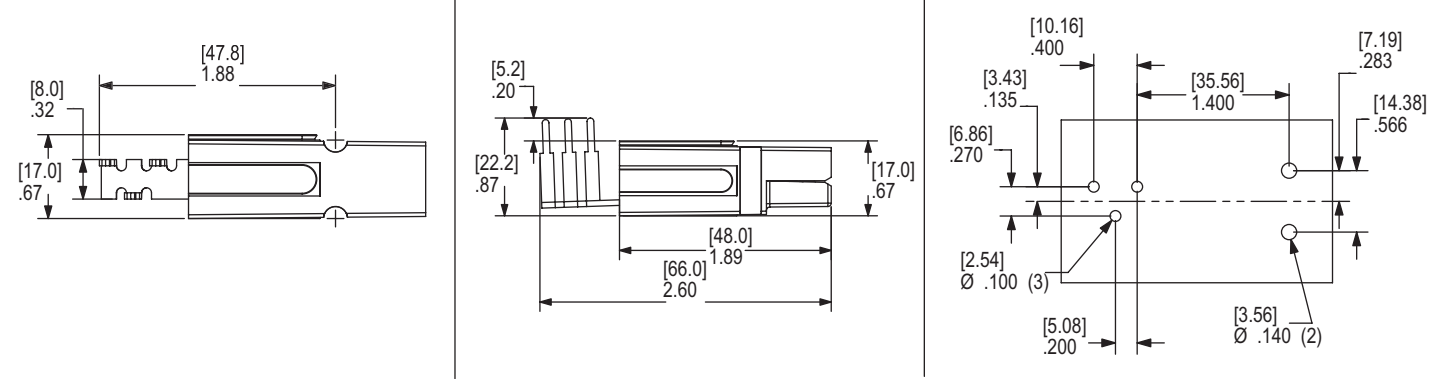


STANDARD POWERCLAW DIMENSIONS

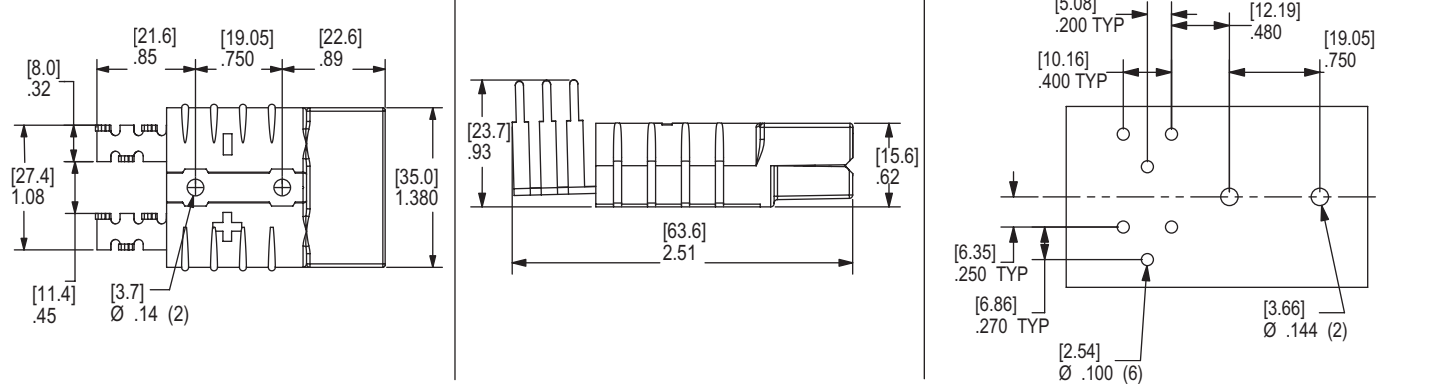
Standard Powerclaw with locking PP75



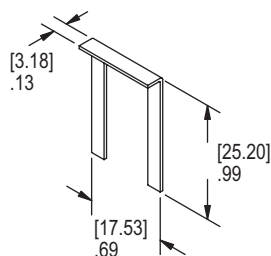
Standard Powerclaw with PP75



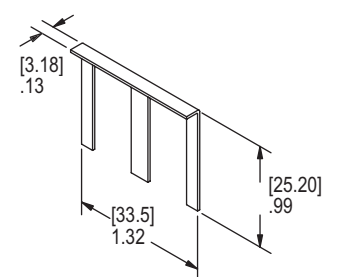
Standard Powerclaw with SB®50



Staple for single powerpole Part Number: PC Staple 1

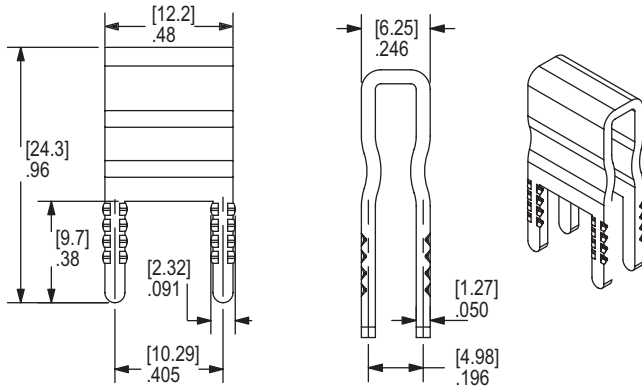


Staple for double powerpole Part Number: PC Staple 2

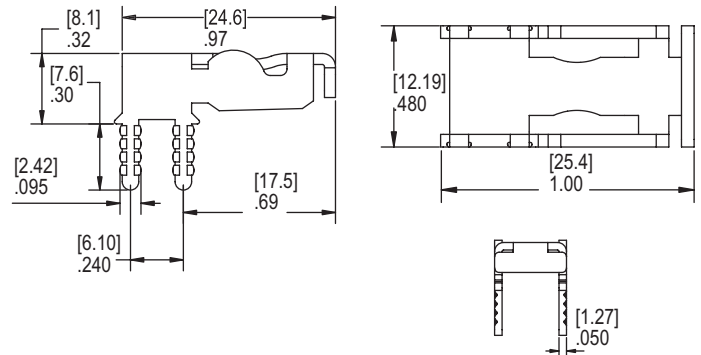


MINI-POWERCLAW DIMENSIONS

Vertical Powerclaw

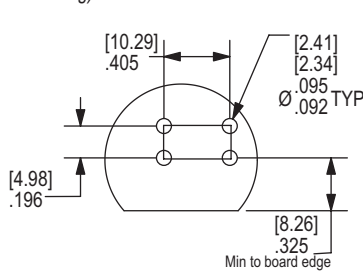


Horizontal Powerclaw

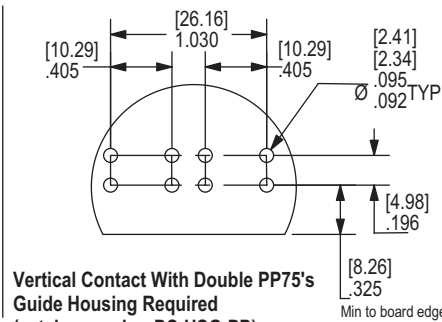


Vertical PCB Placement - Hole Configuration

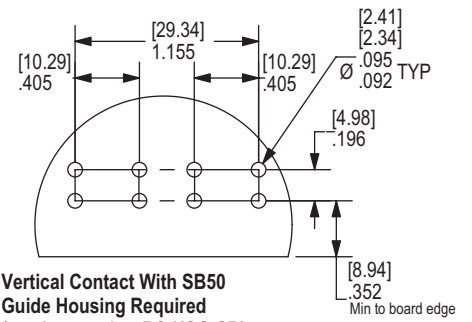
(with or without housing)



Vertical Contact With Single PP75
Guide Housing NOT Required

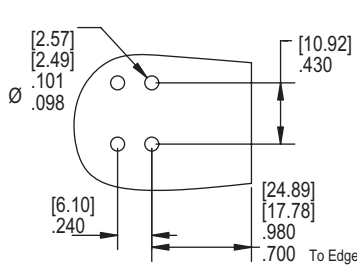


Vertical Contact With Double PP75's
Guide Housing Required
(catalog number PC-HSG-PP)

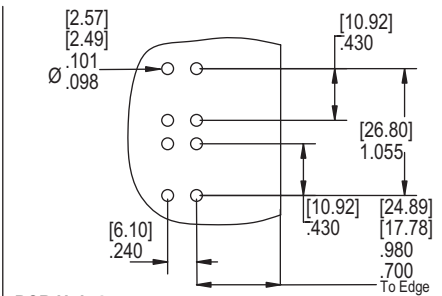


Vertical Contact With SB50
Guide Housing Required
(catalog number PC-HSG-SB)

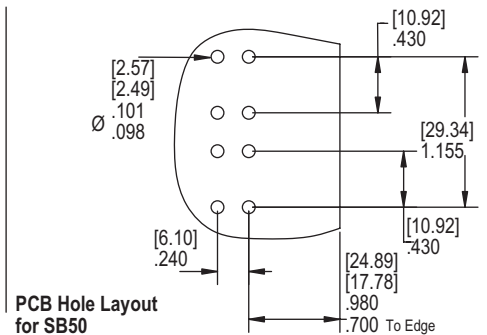
Horizontal PCB Placement - Hole Configuration



PCB Hole Layout
for Singlepole Powerpole



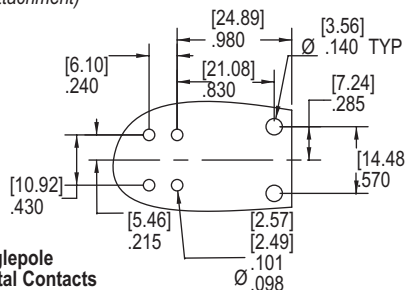
PCB Hole Layout
for Double Powerpole



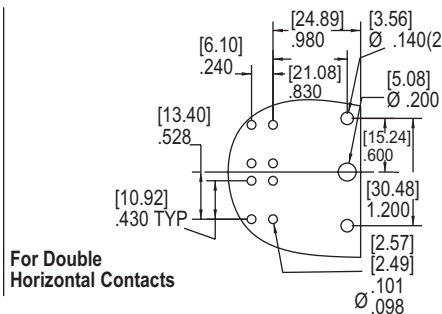
PCB Hole Layout
for SB50

Mated Horizontal Contacts

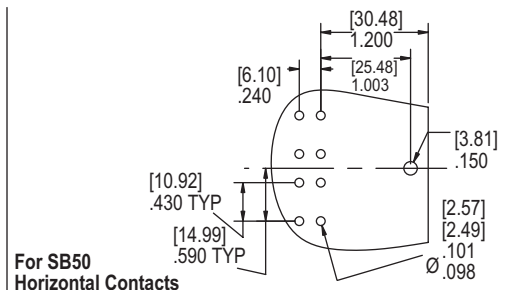
(board attachment)



For Singlepole
Horizontal Contacts



For Double
Horizontal Contacts



For SB50
Horizontal Contacts