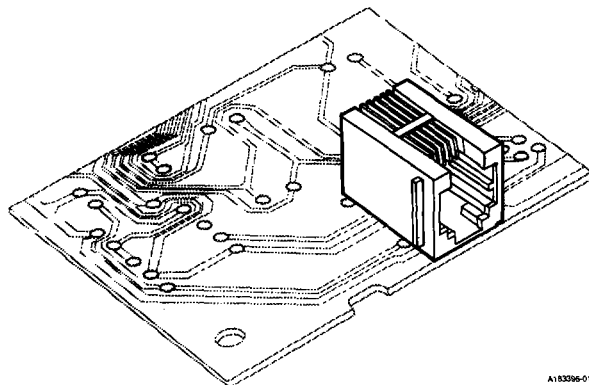


# Telephone Interconnection Systems

## PCB Modular Jacks



A183096-01/46

### Features

- Components are designed and packaged for robotic placement, ensuring true positioning of the legs and contact wires.
- Through-mount, solder-to-board configuration.
- 4-, 6-, and 8-position receptacles are available in both horizontal and vertical entry styles.
- GXT™ (palladium-nickel alloy with gold flash), a Berg Electronics gold equivalent plating, ensures high cycle life and excellent solderability.
- Selective loading is available.
- Press-fit peg design eliminates hot and cold staking.

- Meets industry standard jack-to-board footprints.

### Options

- Contact wire plating is also available in 0.76  $\mu\text{m}$  (30  $\mu\text{in.}$ ) or 1.27  $\mu\text{m}$  (50  $\mu\text{in.}$ ) gold.
- IR reflow compatible housings available.


### Mating Data


Mates with modular plugs conforming to FCC part 68, subpart F.

### Specifications

FCC part 68, subpart F  
UL Standard 1863

### Approvals and Certifications

 File no. E82037

 File no. LR46923

### Technical Data

#### Materials

- Housing
  - Material ..... Thermoplastic resin (UL 94 V-0)
  - Color ..... Gray or Black
- Contact spring ..... Phosphor-bronze (alloy 510 per ASTM B-159), 0.46 mm (0.018 in.) diameter

#### Plating

- Contact spring
  - Finish ..... 0.76  $\mu\text{m}$  (30  $\mu\text{in.}$ ) GXT™ or 0.76  $\mu\text{m}$  (30  $\mu\text{in.}$ ) gold or 1.27  $\mu\text{m}$  (50  $\mu\text{in.}$ ) gold

#### Electrical Performance

- Insulation resistance ..... 10 M $\Omega$  min
- Withstanding voltage ..... 1000 volts rms, 60 Hz
- Current rating ..... 2.0 amp dc
- Contact resistance ..... 20 m $\Omega$  max

#### Mechanical Performance

- Maximum total mating force
  - 4-wire lead ..... 19.5 N (4.4 lbf)
  - 6-wire lead ..... 29.5 N (6.6 lbf)
  - 8-wire lead ..... 39.0 N (8.8 lbf)
- Retention force ..... 22.5 N (5 lbf) min between jack and plug
- Durability (mating cycles) ..... 250

#### Packaging (package type depends on part number)

- Tubes
- Trays

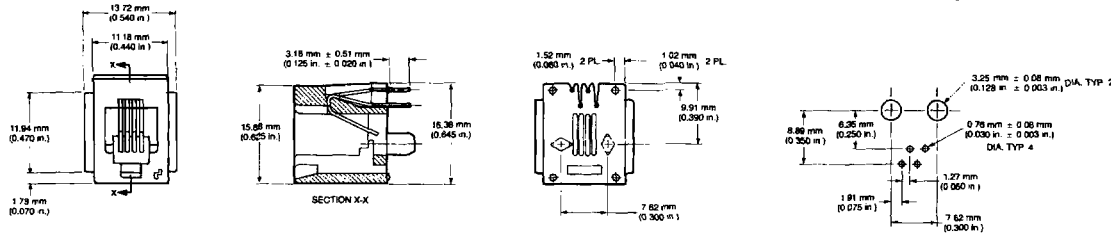
### Customer Support Materials

Description	Order No.	Description	Order No.
Customer Product Drawings.....	By Part No.	Product Samples.....	Upon request
Product Specifications.....	BUS 12-068		

### Description

#### 4-Position Vertical PCB Jacks

Height: 15.62 / 0.615



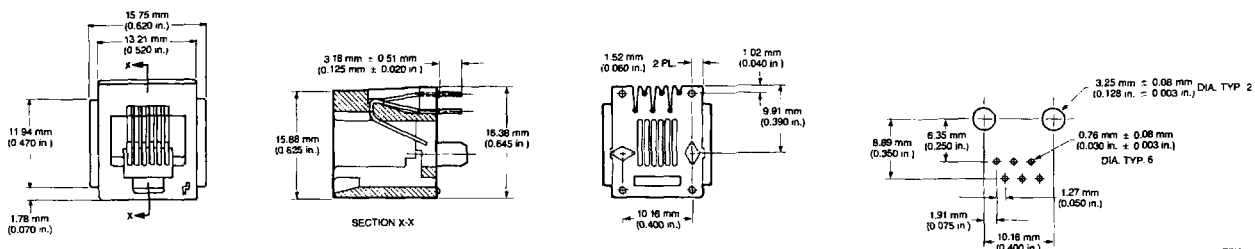
### Ordering Data

Number of Positions	Number of Wires	Configuration	Part Number
4	4	Vertical	69253-001

### Description

#### 6-Position Vertical PCB Jacks

Height: 15.62 / 0.615



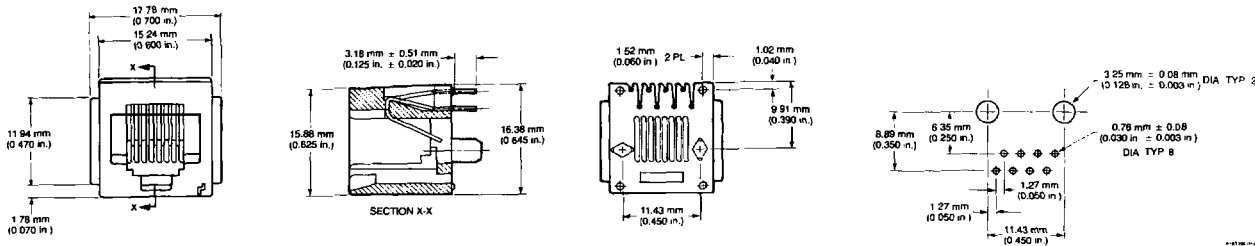
### Ordering Data

Number of Positions	Number of Wires	Configuration	Part Number	Notes
6	6	Vertical	69254-001	
6	4	Vertical	69254-002	Positions 1 and 6 unloaded.
6	2	Vertical	69254-003	Positions 1, 2, 5, and 6 unloaded

### Description

#### 8-Position Vertical PCB Jacks

Height: 15.62/0.615

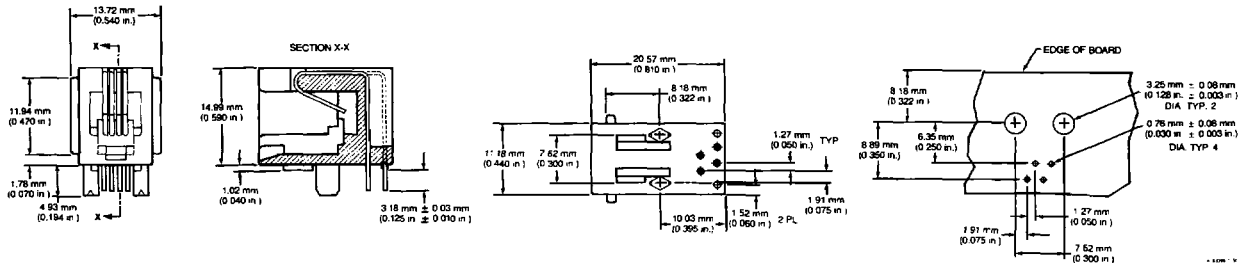


### Ordering Data

Number of Positions	Number of Wires	Keyed	Configuration	Part Number
8	8	No	Vertical	69255-001
8	8	Yes	Vertical	69255-002



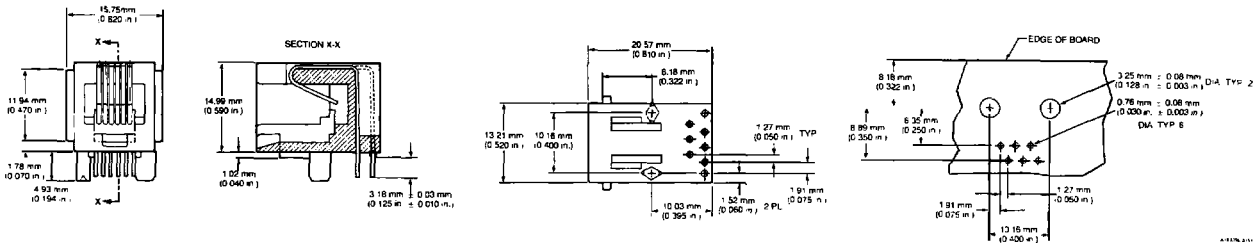
**Description**  
**4-Position Horizontal PCB Jacks**  
**Height: 14.99/0.590**



**Ordering Data**

Number of Positions	Number of Wires	Configuration	Part Number
4	4	Horizontal	68897-001

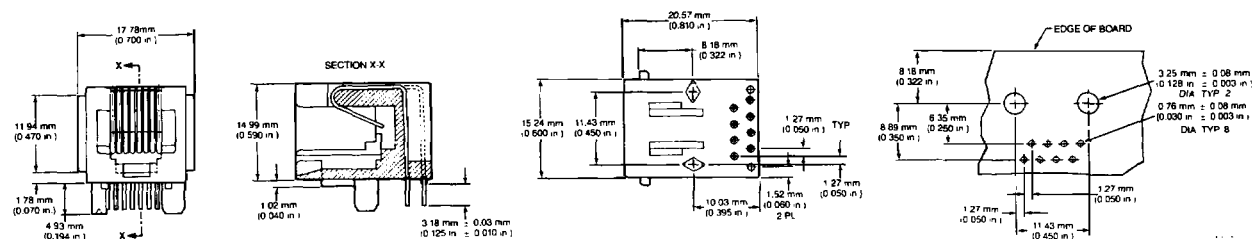
**Description**  
**6-Position Horizontal PCB Jacks**  
**Height: 14.99/0.590**



**Ordering Data**

Number of Positions	Number of Wires	Configuration	Part Number	Notes
6	6	Horizontal	68898-001	
6	4	Horizontal	68898-002	Positions 1 and 6 unloaded.

**Description**  
**8-Position Horizontal PCB Jacks**  
**Height: 14.99/0.590**



**Ordering Data**

Number of Positions	Number of Wires	Keyed	Configuration	Part Number
8	8	No	Horizontal	68899-001
8	8	Yes	Horizontal	68899-002

### Description

**4-Position, Low Profile Horizontal PCB Jacks**  
**Height: 11.50/0.452**

<b>Ordering Data</b>			
Number of Positions	Number of Wires	Configuration	Part Number
4	4	Horizontal	87180-X44
4	2	Horizontal	87180-X42

### Description

**6-Position, Low Profile Horizontal PCB Jacks**  
**Height: 11.50/0.452**

<b>Ordering Data</b>			
Number of Positions	Number of Wires	Configuration	Part Number
6	6	Horizontal	87180-X66
6	4	Horizontal	87180-X64
6	2	Horizontal	87180-X62

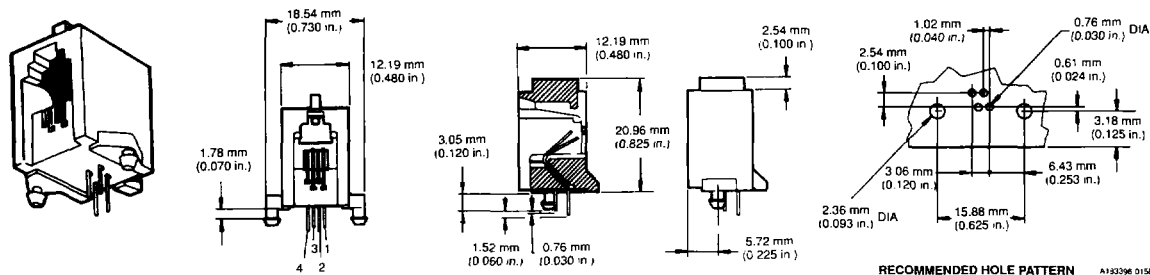
### Description

**8-Position, Low Profile Horizontal PCB Jacks**  
**Height: 11.50/0.452**

<b>Ordering Data</b>			
Number of Positions	Number of Wires	Configuration	Part Number
8	8	Horizontal	87180-X88
8	6	Horizontal	87180-X86
8	4	Horizontal	87180-X84

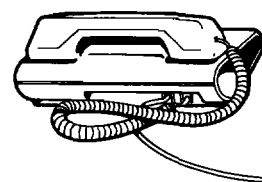


### Description PCB Jacks - 616 Type

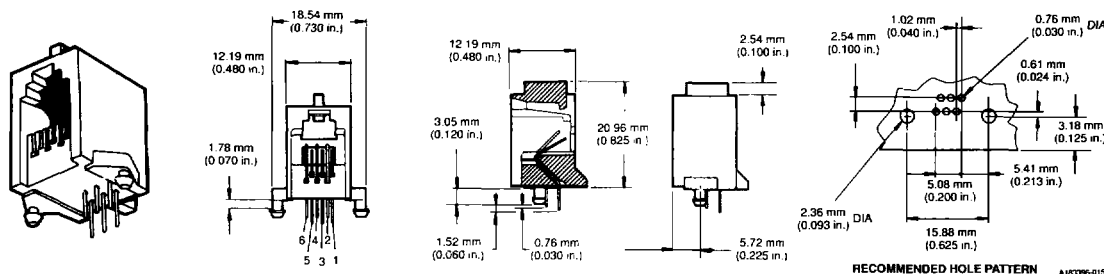


### Ordering Data

Type	Number of Positions	Number of Wires	Part Number
616	4	4	66010-001

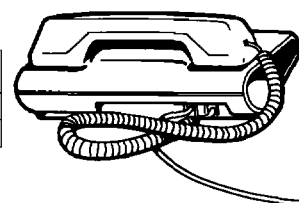


### Description PCB Jacks - 623 Type

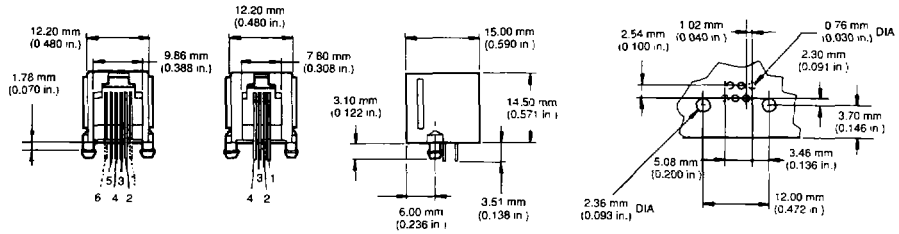
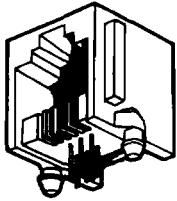


### Ordering Data

Type	Number of Positions	Number of Wires	Part Number	Notes
623	6	4	66011-001	Positions 1 and 6 unloaded.
623	6	6	66011-002	

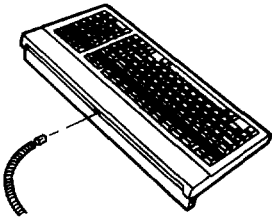


**Description**  
**PCB Jacks**  
**Low Profile, 4 to 6 Positions**



RECOMMENDED HOLE PATTERN A183396-6160

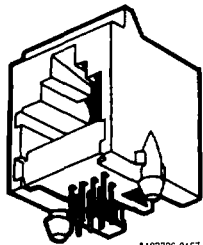
**Ordering Data**



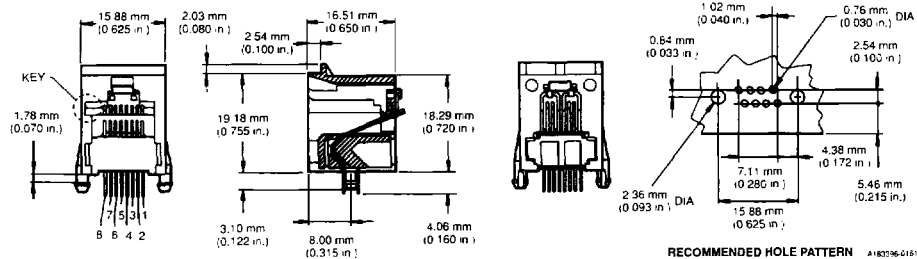
A183396-0667

Number of Positions	Number of Wires	Part Number	Notes
4	4	67969-001	
6	4	67968-001	Positions 1 and 6 unloaded.
6	6	67968-002	

**Description**  
**PCB Jacks---641 and 647 Type**  
**Low Profile, 8 Positions**



A183396-0157



RECOMMENDED HOLE PATTERN A183396-0161

**Ordering Data**



Type	Number of Positions	Number of Wires	Keyed	Part Number
641	8	8	No	66175-001
647	8	8	Yes	66476-001

**Customer Support Materials**

Description	Order No.	Description	Order No.
Customer Product Drawings	By Part No.	Product Samples	Upon request
Product Specifications	BUS 12-018		