

## 1/4" ENCLOSED TELEPHONE JACKS



Series M11\*



Series MNS11\*



Series MS11\*



Twin Hi-D Jax



Series MN11\*

Compactly constructed jacks permit direct cross-patching with Switchcraft, WEco and MIL-type telephone plugs and patch cords. Series M Hi-D Jax® offer a choice of solder lugs or PC terminals. Both insulated and metal bushings can be specified, as well as .21 inch inside diameter sleeves for narrow plug fingers. Maximum contact resistance is .1 ohm. Springs are made of a special gold-plated copper alloy. Welded cross bar gold alloy contacts are available on special order.

**SERIES M-11\* HI-D JAX®**

Two- and 3-conductor type mate with .25 inch diameter finger plugs. Tip and ring springs are gold-plated. Shunts (if used) have welded crossbar palladium contacts. Ring springs (where used with shunts) have welded crossbar palladium contacts. Tip springs (when used) do not have a contact welded to the spring. Bushing has 3/8-32-NEF-2 thread; locknut and flat washer for mounting are supplied.

**SERIES MN-11\* HI-D JAX®**

Same as Series M-11\* except threaded bushing is molded thermoplastic for insulated mounting. Continuous sleeve contact assures positive sleeve connection without exposed metal on front of panel.

**SERIES M113 AND M114 HI-D JAX®**

The versatile 3-conductor M113 and M114 feature springs which accept a wide variety of 1/4 inch plug designs. Self-aligning PC terminals allow for easier insertion into a printed circuit board. Also feature a metric thread mounting.

**SPECIFICATIONS****MATERIALS**

**Mounting Bushing:** Series M11\*, MS11\* - Nickel-plated copper alloy. Series MN11\*, MNS11\* - Molded thermoplastic.

**Housing:** Molded thermoplastic, UL 94V-0.

**Springs:** Copper alloy.

**Contacts (mil-type):** Tip and Ring Springs are gold-plated. Shuntsprings (where used) are welded crossbar palladium. Welded crossbar gold alloy contacts are available on special order.

**Contacts (commercial):** Tin-plated integral contacts.

**Sleeve Terminal:** Steel, tin-plated.

**Hardware:** Supplied with one **P10001** copper alloy, nickel-plated locknut and one **S10221** steel, nickel-plated washer.

**MECHANICAL**

**Life:** 10,000 insertion/withdrawal cycles, minimum.

**Insertion/Withdrawal Forces:** Nominal plug retention on 2-conductor jack is .75 pounds with .5 pounds minimum. Nominal plug retention on 3-conductor jack is 2 pounds with 1.5 pounds minimum. With double tips, the nominal is 1.5 pounds and 1 pound minimum.

**Maximum Recommended Mounting Torque:**

6 inch-lb. for thermoplastic bushing.

**Mounting Torque (for Spring Lock PC Terminal):**

8 inch-pound for thermoplastic bushings.

**ELECTRICAL**

**Contact Resistance:** .020 ohms maximum (initial), .050 ohms maximum (after humidity, durability exposure). Per MIL-STD-202E.

**Insulation Resistance:** 10,000 M $\Omega$  minimum (initial), 1,000 M $\Omega$  minimum (after humidity).

**Dielectric Withstanding Voltage:** 500 V, 60 Hz (rms) AC.

**Contact Rating:** .25A, 48 VDC make and break. 3A carry only.

**ENVIRONMENTAL**

**Thermal Range:** -55°C to +85°C (non-operating); -20°C to +65°C (operating).

**Thermal Shock:** Per MIL-STD 202, method 107.

**Humidity:** Per MIL-STD 202, method 106.

**Salt Spray:** Per MIL-STD 202, method 101.

DIMENSIONS ARE FOR REFERENCE ONLY  $\frac{\text{Inch}}{(\text{mm})}$

NOTE: Contact your Switchcraft Representative for price and delivery.

## 1/4" ENCLOSED TELEPHONE JACKS (continued)

### SERIES MS11\* HI-D JAX®

3-conductor with .21 inch inside diameter sleeve. Mates with plugs having .206 inch diameter finger. Protects against accidental insertion of .25 inch diameter finger plugs. Gold-plated tip and ring springs. Welded crossbar palladium contacts on shunt springs standard. Bushing has 3/8-32-NEF-2 thread; locknut and flat washer for mounting are supplied.

### ◇SERIES MNS11\* HI-D JAX®

Same as Series MS11\* except bushing is molded thermoplastic.

### ◇TWIN M11\* HI-D JAX®

Two Series M11\* Hi-D Jax strapped on .625 inch centers. Mates with Switchcraft® Twin Plugs. 411, 412 and 413. MIL-type Littell-Plug® phone plugs, 420, 430 and 440 (2-conductor) and 482 and 483 (3-conductor) are also recommended for mating with this series.

### ◇TWIN MNS11\* HI-D JAX®

Same as Twin M11\* except with insulated bushing. Mounting centers larger than .625 inch and unthreaded bushings are available on special order.

### ◇TWIN MS11\* HI-D JAX®

Mates with Switchcraft 415 Twin-Plug® plug, which has one .25 inch diameter finger and one .206 inch diameter finger. Also mates with MIL- type plugs listed in this section.

### ORDERING INFORMATION

Order by part number from table.

2-CONDUCTOR				
Part Number Solder Lugs	Part Number PC Terms	Description	Schematic**	Typical Mating Plug†
M111	-	.25 inch I.D. sleeve, metal bushing.	I	420
MN111	-	.25 inch I.D. sleeve, molded thermoplastic bushing.		
◇M112A	◇M112APC	.25 inch I.D. sleeve, metal bushing.	III	
MN112A	◇MN112APC	.25 inch I.D. sleeve, molded thermoplastic bushing.		
M113E	-	.25 inch I.D. sleeve, metal bushing.	IX	
MN113E	-	.25 inch I.D. sleeve, molded thermoplastic bushing.		

† Special Order only; contact Switchcraft  
 † Other mating plugs are contained in this plug section.  
 \*\* See pages 65 and 66.

### MILITARY HI-D JAX® PART NUMBERING SYSTEM

Mating Plug Option	Bushing Option	Series	Circuitry	Suffix Options
M - Accepts 1/4" MIL plug	Blank - 1/4" Commercial Jack	11 - Hi-D Jax®	1 - I	PC - PC Terminals
	L - .375" Long Bushing		2A - III	PCS - Snap Lock PC Terminals
	N - Insulated Bushing		2B - IV	Blank - Solder Terminals
	NL - Insulated Bushing and .375" Long Bushing	3 -	V M-	M-Reshaped Springs accept wide variety of 1/4" plug designs.
	NS - Insulated Bushing and Accepts .206 Diameter Plugs		3B - VII	
	S - Accepts .206 Diameter Plugs		3D - VI	
			3E - IX	
			3F - XXVIII	
			4B - XII	

See page 92 for Commercial Hi-D Jax® part numbering system.

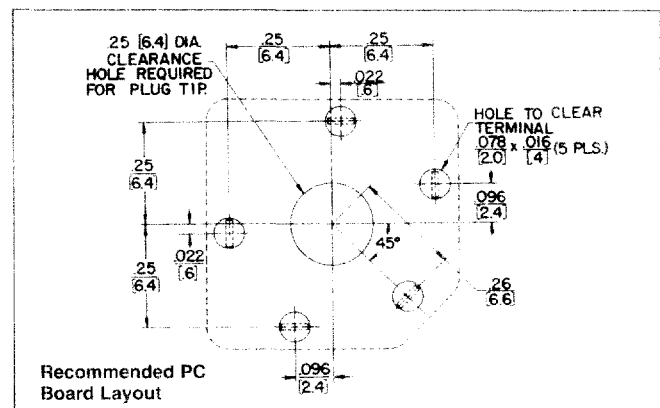
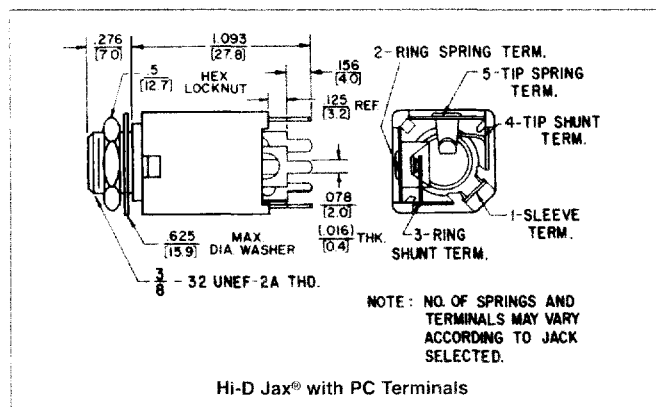
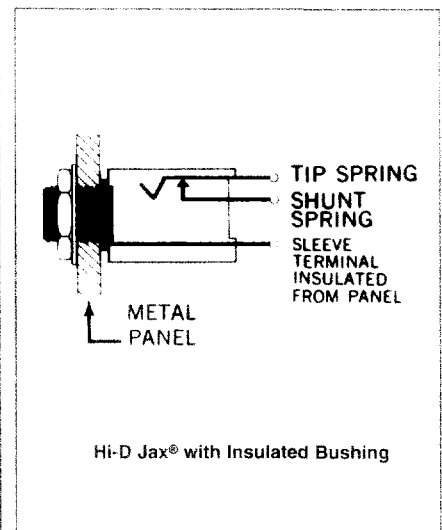
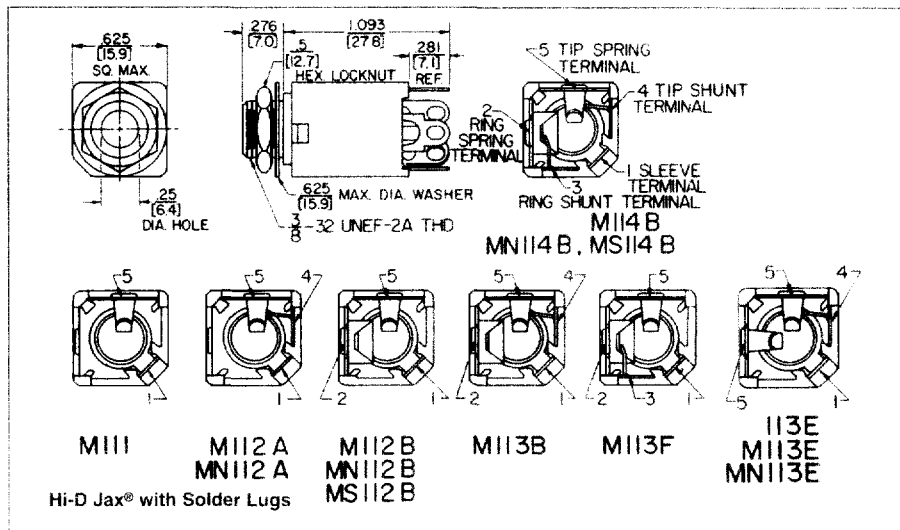


### 1/4" ENCLOSED TELEPHONE JACKS

3-CONDUCTOR				
Part Number	Part Number	Description	Schematic <sup>1</sup>	Typical Mating Plug <sup>2</sup>
Solder Lugs	PC Terms			
M112B	◊M112BPC	.25 inch I.D. sleeve, metal bushing.	IV	482
ML112B	-	.25 inch I.D. sleeve, .375 inch long metal bushing.		
MN112B	◊MN112BPC	.25 inch I.D. sleeve, molded thermoplastic bushing.		
MNL112B	-	.25 inch I.D. sleeve, .375 inch long metal bushing.		
MNS112B	-	.21 inch I.D. sleeve, molded thermoplastic bushing.		
◊MS112B	◊MS112BPC	.21 inch I.D. sleeve, metal bushing.		
M113B	-	.25 inch I.D. sleeve, metal bushing.	VII	482
MN113B	MN113BPC	.25 inch I.D. sleeve, molded thermoplastic bushing.		
	M113BPC1M	.25 inch I.D. sleeve, molded thermoplastic bushing, metric hardware		

3-CONDUCTOR				
Part Number	Part Number	Description	Schematic <sup>1</sup>	Typical Mating Plug <sup>2</sup>
Solder Lugs	PC Terms			
MNL113B	-	.25 inch I.D. sleeve, .375 inch long metal bushing.	VII	482
MNS113B	-	.21 inch I.D. sleeve, molded thermoplastic bushing.		
MS113B	-	.21 inch I.D. sleeve, metal bushing.		
M114B	◊M114BPC	.25 inch I.D. sleeve, metal bushing.	VIII	482
	M114BPC1M	.25 inch I.D. sleeve, metal bushing, metric hardware.		
MN114B	◊MN114BPC	.25 inch I.D. sleeve, molded thermoplastic bushing.	XII	480, 484
MNS114B	-	.21 inch I.D. sleeve, molded thermoplastic bushing		
◊MS114B	◊MS114BPC	.21 inch I.D. sleeve, metal bushing		

◊ Special order only; contact Switchcraft for price and delivery.  
 1 See schematics, pages 65 and 66.  
 2 Number(s) specified are not necessarily the only mating plug(s). See Plugs Section



DIMENSIONS ARE FOR REFERENCE ONLY  
 Inch (mm)

NOTE: Contact your Switchcraft Representative for price and delivery.