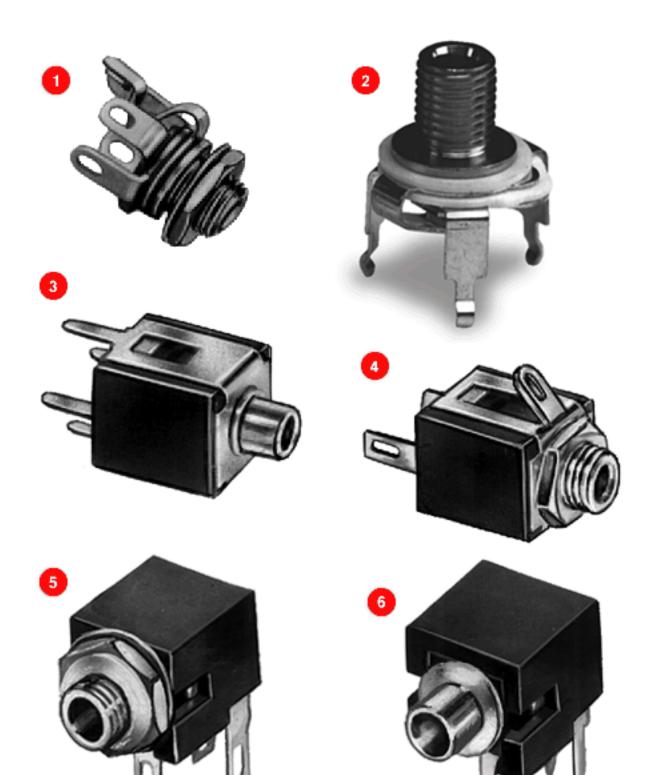
# **Switchcraft**®

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# .101" SUBMINIATURE PHONE JACKS

- 1. TR2A
- **2.** TR1PC
- 3. MDPC2A
- 4. MDSL2A
- 5. MDSL2ARA
- 6. MDPC2ARA

# click here to download a schematic drawing

(you will need to have Adobe Acrobat installed on your system to do this)



# SUBMINIATURE PHONE JACKS, TR2A AND TR1PC

Extremely small, rugged, shunted Micro-Jax® 2-conductor jack is 1/4 the size of a standard phone jack and weighs less than 1/20 ounce. Can be wired for open or closed circuit operation. Internally keyed insulators interlock all parts and tip springs grip mating plugs positively. Mates with Switchcraft Micro-Plug® phone plugs. Jacks mount through .190 inch diameter hole in chassis/panels up to .093 inches thick. For insulated mounting, a .281 inch diameter hole and .050 inch maximum panel thickness applies. Order insulating washer separately. Number P1617 (flat phenolic washer) and Number P1618 (swedged fiber washer).

**Number TR1PC:** 2-conductor open or closed circuit jack with PC terminals. Open frame and enclosed versions available. Mates with Switchcraft<sup>®</sup> Micro Plug<sup>®</sup> numbers 850, 855, and 880.

#### SUBMINIATURE ENCLOSED PHONE JACKS

Micro-D Jax® 2-conductor jacks have insulated box construction and subminiature size.

**Number MDPC2A:** 2-conductor closed circuit jack with PC terminals. Mounts to single-, double-sided or multilayer boards either singly or in rows as close as .344 inch centers

(+/- .01 inches). Bushing is .10 inch inside diameter.

**Number MDSL2A:** Same as MDPC2A except, **1.** solder lugs, **2.** bushing is #10-48 threaded (nut and washer supplied), and **3.** mounting centers are .35 inch or .313 inch. When mounted on .313 inch centers, sleeves or adjacent jacks may be in intimate contact. Mounts through a .203 inch diameter hole in chassis/panels up to .063 inches thick.

#### SUBMINIATURE RIGHT-ANGLE PHONE JACKS

2-conductor jacks have molded housing which protects all internal parts. Panel/chassis or PC boards mounting in rows, if desired, on .351 inch centers. PC terminals need only .382 inch behind-panel clearance.

**Number MDPC2ARA:** PC terminals mount/terminate directly to PC or multilayer boards. Bushing clears a .156 inch diameter panel hole.

**MDSL2ARA:** Right-angle solder lugs and #10-48 threaded bushing for chassis/panel mount. Mounts in .203 inch diameter hole in chassis/panels up to .063 inches thick.

#### **SPECIFICATIONS - MICRO-JAX®**

#### **ELECTRICAL**

**Contact Resistance:** .10 ohms maximum (spring to plug).

**Shunt Resistance:** .10 ohms maximum.

**Dielectric Withstanding Voltage:** 250 V AC.

**Shunt Tension:** 60 grams minimum.

#### **MATERIAL**

**Mounting Bushing:** Nickel-plated copper alloy.

**Insulating Spacers:** Rigid plastic.

**Springs:** Nickel-plated copper alloy. Integral contacts

are plated.

Tip, Shunt and Sleeve Terminals: Silver-plated

copper alloy.

Hardware: Supplied with one, P15331 nickel-plated

copper alloy hex nut, and one S29571 nickel-plated

copper alloy flat washer.

## **MATERIAL - TR1PC**

Threaded Bushing: Nickel-plated copper alloy.

**Tip Spring:** Copper alloy.

Sleeve/Ground Terminal: Copper alloy tin-lead with

nickel underplate.

# **MECHANICAL - TR1PC**

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

Insertion/Withdrawal Forces: 11 ounces insertion, 11 ounce minimum withdrawal.

# **ENVIRONMENTAL - TR1PC**

**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.

Part Number	Description	Jack Schematic <sup>1</sup>	Typical Mating Plug <sup>2</sup>
TR2A			
TR1PC			
MDPC2A			

MDSL2A MDPC2ARA	2-conductor (closed circuit)	III	850
MDSL2ARA			
<ul> <li>See Jack Schematics,</li> <li>pages 65 and 66.</li> <li>See Plugs Section for mating information.</li> </ul>			

#### **SPECIFICATIONS - MICRO-D JAX**

### **MECHANICAL**

Life: 10,000 insertion/withdrawal cycles minimum.

Insertion/Withdrawal Forces: 11 ounce insertion, 11

ounce minimum withdrawal.

#### **ELECTRICAL**

Contact Resistance: .010 ohms maximum (initial), .020

ohms maximum (after humidity, durability exposure), .10

ohms maximum (after salt spray).

**Insulation Resistance:** 10,000 M(omega) minimum (initial), 1,000 M(omega) minimum (after humidity, durability exposure).

**Dielectric Withstanding Voltage:** 500 V AC maximum.

Contact Rating: .125 A, 125 V AC.

#### **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.

**MATERIAL** 

**Housing:** Glass reinforced plastic.

**Insulation:** Rigid plastic.

Mounting Bushing (Micro-D): Nickel-plated copper alloy.

Mounting Bracket (Right-Angle Micro-D): Nickel-plated

copper alloy.

**Tip Spring:** Silver-plated copper alloy.

**Shunt Terminal:** Silver-plated copper alloy.

Sleeve Terminal (Micro-D): Steel, tin-plated.

**Sleeve Terminal (Right-Angle Micro-D):** 

Silver-plated copper alloy.

Hardware (Micro-D): Same as Micro-Jax (MDSL2A).

Hardware (Right-Angle Micro-D): Hex nut, nickel-plated

copper alloy, Number P15331; flat washer, nickel-plated

copper alloy **S29571**; not supplied with MDPC2A.

# .101" SUBMINIATURE PHONE JACKS









MDPC2A



MDSL2A





MDPC2ARA

#### SUBMINIATURE PHONE JACKS, TR2A AND TR1PC

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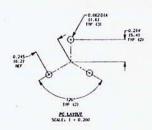
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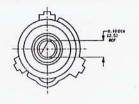
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MDSL2ARA: Right-angle solder lugs and #10-48 threaded bushing for chassis/panel mount. Mounts in .203 inch diameter hole in chassis/panels up to .063 inches thick.





### SPECIFICATIONS - MICRO-JAX® **ELECTRICAL**

Contact Resistance: .10 ohms maximum (spring to plug).

Shunt Resistance: .10 ohms maximum. Dielectric Withstanding Voltage: 250 V AC.

Shunt Tension: 60 grams minimum.

#### MATERIAL

Mounting Bushing: Nickel-plated copper alloy.

Insulating Spacers: Rigid plastic.

Springs: Nickel-plated copper alloy. Integral contacts

are plated.

Tip, Shunt and Sleeve Terminals: Silver-plated

copper alloy.

Hardware: Supplied with one, P15331 nickel-plated copper alloy hex nut, and one S29571 nickel-plated copper alloy flat washer.

#### **MATERIAL - TR1PC**

Threaded Bushing: Nickel-plated copper alloy.

Tip Spring: Copper alloy.

Sleeve/Ground Terminal: Copper alloy tin-lead with nickel underplate.

#### **MECHANICAL - TR1PC**

Life: 10,000 insertion/withdrawal cycles, minimum. Insertion/Withdrawal Forces: 11 ounces insertion, 11 ounce minimum withdrawal.

#### **ENVIRONMENTAL - TR1PC**

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

+65°C (operating).

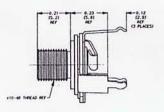
Thermal Shock: Per MIL-STD-202, method 107. Humidity: Per MIL-STD-202, method 106. Salt Spray: Per MIL-STD-202, method 101.

Part Number	Description	Jack Schematic <sup>1</sup>	Typical Mating Plug <sup>2</sup>
TR2A	2-conductor (closed circuit)	III	850
TR1PC			
MDPC2A			
MDSL2A			
MDPC2ARA			
MDSL2ARA			

- 1 See Jack Schematics, pages 65 and 66.
- 2 See Plugs Section for mating information.







NOTE: Contact your Switchcraft Representative for price and delivery

DIMENSIONS ARE FOR REFERENCE ONLY