

**INTRODUCTION:**

Adam Tech MTJ series Modular Jacks are a complete line of PCB and wire leaded jacks which are UL and CSA approved and meet all required FCC rules and regulations. Adam Tech offers a multitude of sizes (4p2c thru 10p10c) with styles including single, ganged and stacked versions with options of ferrite or magnetic filtering and or metal shielding. Jacks with integral LED's and combination hybrids such as MTJ/USB jacks are also available. These jacks are available in thru-hole or SMT mounting.

**FEATURES:**

- UL 1863 recognized
- FCC compliant to No. 47 CFR part 68
- Magnetic and Ferrite filtered types
- 4,6,8 and 10 positions available
- Single, stacked or ganged
- Hi-Temp and LED options
- Unshielded or Metal Shielded
- Thru-Hole or SMT mounting
- Cat. 5 & 5e ANSI/TIA/EIA 568.2

**MATING PLUGS:**

Adam Tech modular plugs and all industry standard telephone plugs.

**SPECIFICATIONS:**

**Material:**

- Standard Insulator: PBT, or ABS, rated UL94V-0
- Optional Hi-Temp Insulator: Nylon 6T rated UL94V-0
- Insulator Colors: Black or medium gray
- Contacts: Phosphor Bronze
- Shield: Phosphor Bronze, tin plated

**Contact Plating:**

- Flat contacts: Gold Flash over Nickel underplate on contact area, Tin over Copper underplate on solder tails.
- Round contacts: Gold flash over Nickel underplate overall

**Electrical:**

- Operating voltage: 150V AC max.
- Current rating: 1.5 Amps max.
- Contact resistance: 20 mΩ max. initial
- Insulation resistance: 500 MΩ min.
- Dielectric withstanding voltage: 1000V AC for 1 minute

**Mechanical:**

- Insertion force: 4 contacts: 17.6N
- 6 contacts: 20.6N
- 8 contacts: 22.5N
- 10 contacts: 24.5N

Durability: 500 Cycles

**Temperature Rating:**

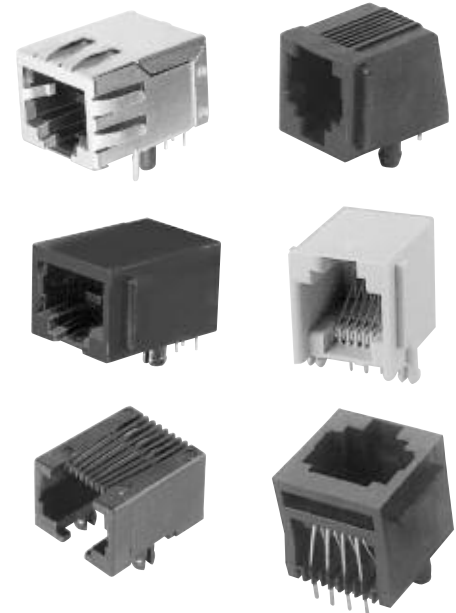
- Operating temperature: -40°C to +85°C
- Soldering process temperature:
  - Standard insulator: 235°C
  - Hi-Temp insulator: 260C

**PACKAGING:**

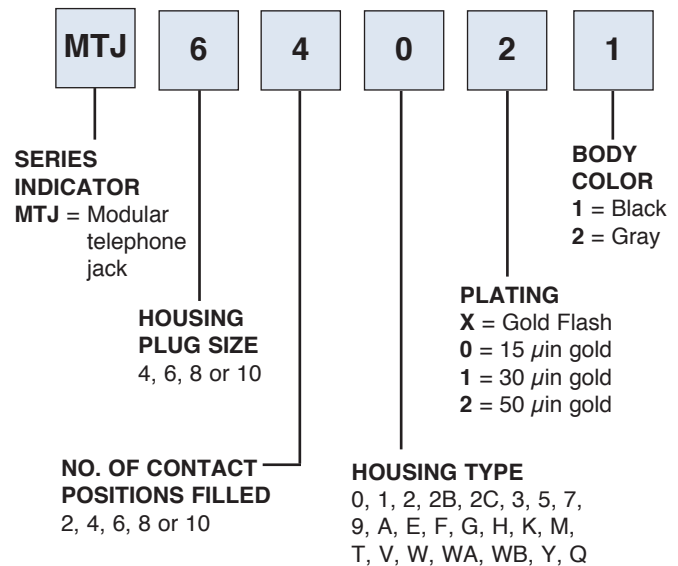
Anti-ESD plastic trays

**SAFETY AGENCY APPROVALS:**

UL Recognized & CSA Certified,  
File no. E224049



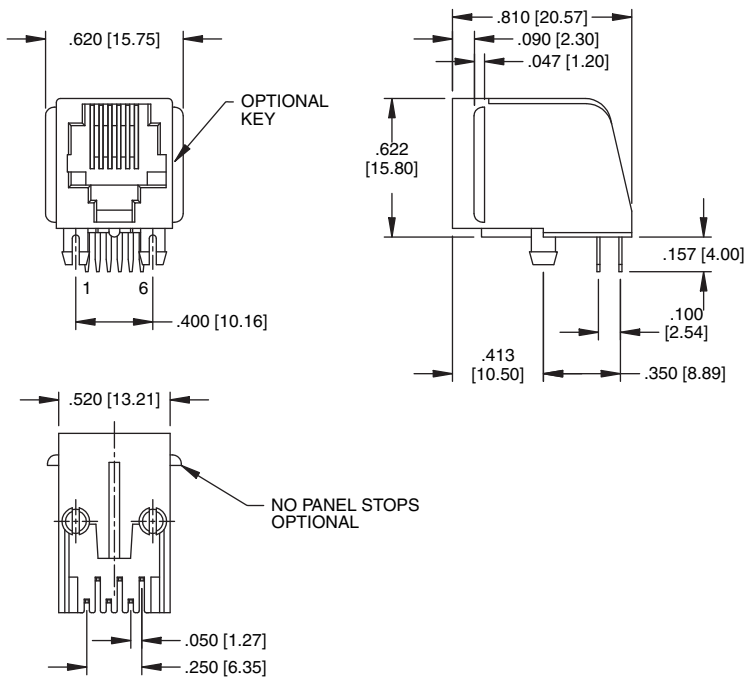
**ORDERING INFORMATION**



**OPTIONS:**

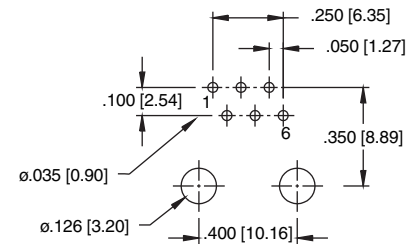
- Add designator(s) to end of part number
- S = Face shielded jack (Body type 0 only)
- FSX = Full metal shield (Use FSA, FSB, FSD, FSE)
- SMT = Surface mount tails, housings 0, 5, 9, G & W with Hi-Temp insulator
- N = No panel stops
- K = Keyed telephone jack
- HT = Hi-Temp insulator for Hi-Temp soldering processes up to 260C (Add this option for thru-hole products only. All SMT products are manufactured with Hi-Temp insulators)
- PG = Panel ground tabs

**TYPE 1**  
**6P6C**  
**6P4C**



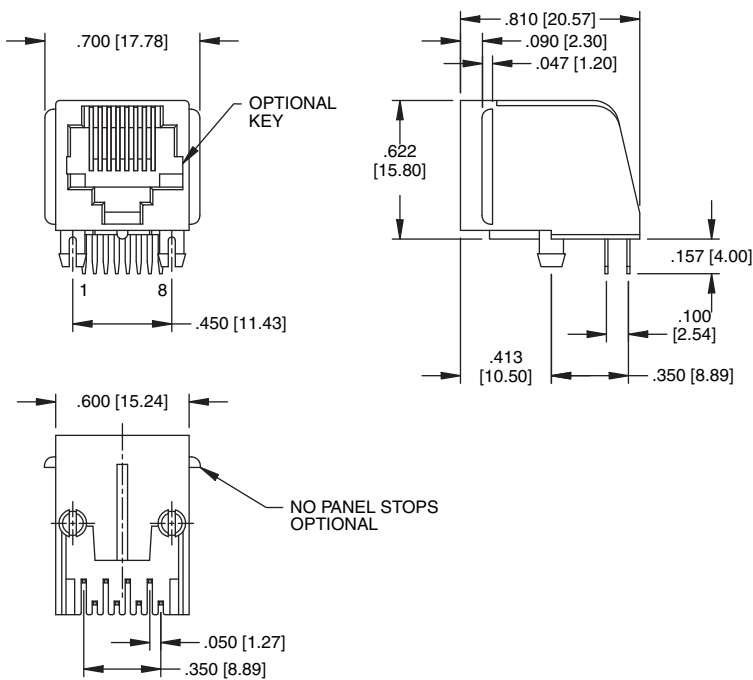
**MTJ-661X1**

Ordering Information pg. 9



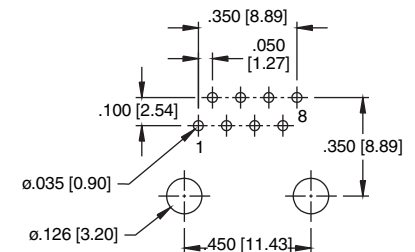
Recommended PCB Layout

**TYPE 1**  
**8P8C**



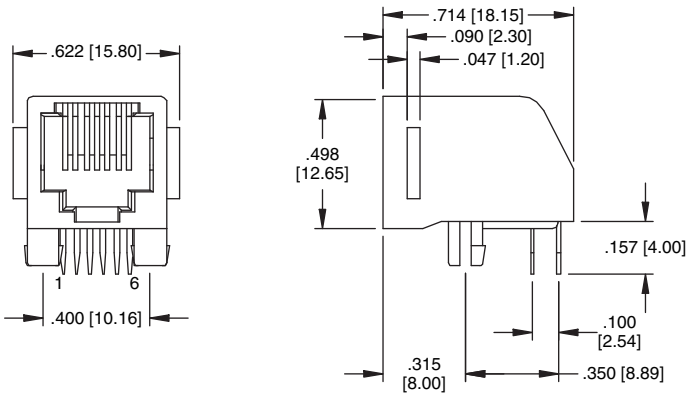
**MTJ-881X1**

Ordering Information pg. 9



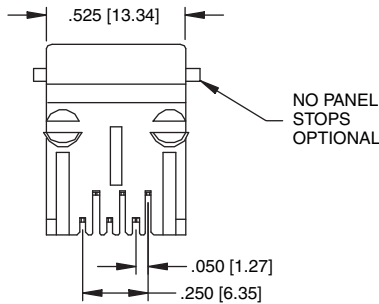
Recommended PCB Layout

**TYPE 0**  
**6P6C**  
**6P4C**

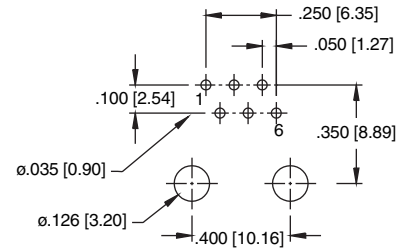


**MTJ-660X1**

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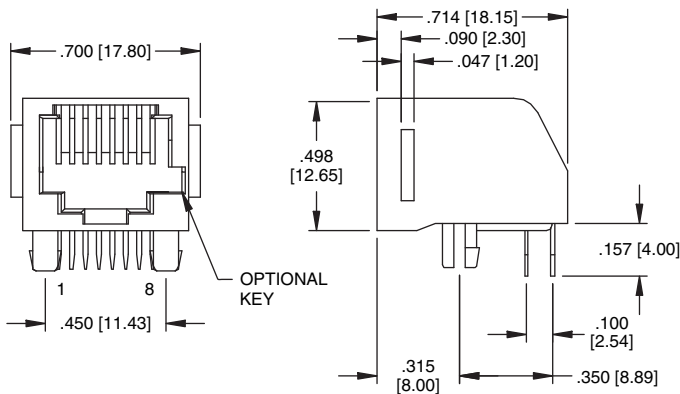


**Face Shield Option**



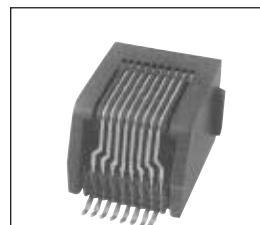
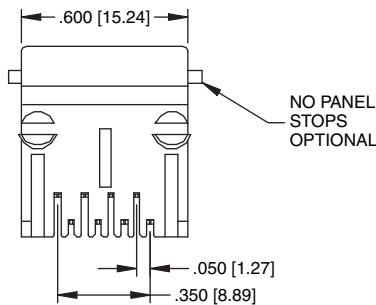
**Recommended PCB Layout**

**TYPE 0**  
**8P8C**

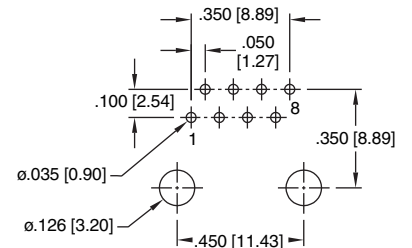


**MTJ-880X1**

[Ordering Information pg. 9](#)



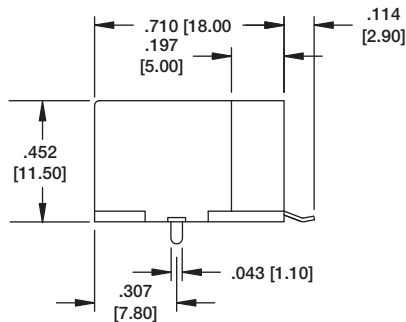
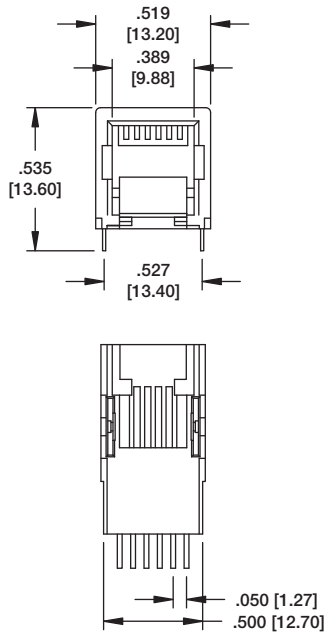
**SMT Option**



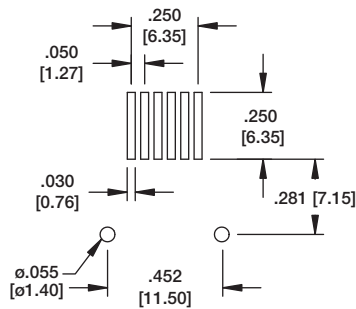
**Recommended PCB Layout**

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**TYPE Y**  
6P6C  
6P4C

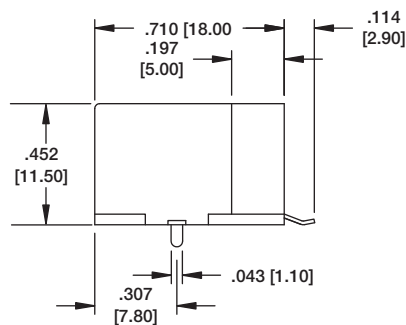
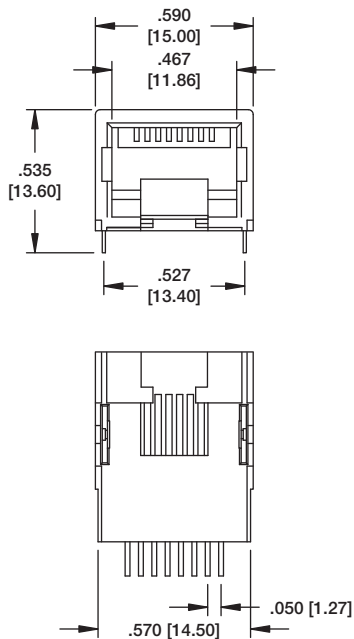


MTJ-66YX1

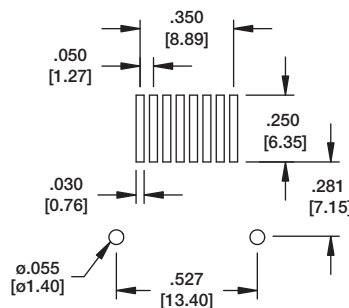


Recommended PCB Layout

**TYPE Y**  
8P8C

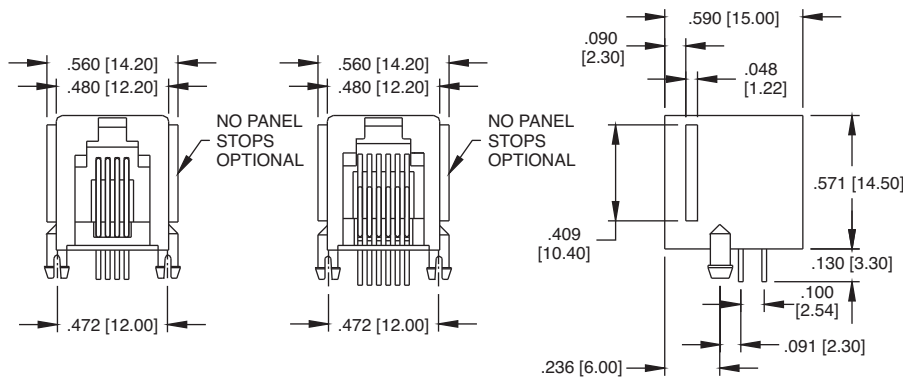


MTJ-88YX1



Recommended PCB Layout

Ordering Information pg. 9

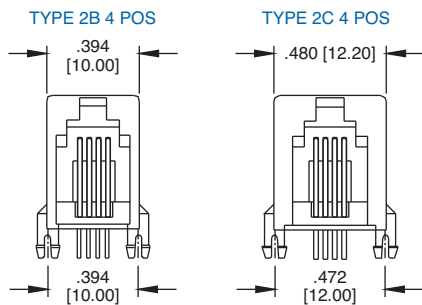


MTJ-662X2



MTJ-442X2

**TYPE 2**  
4P4C  
6P6C  
6P4C

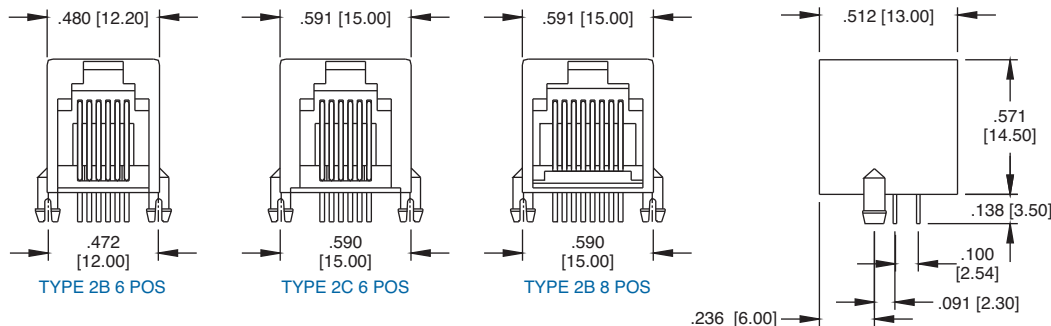


MTJ-442BX2



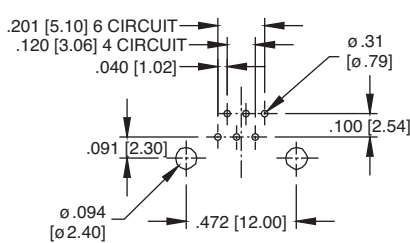
MTJ-642BX2

**TYPE 2B & 2C**  
4P4C  
6P6C  
6P4C  
8P8C

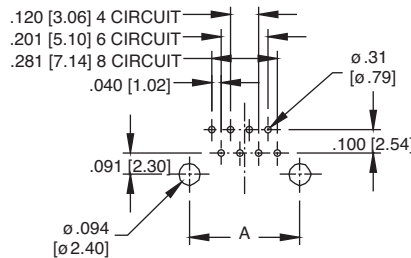


MTJ-882BX1

**TYPE 2**



**TYPE 2B & 2C**



Recommended PCB Layout

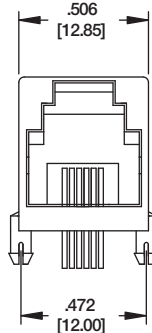
DIM. "A"	
TYPE 2B 4P4C	.394 [10.00]
TYPE 2C 4P4C	.472 [12.00]
TYPE 2B 6P6C	.472 [12.00]
TYPE 2C 6P6C	.591 [15.00]
TYPE 2B 8P8C	.590 [15.00]

Ordering Information pg. 9

**TYPE 2B  
SHIELDED**

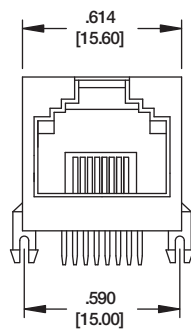
6P6C  
6P4C  
8P8C

**MTJ-662BX1-FS**

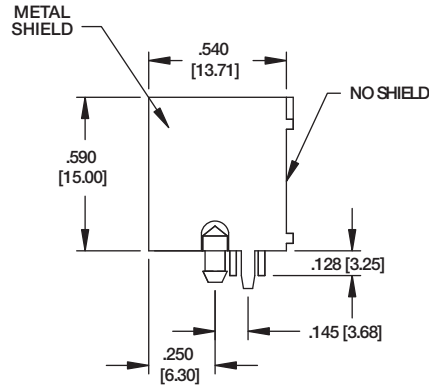


6 POS  
2B SHIELDED

**MTJ-882BX1-FS**



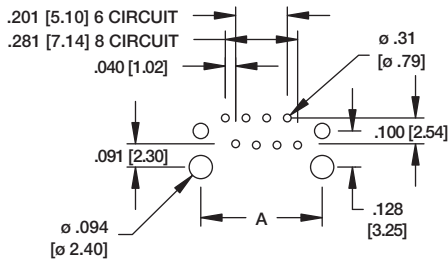
8 POS  
2B SHIELDED



**MTJ-662BX1-FS**

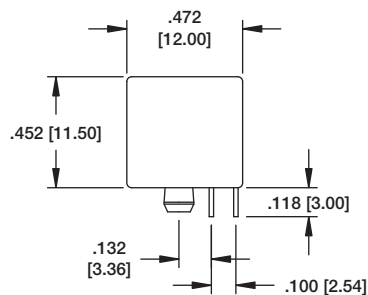
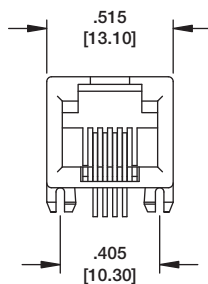


**MTJ-882BX1-FS**

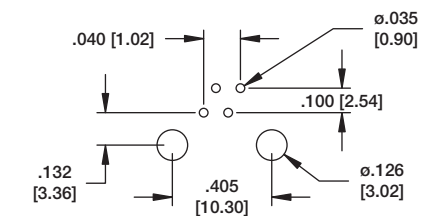
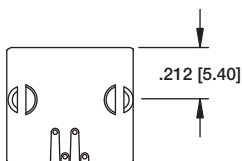


**Recommended PCB Layout**

DIM. "A"	
TYPE2B 6P6C	.472 [12.00]
TYPE2B 8P8C	.590 [15.00]



**MTJ-44QX1**



**Recommended PCB Layout**

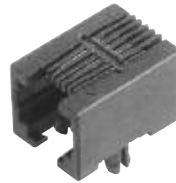
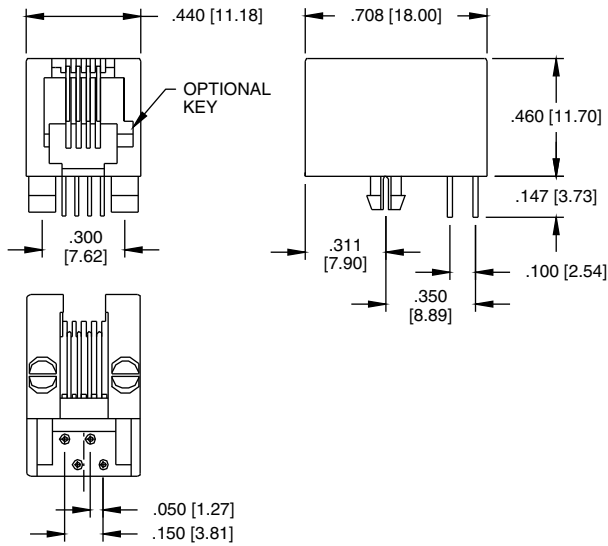
	<p>Ordering Information pg. 9</p> <p><b>TYPE 3</b> <b>4P4C</b></p> <p><b>MTJ-443X1</b></p>
	<p><b>TYPE 3</b> <b>6P4C</b></p> <p><b>MTJ-663X1</b></p>
	<p><b>TYPE 3</b> <b>8P8C</b></p> <p><b>MTJ-883X1</b></p>

**Recommended PCB Layout**

<p><b>4p4c</b></p>	<p><b>6p4c</b> <b>6p6c</b></p>	<p><b>8p8c</b></p>
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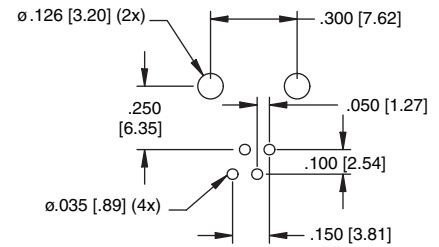
Ordering Information pg. 9

**TYPE 5**  
**4P4C**

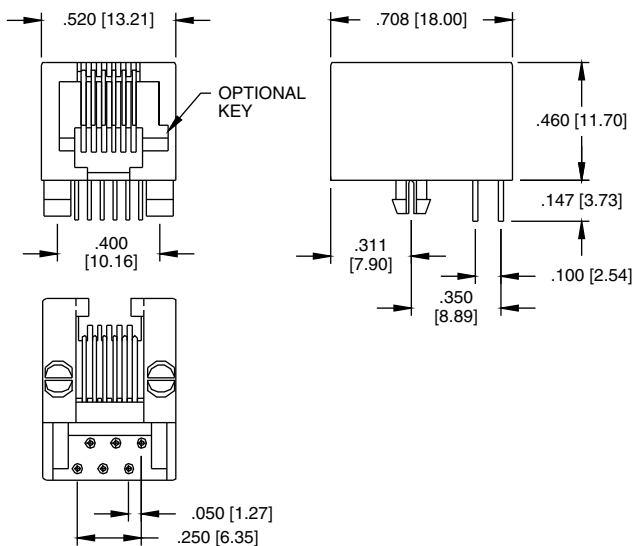


**MTJ-445X1**

**Recommended PCB Layout**

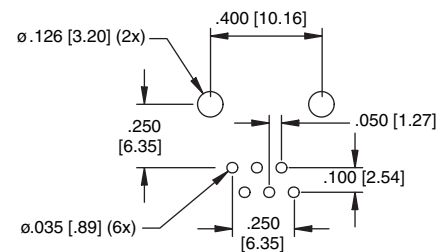


**TYPE 5**  
**6P4C**  
**6P6C**



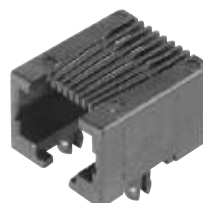
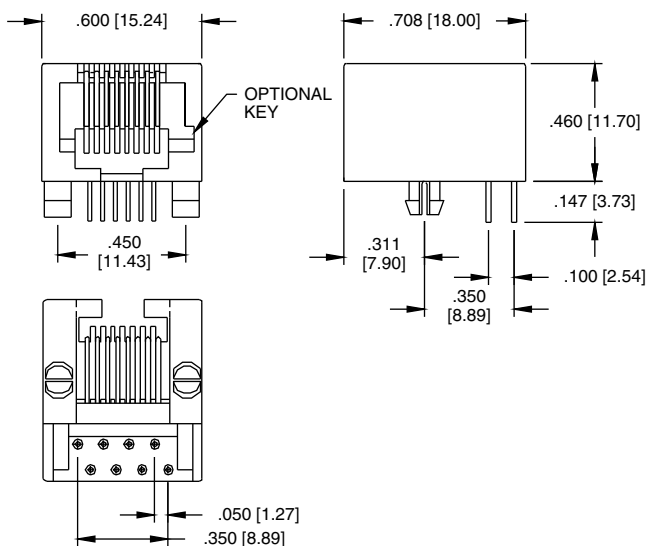
**MTJ-665X1**

**Recommended PCB Layout**



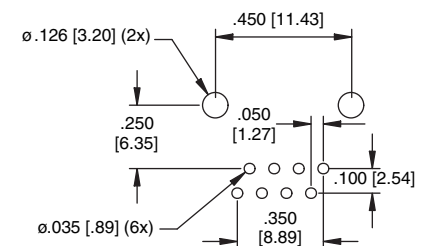
**TYPE 5**  
**8P8C**

**SMT Option**



**MTJ-885X1**

**Recommended PCB Layout**

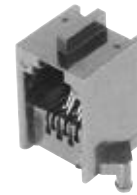
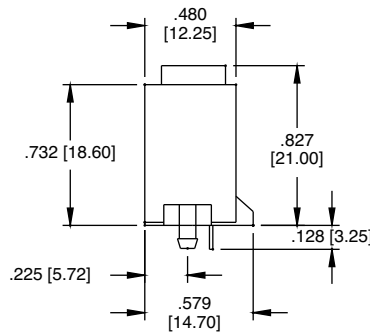
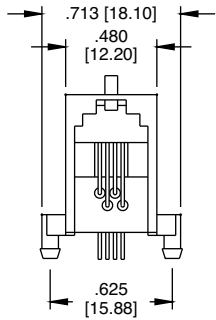




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**TYPE 7**

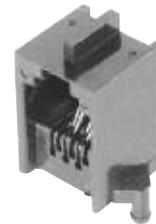
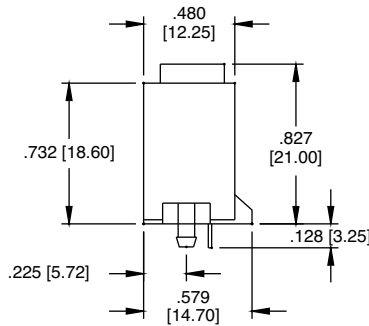
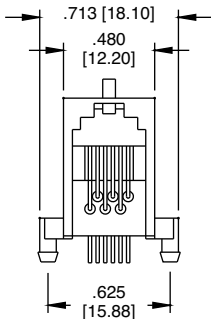
**4P4C**



**MTJ-447X1**

**TYPE 7**

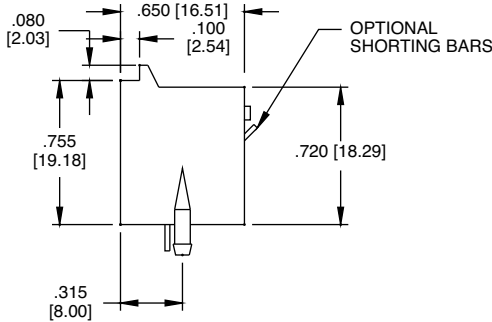
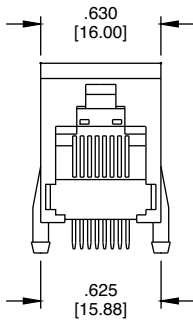
**6P4C  
6P6C**



**MTJ-647X1**

**TYPE 7**

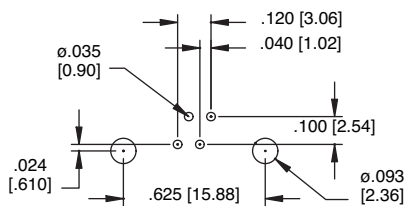
**8P8C**



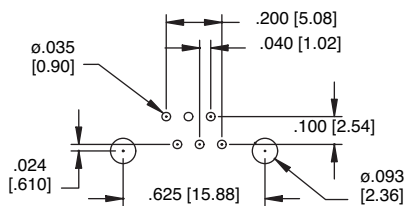
**MTJ-887X1**

**Recommended PCB Layout**

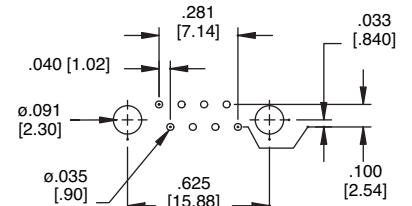
**4p4c**



**6p4c  
6p6c**



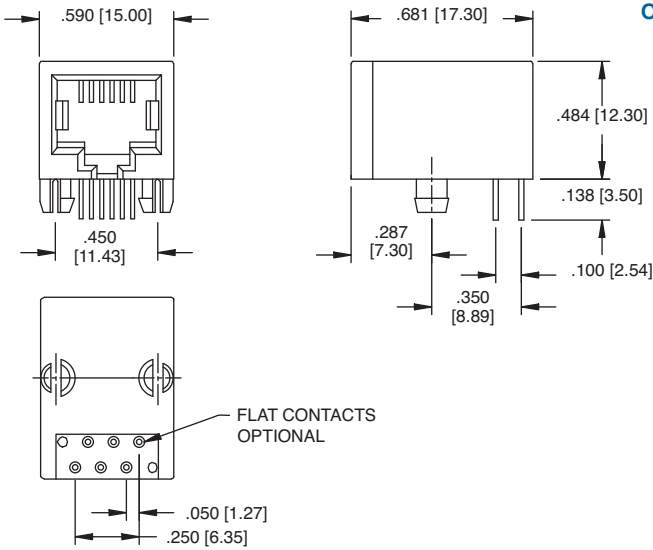
**8p8c**



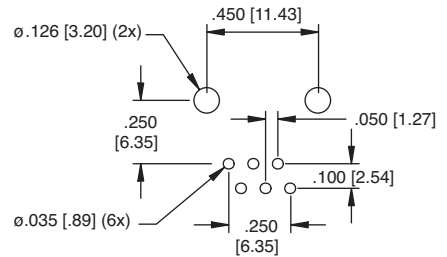
Ordering Information pg. 9

**TYPE 9**

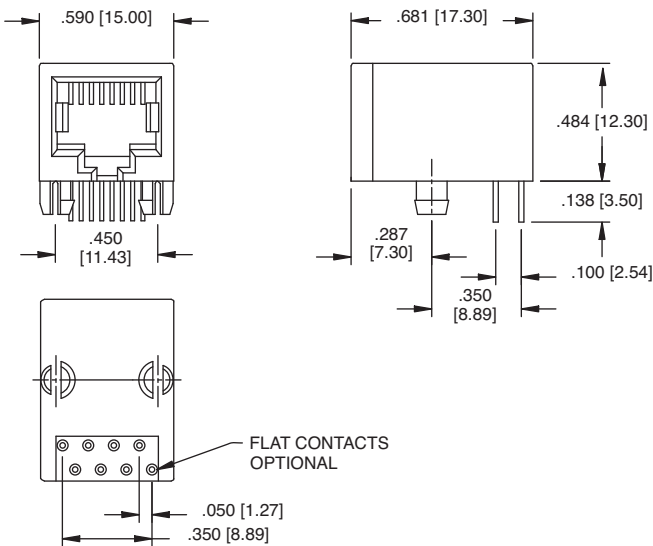
**6P4C  
6P6C**



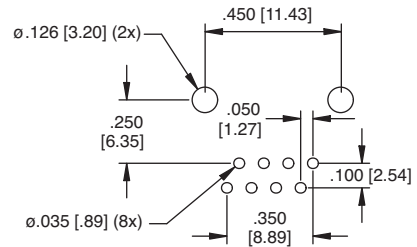
**MTJ-669X1**



**Recommended PCB Layout**

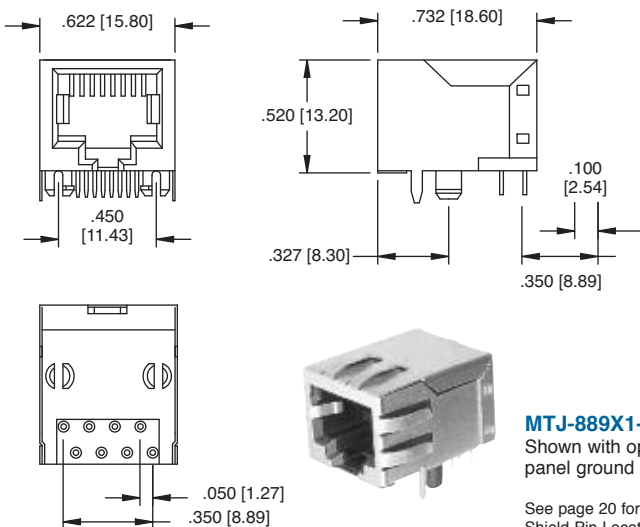


**MTJ-889X1**



**Recommended PCB Layout**

**TYPE 9  
8P8C  
SHIELDED**



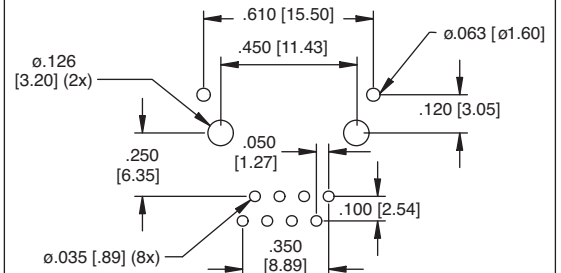
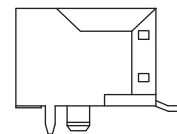
**MTJ-889X1-FSE**

**MTJ-889X1-FSE-PG**

Shown with optional panel ground tabs

See page 20 for other Shield Pin Location Options

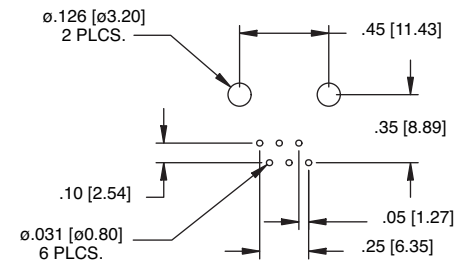
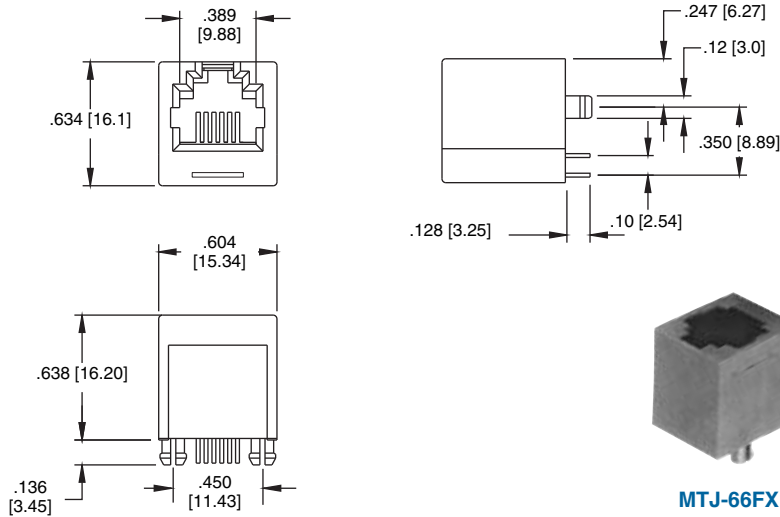
**SMT Option**



**Recommended PCB Layout**

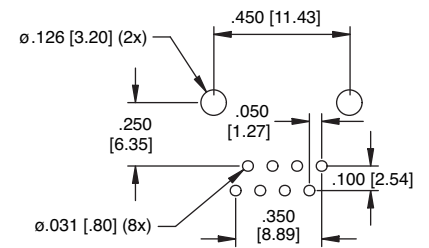
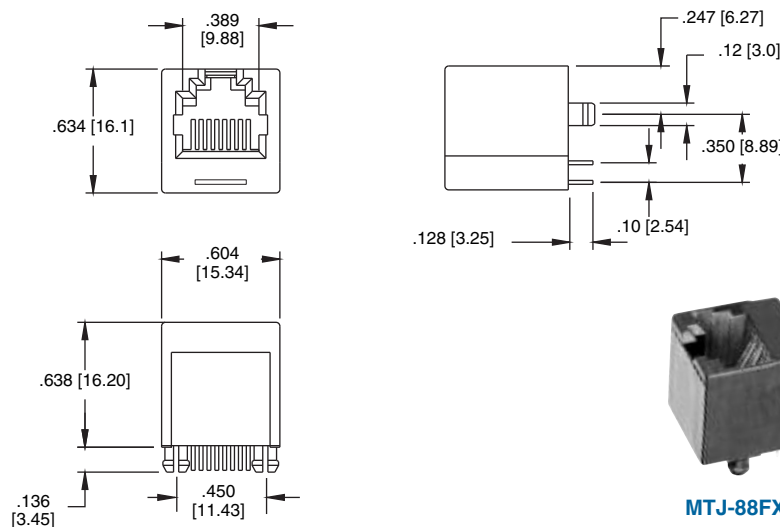
Ordering Information pg. 9

**TYPE F**  
**6P6C**



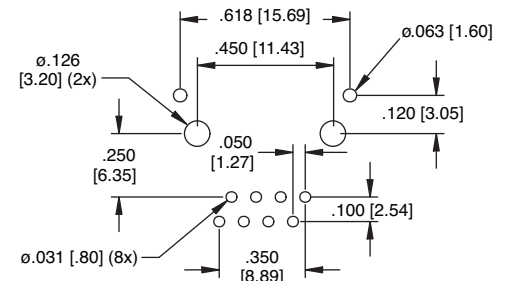
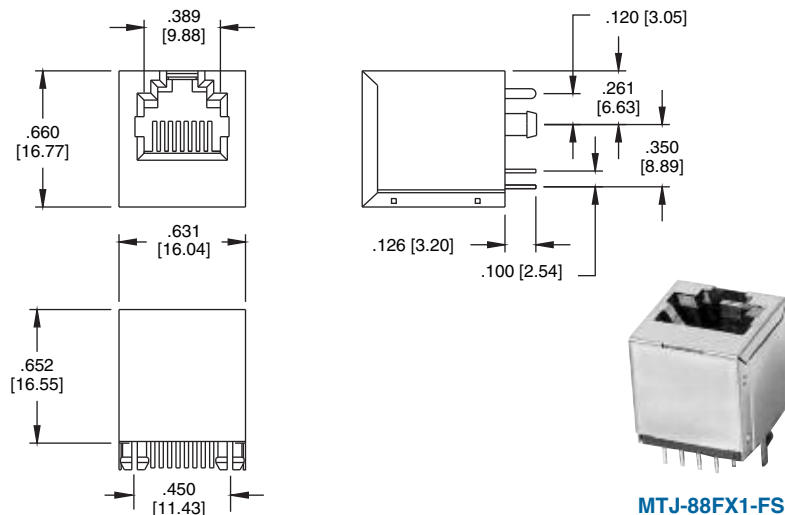
Recommended PCB Layout

**TYPE F**  
**8P8C**



Recommended PCB Layout

**TYPE F**  
**SHIELDED**  
**8P8C**



Recommended PCB Layout

Ordering Information pg. 9

**TYPE G**  
**6P6C**

**MTJ-64GX1**

**Recommended PCB Layout**

**TYPE G**  
**8P8C**

**MTJ-88GX1**

**Recommended PCB Layout**

Panel Stops  
Available with optional panel stops  
Add -PS to end of part No.

SHIELD PIN LOCATION  
FSD OPTION: A = .120 [3.05]

**SHIELD PIN LOCATION OPTIONS**  
FSA OPTION: A = .170 [4.32]  
FSB OPTION: A = .144 [3.66]  
FSE OPTION: A = .120 [3.05]

**TYPE G**  
**SHIELDED**  
**8P8C**

**MTJ-88GX1-FSB-PG**  
Shown with Full Metal Shield & Panel Ground Tab options

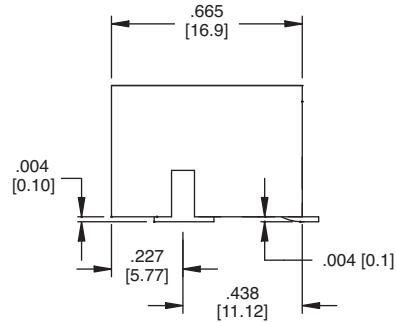
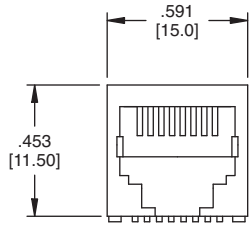
**MTJ-88GX1-FSD**  
Shown with Full Metal Shield option

**Recommended PCB Layout (FSD)**

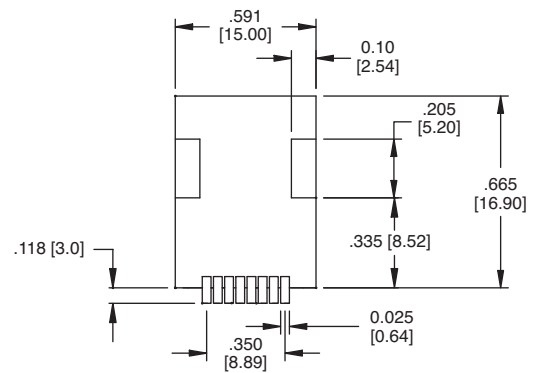
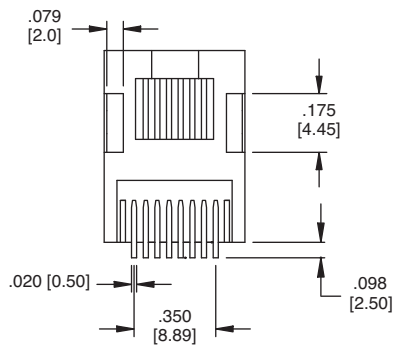
**PCB Layout (FSA, FSB, & FSE)**

Ordering Information pg. 9

**TYPE WA**  
SMT TABS IN  
8P8C

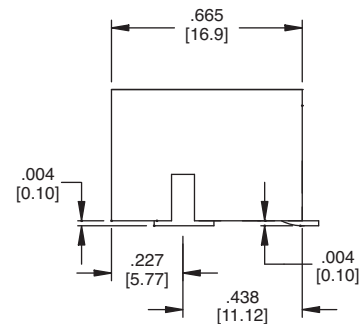
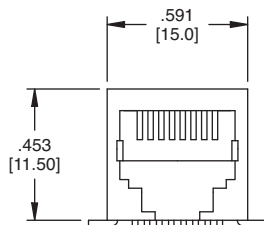


**MTJ-88WAX1**

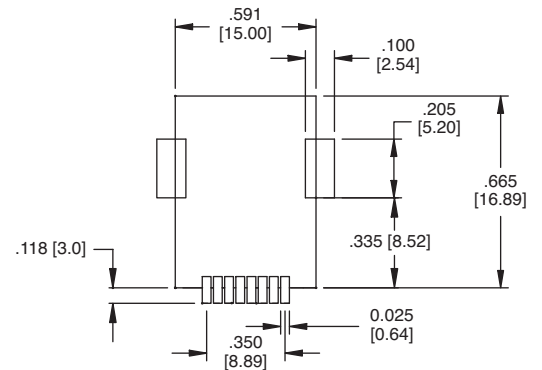
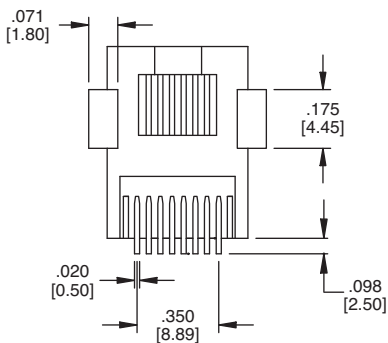


**Recommended Solder Pad Layout**

**TYPE WB**  
SMT TABS OUT  
8P8C



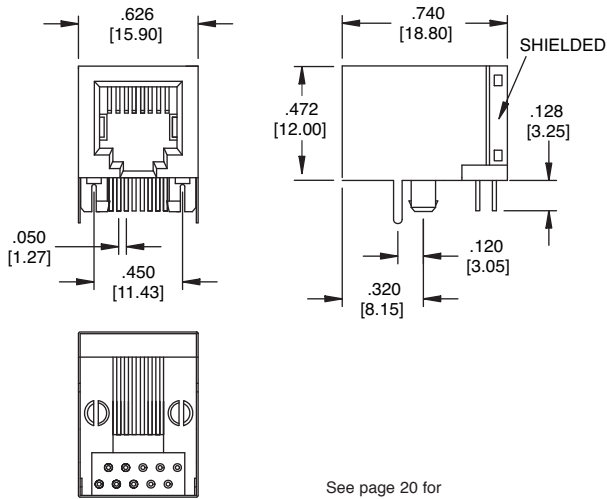
**MTJ-88WBX1**



**Recommended Solder Pad Layout**

Ordering Information pg. 9

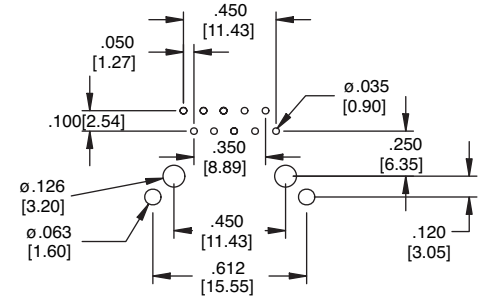
**TYPE W**  
**SHIELDED, THRU HOLE**  
**8P8C**  
**10P10C**



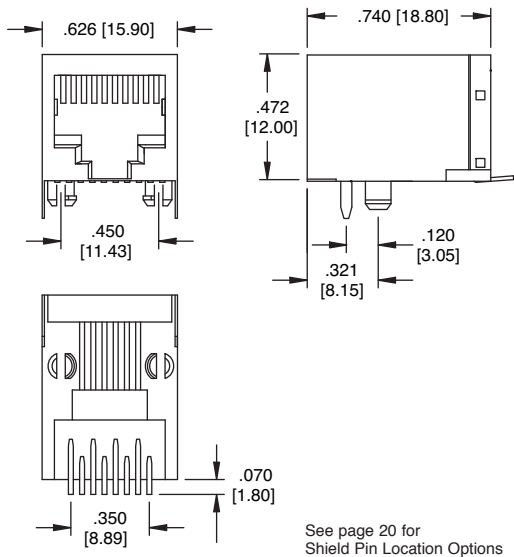
**MTJ-88WX1-FSE**



**MTJ-88WX1-FSE-PG**  
Shown with optional panel ground tabs



**Recommended PCB Layout**

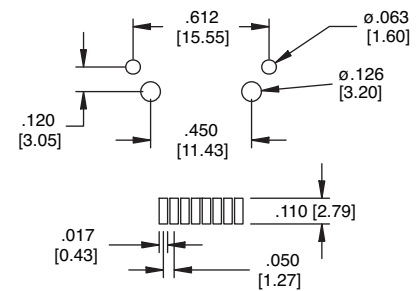


**MTJ-88WX1-FSE-SMT**

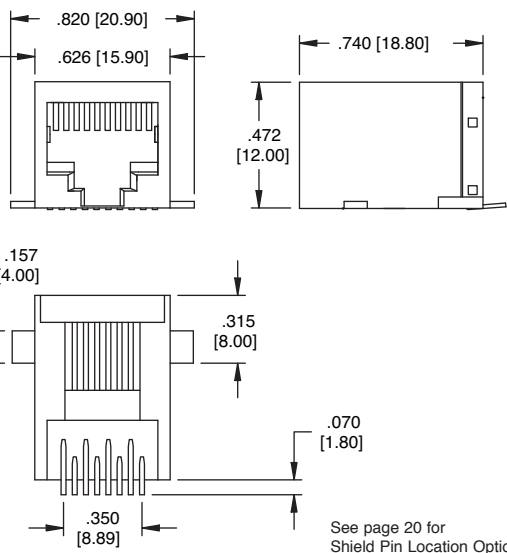


**MTJ-88WX1-FSE-SMT-PG**  
Shown with optional panel ground tabs

**TYPE W**  
**SHIELDED SMT WITH PLASTIC PEG**  
**8P8C**



**Recommended Solder Pad Layout**

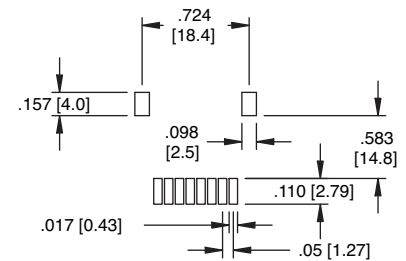


**MTJ-88WX1-FS-TSMT**



**MTJ-88WX1-FS-TSMT-PG**  
Shown with optional panel ground tabs

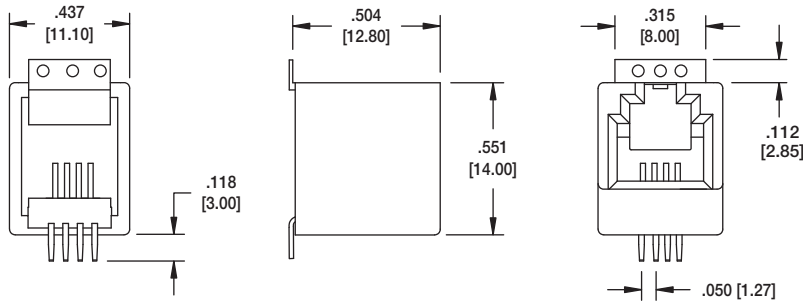
**TYPE W**  
**SHIELDED TRUE SMT**  
**8P8C**



**Recommended Solder Pad Layout**

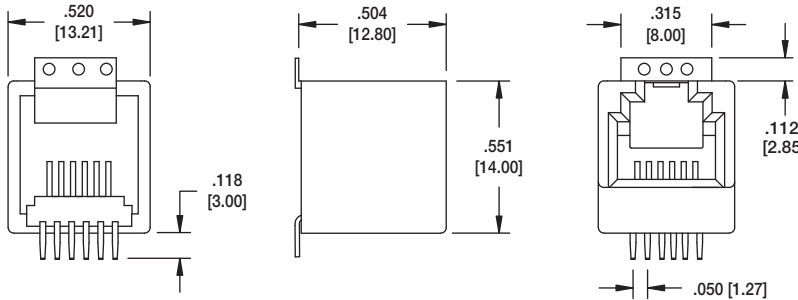
Ordering Information pg. 9

**TYPE H**  
**4P4C**



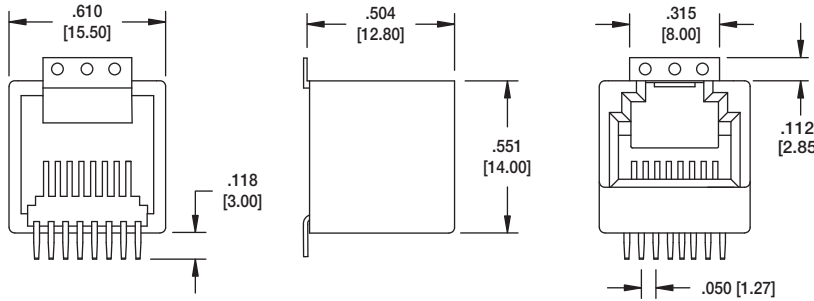
**MTJ-44HX1**

**TYPE H**  
**6P6C**

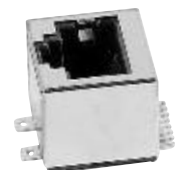


**MTJ-66HX1**

**TYPE H**  
**8P8C**



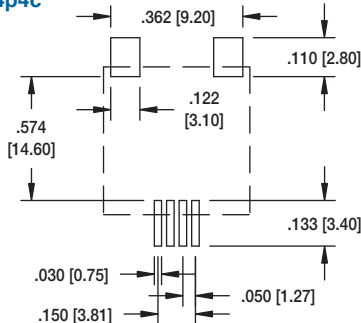
**MTJ-88HX1**



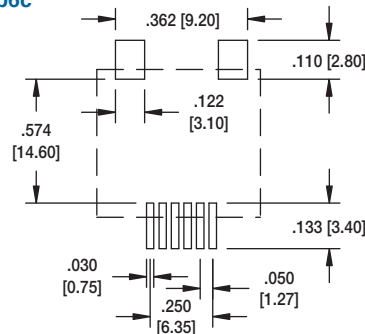
**MTJ-88HX1-FS**

Recommended PCB Layout

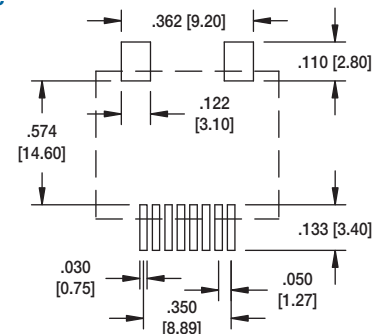
**4p4c**



**6p6c**

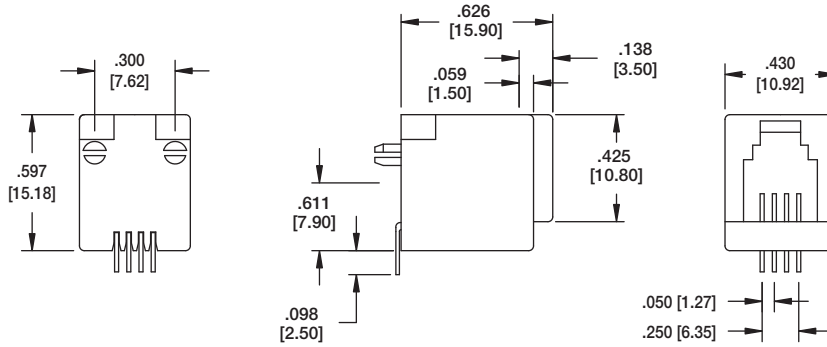


**8p8c**



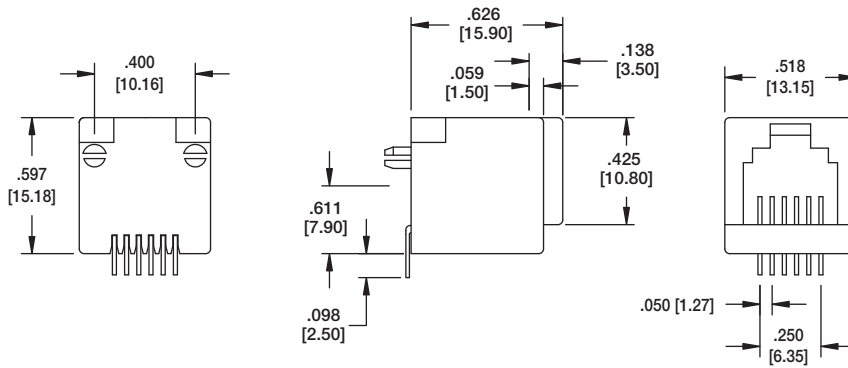
Ordering Information pg. 9

**TYPE K**  
4P4C



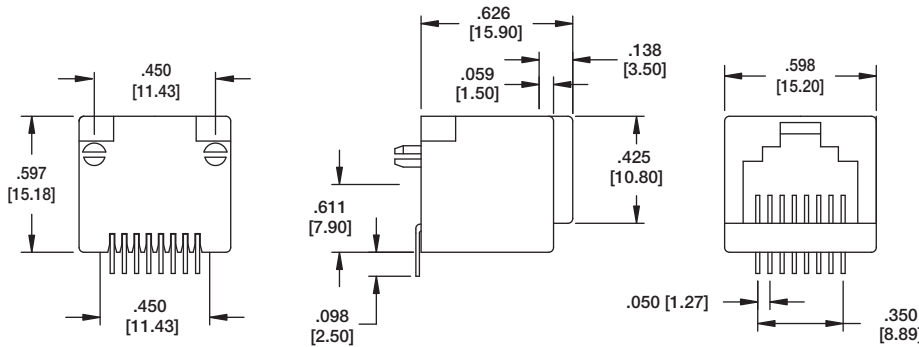
MTJ-44KX1

**TYPE K**  
6P4C  
6P6C



MTJ-66KX1

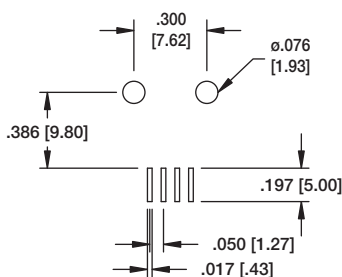
**TYPE K**  
8P8C



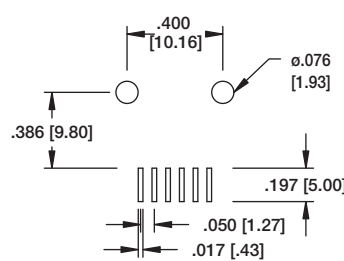
MTJ-88KX1

Recommended PCB Layout

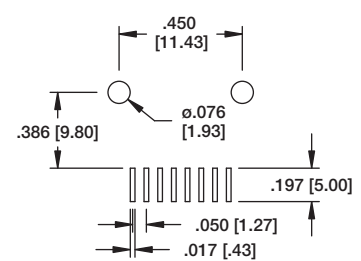
4p4c



6p6c



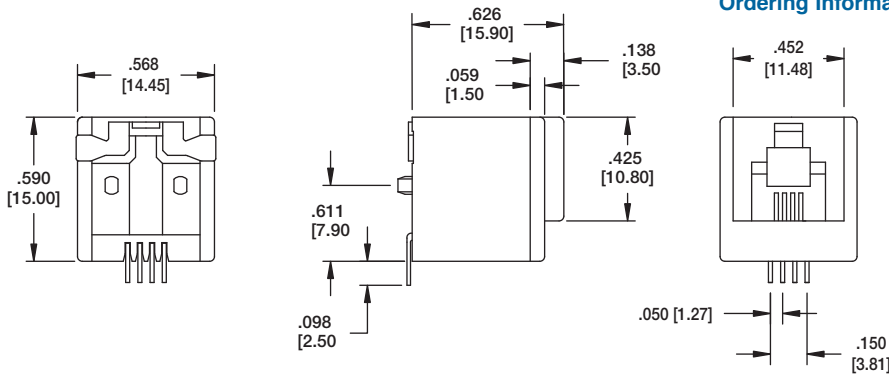
8p8c





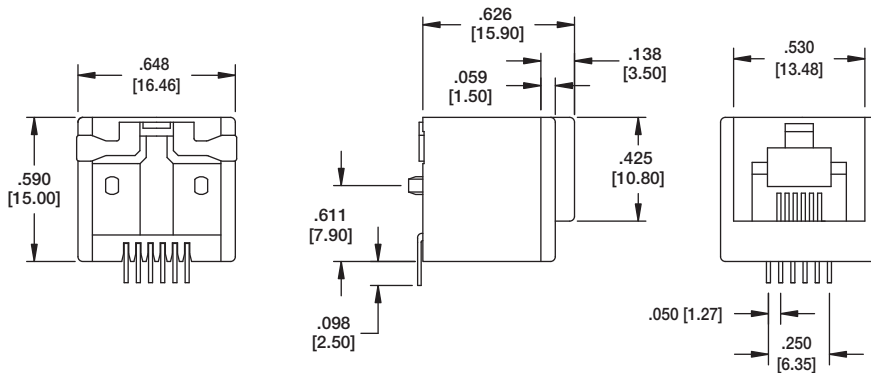
Ordering Information pg. 9

**TYPE V**  
4P4C



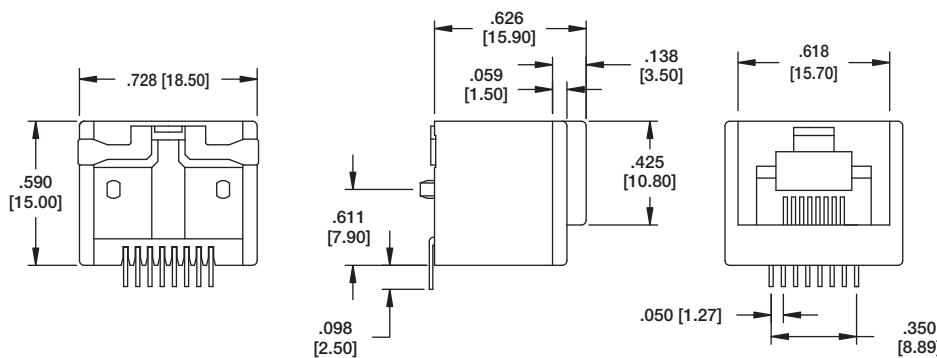
**MTJ-44VX1**

**TYPE V**  
6P6C  
6P4C



**MTJ-66VX1**

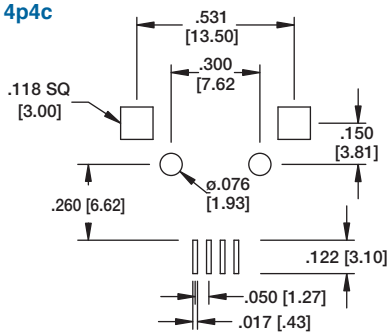
**TYPE V**  
8P8C  
8P4C



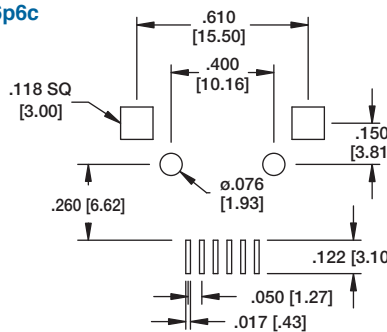
**MTJ-88VX1**

**Recommended PCB Layout**

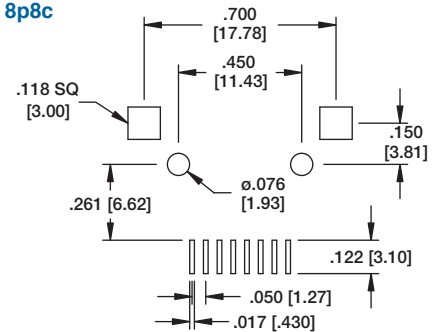
**4p4c**



**6p6c**

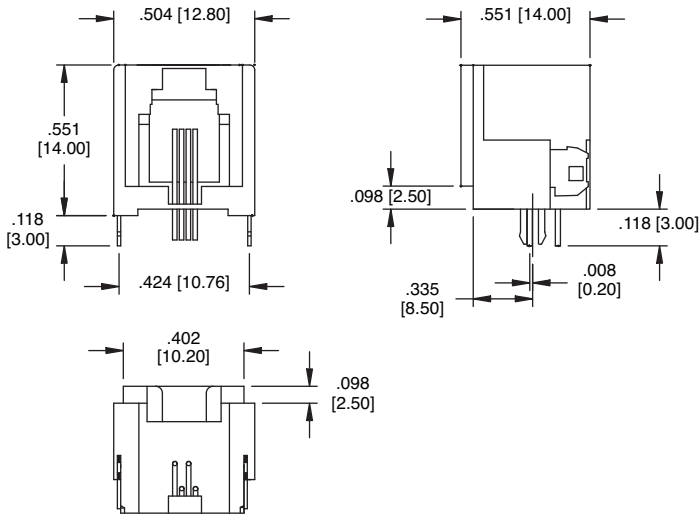


**8p8c**

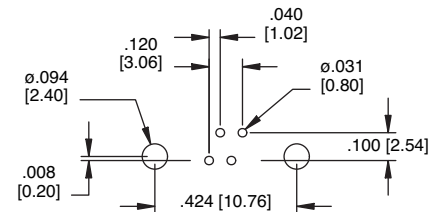


Ordering Information pg. 9

**TYPE E**  
4P4C

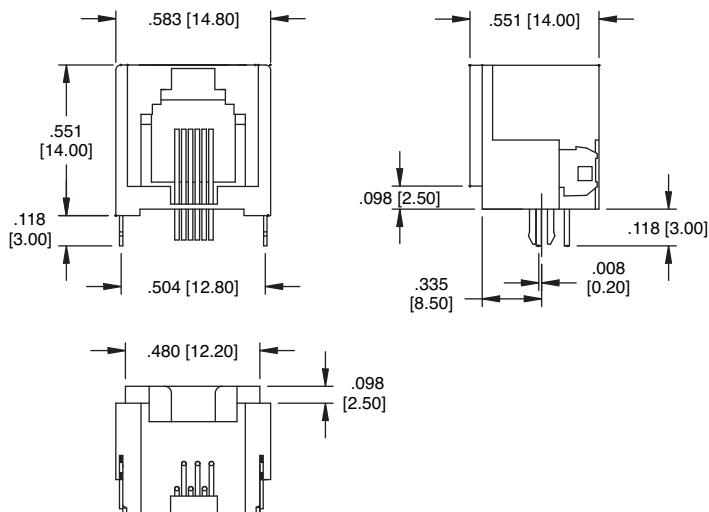


MTJ-44EX1

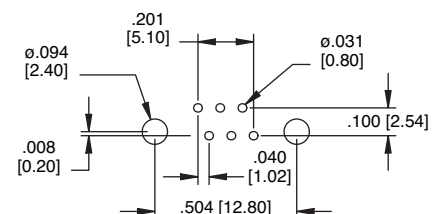


Recommended PCB Layout

**TYPE E**  
6P4C  
6P6C

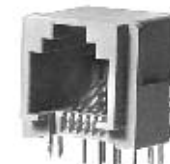
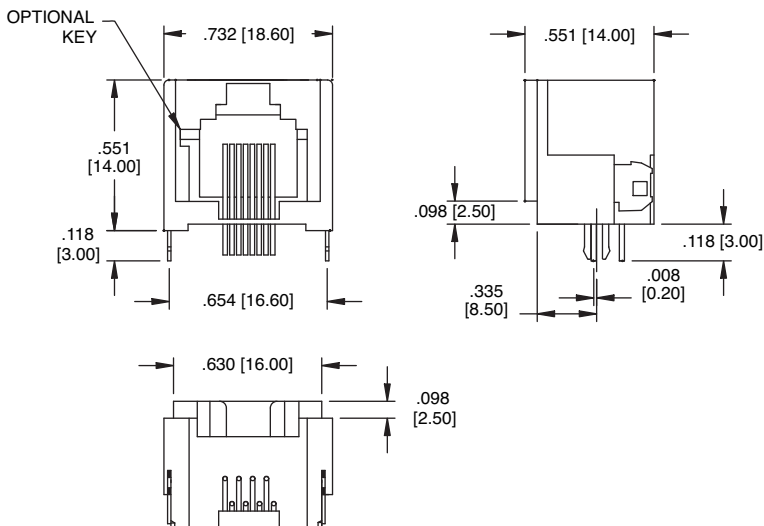


MTJ-66EX1

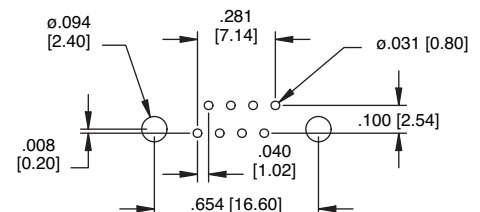


Recommended PCB Layout

**TYPE E**  
8P8C

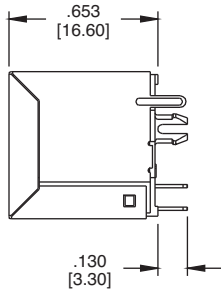
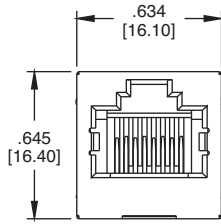


MTJ-88EX1



Recommended PCB Layout

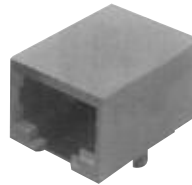
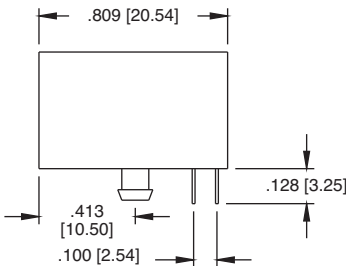
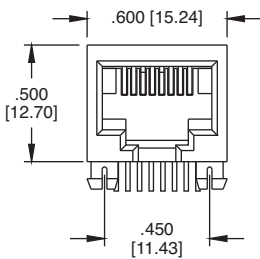
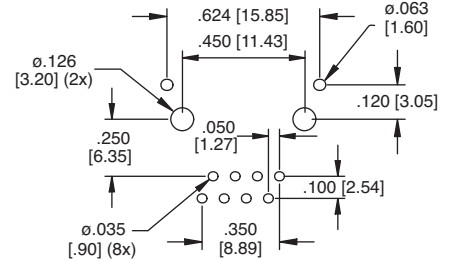
Ordering Information pg. 9



MTJ-88AX1-FSE

**TYPE A**  
CAT. 5, TOP ENTRY  
8P8C

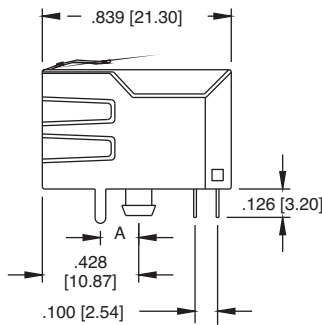
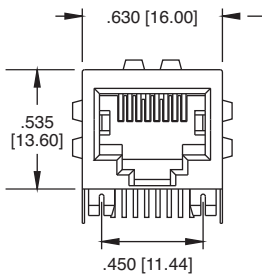
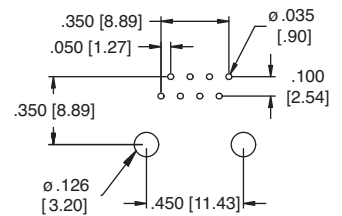
Recommended PCB Layout



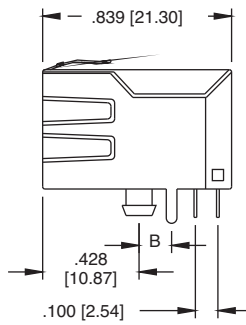
MTJ-88TX1

**TYPE T**  
CAT. 5e, SIDE ENTRY  
8P8C

Recommended PCB Layout



FSA, FSB & FSE

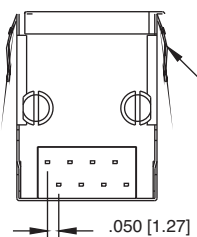


FSD = .120 [3.05]



MTJ-88TX1-FSE-PG  
Available with or without  
panel ground tabs

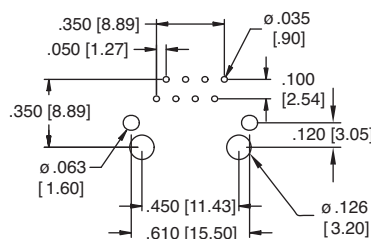
**TYPE T**  
CAT. 5e, SHIELDED  
8P8C



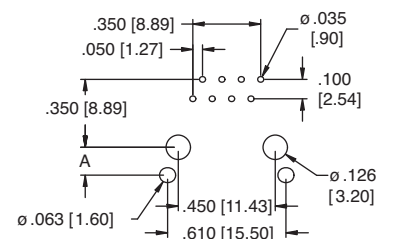
OPTIONAL  
PANEL GROUND TABS

Dimensions A & B  
SHIELD PIN LOCATION OPTIONS  
FSA OPTION: A = .170 [4.32]  
FSB OPTION: A = .144 [3.66]  
FSE OPTION: A = .120 [3.05]  
FSD OPTION: B = .120 [3.05]

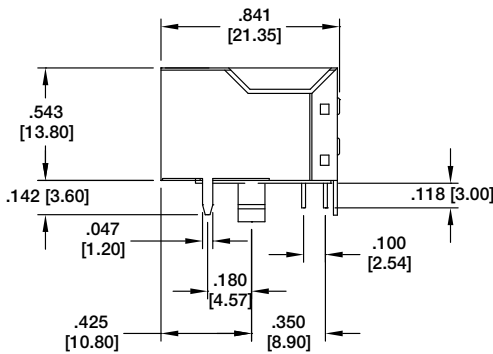
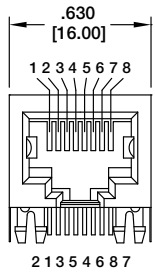
PCB Layout (FSD)



PCB Layout (FSA, FSB & FSE)



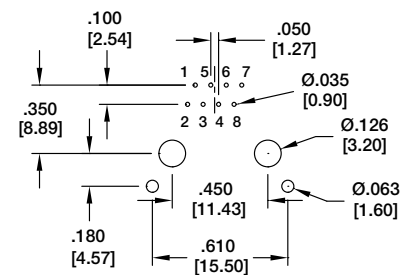
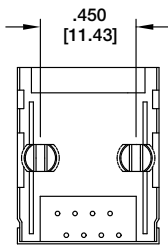
**TYPE T**  
CAT. 5e, SHIELDED



MTJ-88TX1-FSG

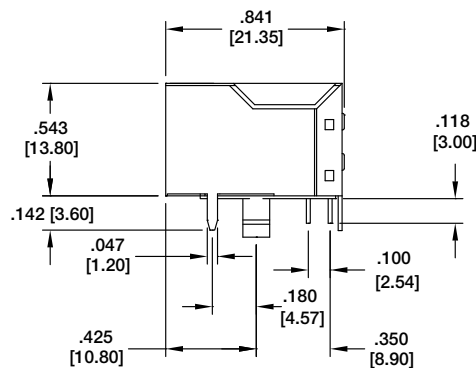
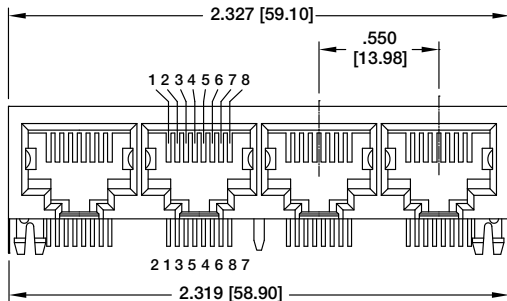


MTJ-88TX1-FSG-PG

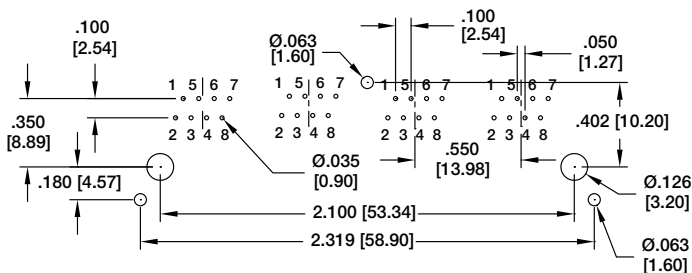
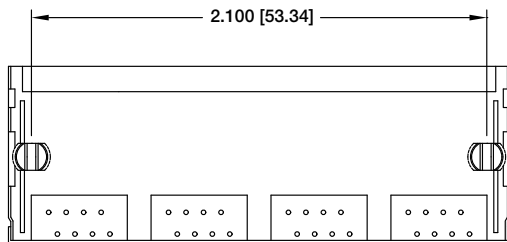


Recommended PCB Layout

**TYPE T**  
GANGED  
CAT. 5e, SHIELDED



MTJG-4-88TX1-FSG



Recommended PCB Layout

**TYPE AR**  
LED JACK .531" HEIGHT  
TOP TAB & TOP LEDs, THRU HOLE  
RPRC

**MTJ-88ARX1-FS-LG**  
Also available with panel ground tabs

**TYPE AA**  
LED JACK BOTTOM TAB &  
BOTTOM LEDSTHRU HOLE  
8P8C

**MTJ-88AAX1-FS-LG-PG**

**TYPE D**  
TOP ENTRY LED JACK .610" HEIGHT WITH LEDs, NON-SHIELDED  
8P8C

**MTJ-88DX1-LG**

Add suffix to end of P/N:

LED CONFIGURATION		
SUFFIX	LED 1	LED 2
LA	YELLOW	YELLOW
LD	GREEN	GREEN

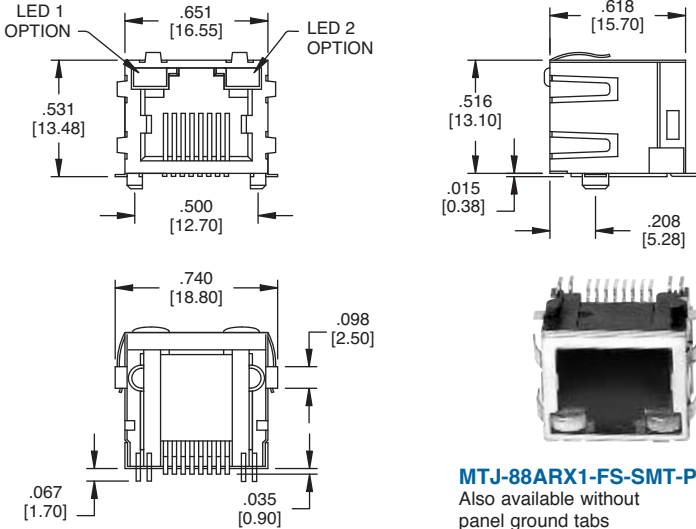
### JACKS WITH LEDs ORDERING INFORMATION

<b>MTJ</b>	<b>8</b>	<b>8</b>	<b>AR</b>	<b>2</b>	<b>1</b>	<b>LD</b>
<b>SERIES INDICATOR</b> MTJ = Modular telephone jack	<b>HOUSING PLUG SIZE</b> 8 or 10	<b>NO. OF CONTACT POSITIONS FILLED</b> 6, 8 or 10	<b>HOUSING TYPE</b> AR, AA, D, G	<b>PLATING</b> X = Gold Flash 0 = 15 μin gold 1 = 30 μin gold 2 = 50 μin gold	<b>BODY COLOR</b> 1 = Black 2 = Gray	<b>LED Configuration</b> See Chart above Leave blank for no LEDs

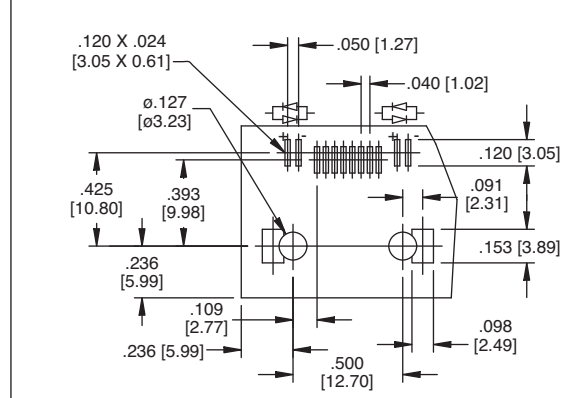
**OPTIONS:**  
SMT = Surface mount tails with Hi-Temp insulator  
PG = Panel Ground Tabs  
LX = LED's, use LA, LD, LG, LH, LI, see LED Configuration Chart

Ordering Information pg. 29

**TYPE AR  
WITH SMT OPTION  
8P8C**



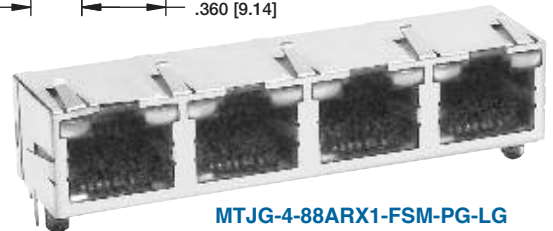
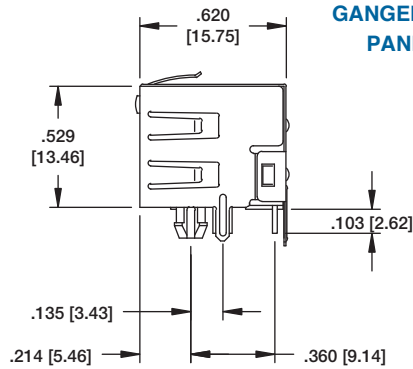
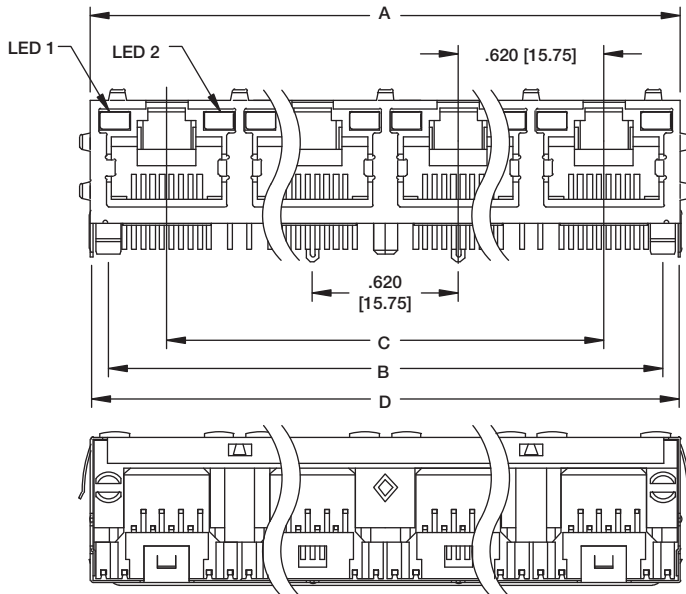
**MTJ-88ARX1-FS-SMT-PG-LG**  
Also available without panel ground tabs



**Recommended PCB Layout**

Ordering Information pg. 34

**TYPE AR  
GANGED WITH METAL SHIELD,  
PANEL GROUND TABS AND  
LED OPTION  
8P8C**



**MTJG-4-88ARX1-FSM-PG-LG**

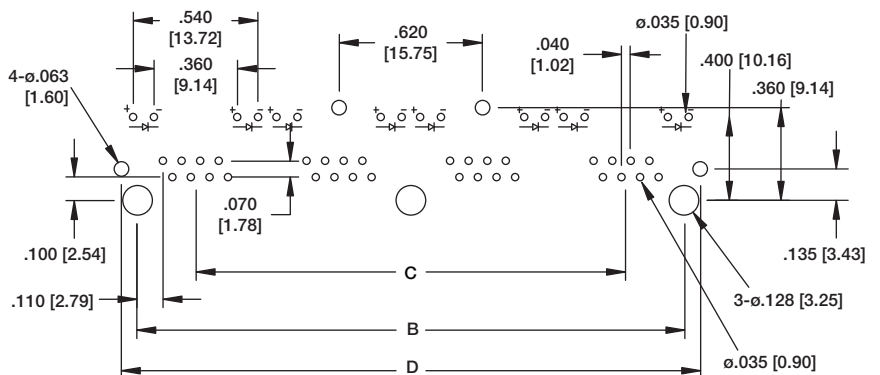
Shown with metal shield, panel ground tabs and LED options

Add suffix to end of P/N:

LED CONFIGURATION		
SUFFIX	LED 1	LED 2
LA	YELLOW	YELLOW
LD	GREEN	GREEN

**2, 4 & 8 PORTS AVAILABLE**

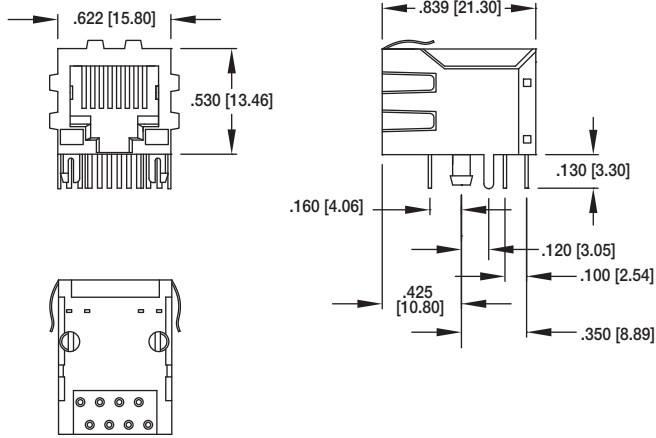
- A = .620 [15.75] x No. of Ports + .029 [0.75]
- B = .620 [15.75] x No. of Ports - 1 + .500 [12.70]
- C = .620 [15.75] x No. of Ports - 1
- D = .620 [15.75] x No. of Ports + .019 [0.50]



**Recommended PCB Layout**

Ordering Information pg. 29

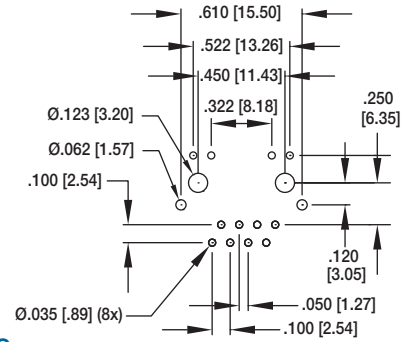
**TYPE G  
WITH LED's**



**MTJ-88GX1-FSD-LH**

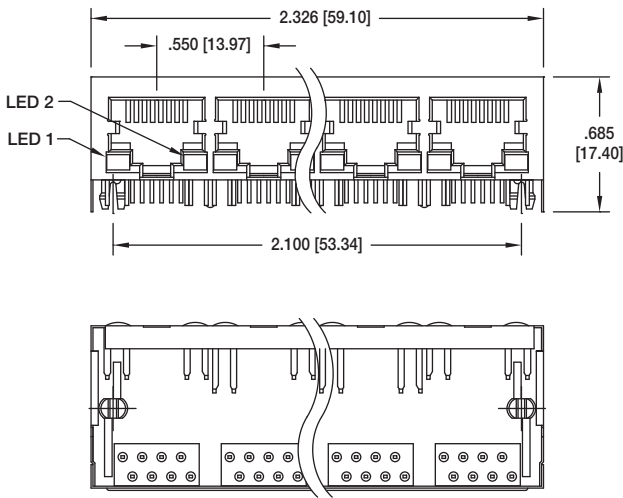


**MTJ-88GX1-FSD-LH-PG**

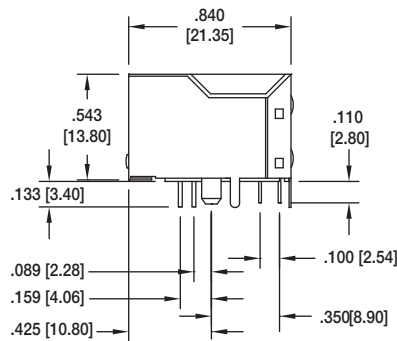


Recommended PCB Layout

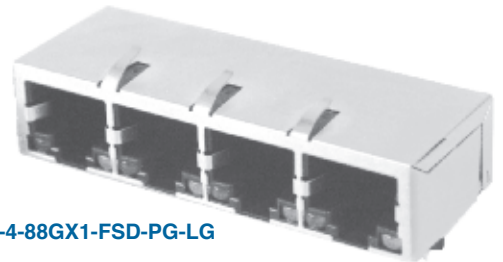
**TYPE G GANGED  
WITH LED's**



2, 4 & 6 PORTS AVAILABLE

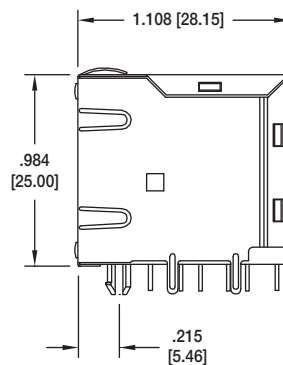
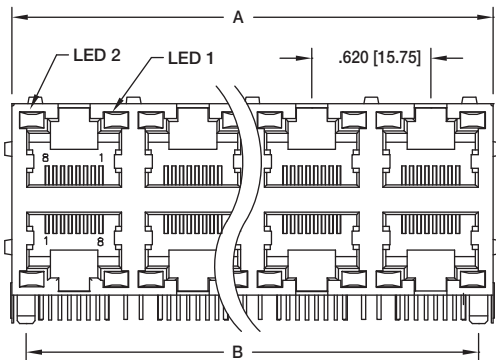


**MTJG-4-88GX1-FSD-PG-LG**



Ordering Information pg. 34

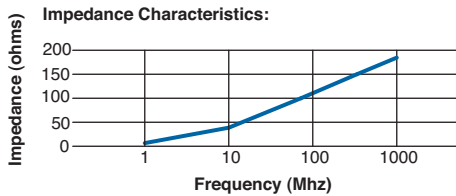
**TYPE J STACKED  
WITH LED's**



PART NUMBER	PORTS	DIMENSIONS	
		A	B
MTJG-2-88JX1-FSM-LXX	2 X 1	.650 [16.51]	.500 [12.70]
MTJG-4-88JX1-FSM-LXX	2 X 2	1.265 [32.15]	1.120 [28.45]
MTJG-8-88JX1-FSM-LXX	2 X 4	2.50 [63.65]	2.360 [59.95]
MTJG-12-88JX1-FSM-LXX	2 X 6	3.74 [95.15]	3.600 [91.45]

## FILTERED MODULAR JACKS

Inductive filtered modular jacks improve signal integrity and are available in a variety of styles including tin plated copper shielding with a choice of magnetic transformer or ferrite filter. Adam Tech offers drop in equivalents to all industry standard filtered jacks



Ordering Information pg. 9

TYPE M

EMI FERRITE FILTERED JACK



**MTJ-88MX1**  
Non-Shielded

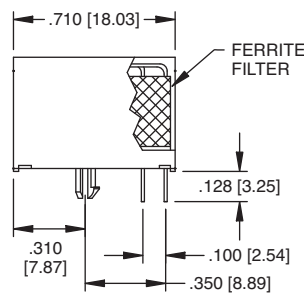
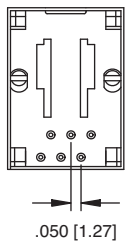
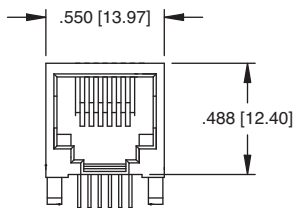


**MTJ-88MX1-FSE**  
Metal Shielded

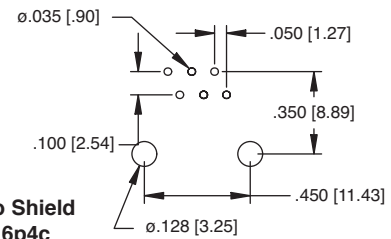


**MTJ-88MX1-FSE-PG**  
Metal Shielded with  
panel ground tabs

## EMI FERRITE FILTERED JACK

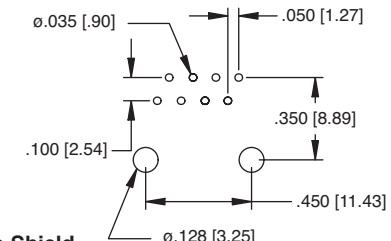


Type M  
**6P6C**  
**6P4C**



No Shield  
**6p4c**  
**6p6c**

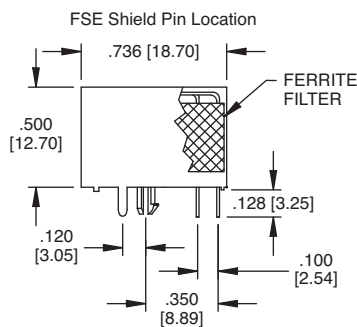
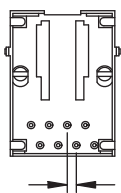
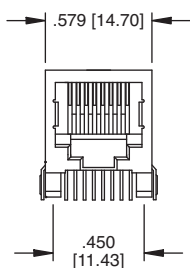
Recommended PCB Layout



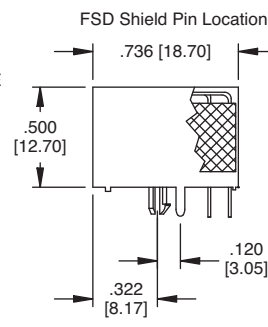
No Shield  
**8p8c**

Recommended PCB Layout

## EMI FERRITE FILTERED & SHIELDED JACK

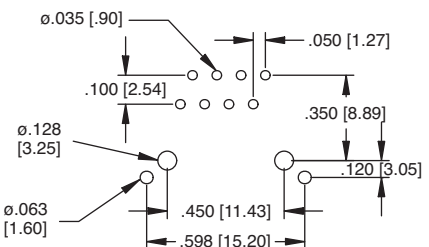


**MTJ-88MX1-FSE**



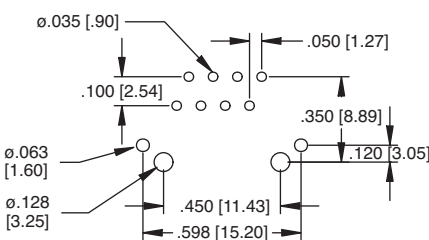
**MTJ-88MX1-FSD**

Type M  
**8P8C**



FSE Shield  
**8p8c**

Recommended PCB Layout

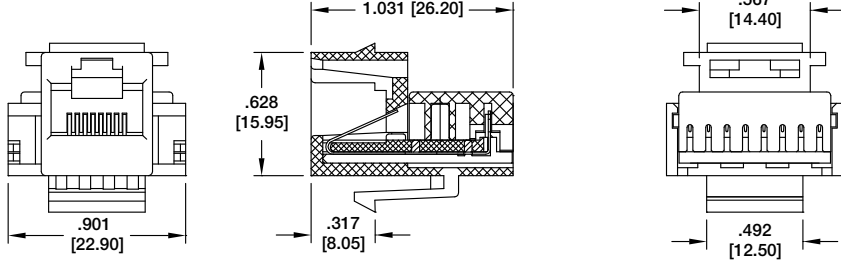


FSD Shield  
**8p8c**

Recommended PCB Layout

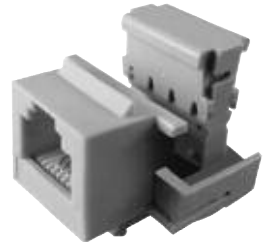
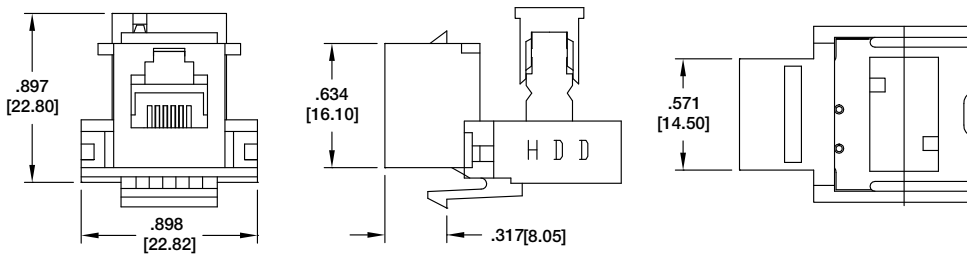


**CAT. 3 KEYSTONE JACK  
8 POSITION 8 CONTACT**



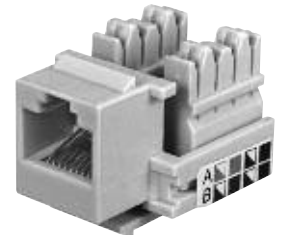
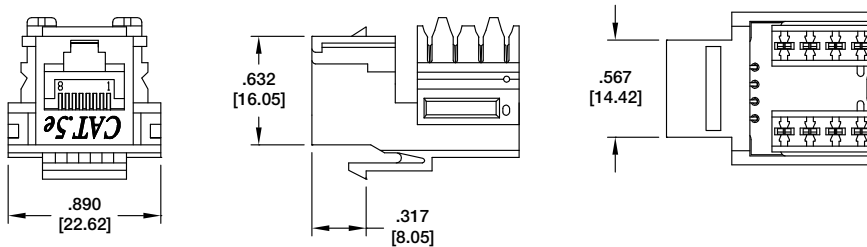
**MTJK-88-10**

**CAT. 3 KEYSTONE JACK  
6 POSITION 4 CONTACT**



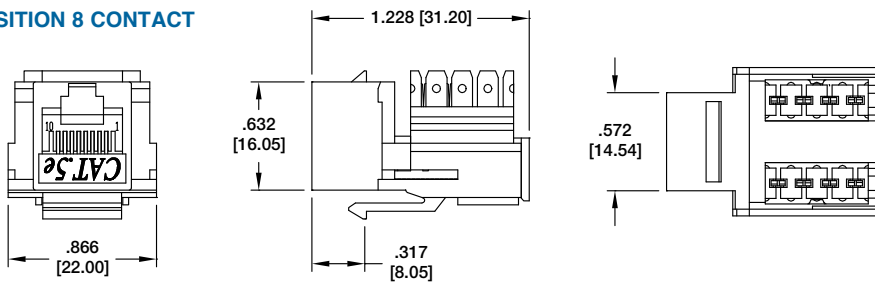
**MTJK-64-29**

**CAT. 5e KEYSTONE JACK  
8 POSITION 8 CONTACT**



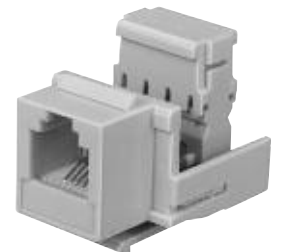
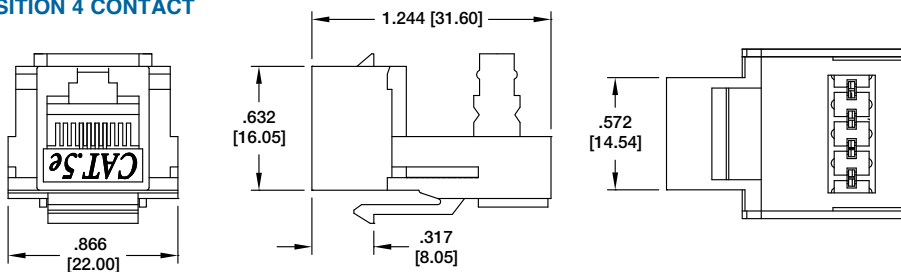
**MTJK-88-02-C5E**

**CAT. 5e KEYSTONE JACK  
8 POSITION 8 CONTACT**



**MTJK-88-05-C5E**

**CAT. 5e KEYSTONE JACK  
8 POSITION 4 CONTACT**



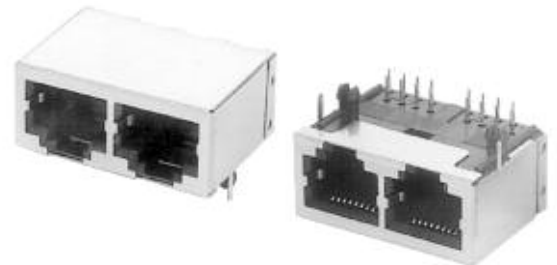
**MTJK-84-01-C5E**

### ORDERING INFORMATION GANGED JACKS WITHOUT LEDs

<b>MTJG</b>	<b>2</b>	<b>64</b>	<b>2</b>	<b>2</b>	<b>1</b>
<p><b>SERIES INDICATOR</b> MTJG = Ganged Telephone Jack</p>	<p><b>NO. OF PORTS</b> 2 thru 16</p>	<p><b>PORT SIZE / POSITIONS FILLED</b> 64 = 6 position, 4 contacts (6P4C) 66 = 6 position, 6 contacts (6P6C) 88 = 8 position, 8 contacts (8P8C)</p>	<p><b>CONTACT PLATING</b> X = Gold flash 0 = 15 <math>\mu</math>in. gold 1 = 30 <math>\mu</math>in. gold 2 = 50 <math>\mu</math>in. gold</p>	<p><b>HOUSING TYPE</b> 2, 2B, 2C, 5, 7H, 7V, AR, C, G, J, N</p>	<p><b>HOUSING COLOR</b> 1 = Black 2 = Medium Gray (Housing Type 7 only)</p>



MTJG-12-88JX1-FSG-PG



MTJG-2-88GX1-FSG

### ORDERING INFORMATION GANGED JACKS WITH LEDs

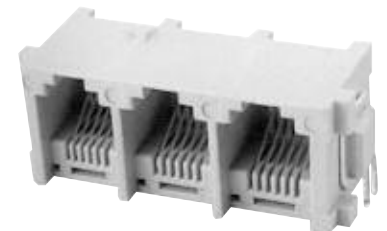
<b>MTJG</b>	<b>2</b>	<b>64</b>	<b>AR</b>	<b>2</b>	<b>1</b>	<b>LD</b>
<p><b>SERIES INDICATOR</b> MTJG = Ganged Telephone Jack</p>	<p><b>NO. OF PORTS</b> 2, 4, 6, 8, 12 or 16</p>	<p><b>PORT SIZE / POSITIONS FILLED</b> 62 = 6 position, 2 contacts (6P2C) 64 = 6 position, 4 contacts (6P4C) 66 = 6 position, 6 contacts (6P6C) 88 = 8 position, 8 contacts (8P8C)</p>	<p><b>HOUSING TYPE</b> AR, G, J</p>	<p><b>CONTACT PLATING</b> X = Gold flash 0 = 15 <math>\mu</math>in. gold 1 = 30 <math>\mu</math>in. gold 2 = 50 <math>\mu</math>in. gold</p>	<p><b>HOUSING COLOR</b> 1 = Black</p>	<p><b>LED Configuration</b> See Chart Below</p>



MTJG-4-88ARX1-FSM-PG-LG



MTJG-4-88GX1-FSB



MTJG-3-667HX2

Add suffix to end of P/N:

LED CONFIGURATION		
SUFFIX	LED 1	LED 2
LA	YELLOW	YELLOW
LD	GREEN	GREEN
LG	YELLOW	GREEN
LH	GREEN	YELLOW
LI	ORANGE/ GREEN	ORANGE/ GREEN

**OPTIONS:**

- Add as suffix to basic part no.
- FSX = Full metal shield
- PG = Panel ground tabs
- SMT = Surface mount tails with Hi-Temp insulator for hi-temp soldering processes up to 260°C



<p> <math>A = .433 [11.00] \times \text{No. of Ports} + .100 [2.54]</math>  <math>B = .433 [11.00] \times \text{No of Ports} + .020 [0.50]</math>  <math>C = .433 [11.00] \times \text{No of Ports} - 1</math> </p>		<p>Ordering Information pg. 34</p> <p><b>TYPE 2</b> 6P4C 6P6C</p> <p><b>MTJG-2-642X1</b></p> <p><b>Recommended PCB Layout</b></p>
<p> <math>A = .459 [11.65] \times \text{No. of Ports} + .100 [2.54]</math>  <math>B = .459 [11.65] \times \text{No of Ports} + .020 [0.50]</math>  <math>C = .459 [11.65] \times \text{No of Ports} - 1</math> </p>		<p><b>TYPE 2B</b> 6P4C 6P6C</p> <p><b>MTJG-2-642BX1</b></p> <p><b>Recommended PCB Layout</b></p>
<p> <math>A = .571 [14.50] \times \text{No. of ports} + .122 [3.10]</math>  <math>B = .571 [14.50] \times \text{No. of Ports} + .019 [0.50]</math>  <math>C = .571 [14.50] \times \text{No. of Port} - 1</math> </p>		<p><b>TYPE 2C</b> 8P8C</p> <p><b>MTJG-2-882CX1</b></p> <p><b>Recommended PCB Layout</b></p>

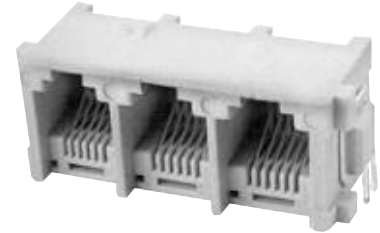
Ordering Information pg. 34

**TYPE 7H**

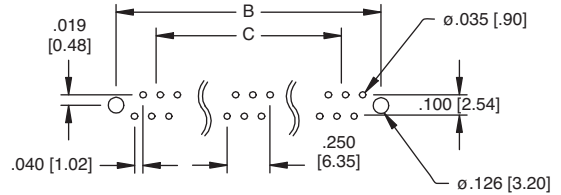
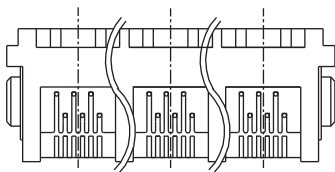
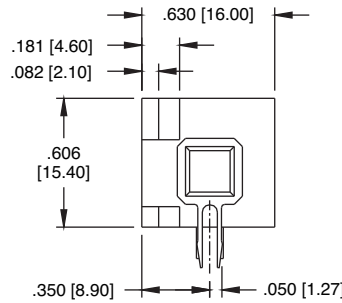
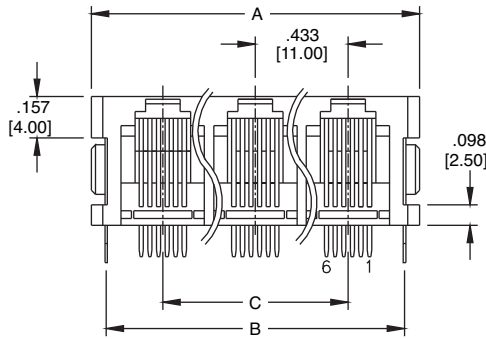
**RIGHT ANGLE ENTRY**

**6P4C**

**6P6C**



**MTJG-3-667HX2**



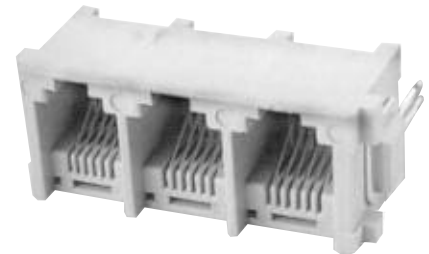
**Recommended PCB Layout**

**TYPE 7V**

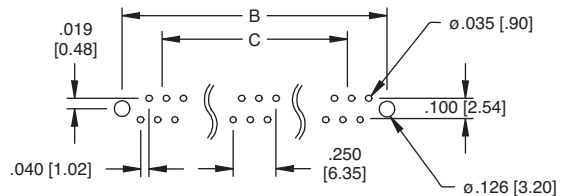
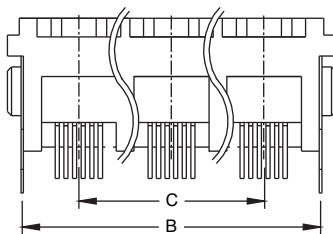
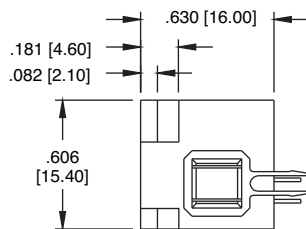
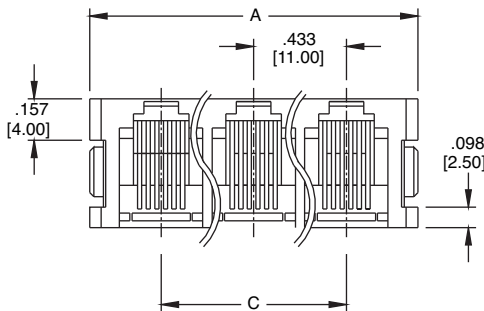
**TOP ENTRY**

**6P4C**

**6P6C**



**MTJG-3-667VX2**



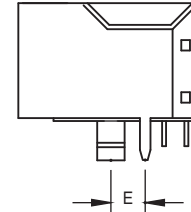
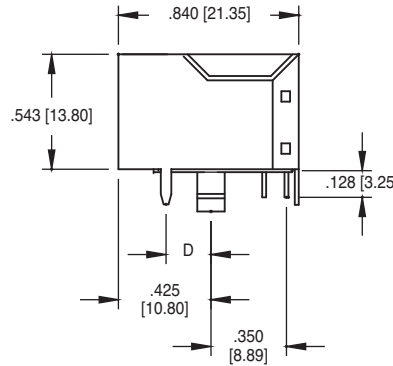
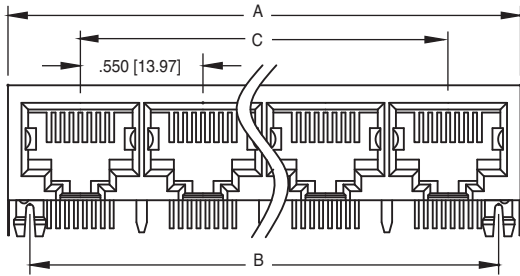
**Recommended PCB Layout**

DIMENSION	No. of Ports						
	2	3	4	5	6	7	8
A	1.110 [28.20]	1.543 [39.20]	1.976 [50.20]	2.409 [61.20]	2.843 [72.20]	3.275 [83.20]	3.710 [94.20]
B	.992 [25.20]	1.425 [36.20]	1.858 [47.20]	2.291 [58.20]	2.724 [69.20]	3.157 [80.20]	3.590 [91.20]
C	.433 [11.00]	.886 [22.00]	1.299 [33.00]	1.732 [44.00]	2.165 [55.00]	2.598 [66.00]	3.030 [77.00]

<p> <math>A = .500 [12.70] \times (\text{NO. OF PORTS} - 1) + .519 [13.20]</math>  <math>B = .500 [12.70] \times (\text{NO. OF PORTS} - 1) + .400 [10.16]</math>  <math>C = .500 [12.70] \times \text{NO. OF PORTS} - 1</math> </p>	<p><b>Recommended PCB Layout</b></p>	<p><b>TYPE 5 THRU HOLE 6P4C 6P6C</b></p> <p><b>MTJG-3-665X1</b></p>
<p> <math>A = .500 [12.70] \times (\text{NO. OF PORTS} - 1) + .519 [13.20]</math>  <math>B = .500 [12.70] \times (\text{NO. OF PORTS} - 1) + .400 [10.16]</math>  <math>C = .500 [12.70] \times \text{NO. OF PORTS} - 1</math> </p>	<p><b>Recommended PCB Layout</b></p>	<p><b>TYPE 5 SMT 8P8C</b></p> <p><b>MTJG-3-885X1-SMT</b> Available in 6P6C or 8P8C Versions</p>
<p>ADD -SP TO END OF PART NO. FOR SPLIT ROUND PLASTIC PEG OPTION</p>	<p><b>Recommended PCB Layout</b></p>	<p><b>TYPE N METAL PEG 6P4C 6P6C</b></p> <p><b>MTJG-2-66NX1</b></p>

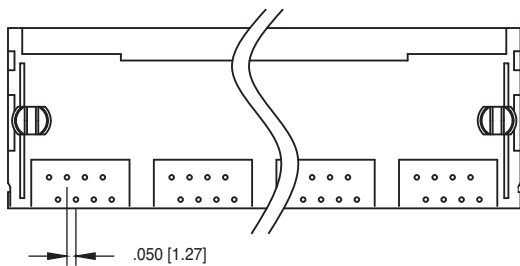
Ordering Information pg. 34

**TYPE G**  
**GANGED**  
**8P8C**



"E" DIM.  
FSD = .120 [3.05]  
FSR = .144 [3.65]

"D" DIM.  
FSA = .170 [4.32]  
FSB = .144 [3.65]  
FSG = .180 [4.57]  
FSE = .120 [3.05]



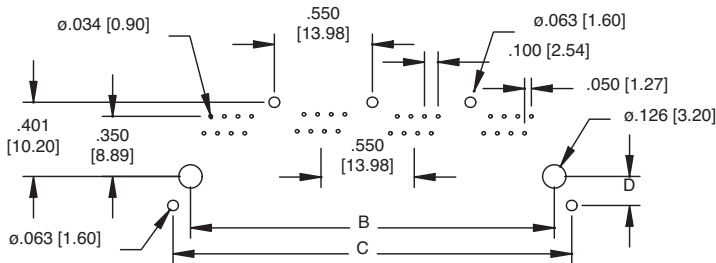
A = .550 [13.97] X (NO. OF PORTS - 1) + .679 [17.27]  
B = .550 [13.97] X (NO. OF PORTS - 1) + .450 [11.43]  
C = .550 [13.97] X NO. OF PORTS - 1



MTJG-4-88GX1-FSB

**Recommended PCB Layout for shield ground pin locations specified as FSA, FSB, FSG & FSE**

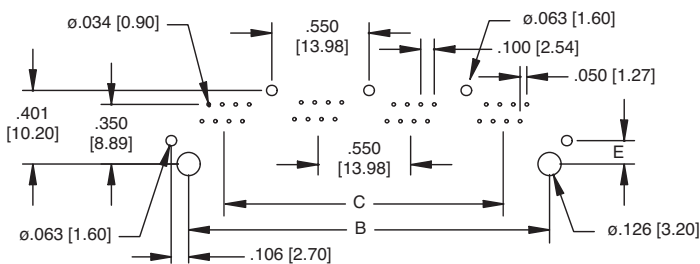
"D" DIM.  
FSA = .170 [4.32]    FSE = .120 [3.05]  
FSB = .144 [3.65]    FSG = .180 [4.57]



MTJG-4-88GX1-FSB-PG

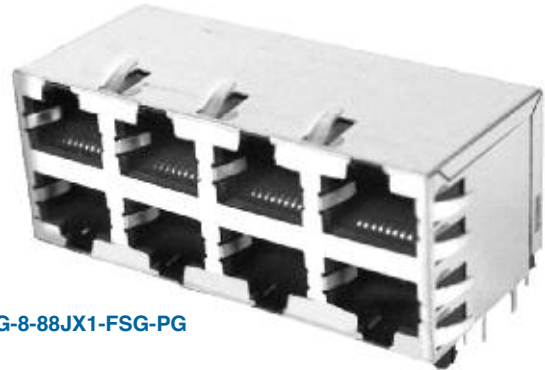
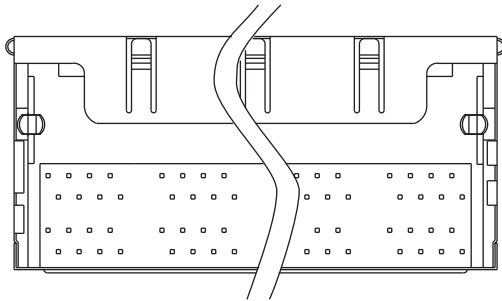
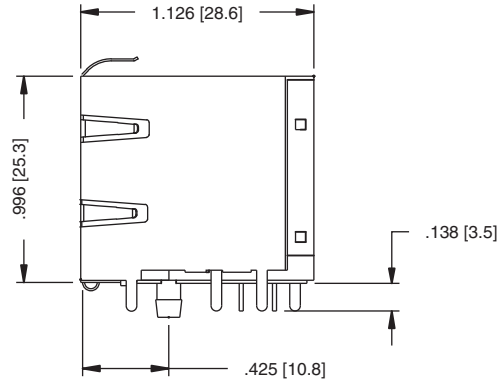
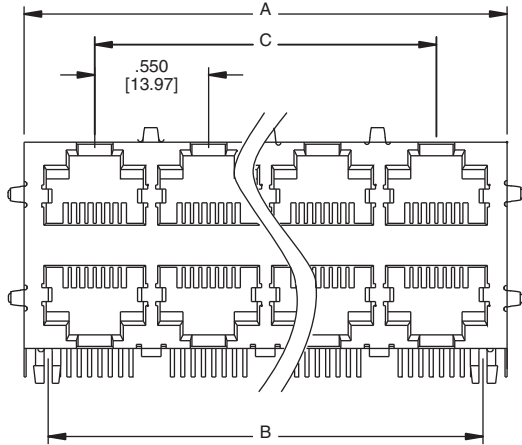
**Recommended PCB Layout for shield ground pin locations specified as FSD & FSR**

"E" DIM.  
FSD = .120 [3.05]  
FSR = .144 [3.65]

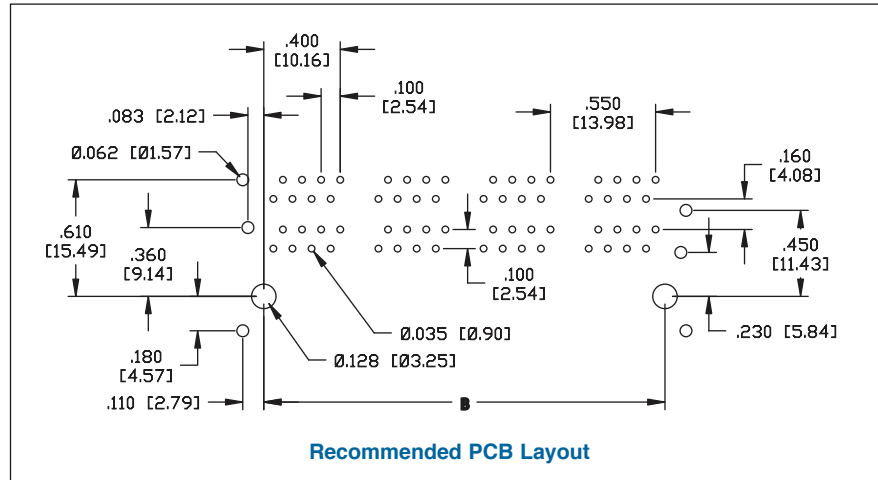


Ordering Information pg. 34

**TYPE J**  
**8P8C**



**MTJG-8-88JX1-FSG-PG**



**Recommended PCB Layout**

PART NUMBER	PORTS	DIMENSIONS		
		A	B	C
MTJG-2-88JX1-FSG-PG	2 X 1	.679 [17.25]	.450 [11.43]	—
MTJG-4-88JX1-FSG-PG	2 X 2	1.230 [31.25]	1.00 [25.40]	.550 [13.97]
MTJG-6-88JX1-FSG-PG	2 X 3	1.780 [45.21]	1.549 [39.34]	1.100 [27.94]

PART NUMBER	PORTS	DIMENSIONS		
		A	B	C
MTJG-8-88JX1-FSG-PG	2 X 4	2.33 [59.18]	2.100 [53.34]	1.650 [41.91]
MTJG-12-88JX1-FSG-PG	2 X 6	3.43 [87.10]	3.200 [81.28]	2.750 [69.85]
MTJG-16-88JX1-FSG-PG	2 X 8	4.537 [115.25]	4.30 [109.22]	3.850 [97.79]

**INTRODUCTION:**

Adam Tech MTJ series RJ-45 connectors with integrated magnetics are designed to support Base 10, 100 and 1000-T applications such as hubs, routers, ADSL modems, and ATM transmission equipment. The integrated magnetics allows the design engineer to save PC board real-estate and lower the total part count per system. This series meets all applicable specifications for CAT 5, 5e, 6 and IEEE 802.3. The USB model meets all applicable USB 2.0 specifications. All configurations are available with optional LED's.

**FEATURES:**

Single, stacked and ganged configurations available All products have a full metal shield to guard against electromagnetic interference. Hi-Temp option available All products are fully lead free and RoHS compliant

**MATING PLUGS:**

Adam Tech modular telephone plugs and all industry standard telephone plugs.

**SPECIFICATIONS:**

**MATERIAL:**

Insulator: PBT, glass filled, rated UL94V-0  
Insulator Color: Black  
Contacts: Phosphor Bronze or Brass  
Shield: Copper Alloy, Nickel or Tin plated

**ELECTRICAL:**

Operating Voltage: 150V AC  
Current Rating: 1.5 Amps Max.  
Contact Resistance: 20 mΩ Max.  
Insulation Resistance: 500 MΩ Min.  
Dielectric Withstanding Voltage: 1500V AC for 1 Minute  
DC resistance: 1.2 Ohms Max.  
Interwinding capacitance: 35pF @ 1MHz  
Insertion loss: 100KHz to 80MHz = -1.1dB Min.  
Return loss: 1MHz to 30MHz = -18dB Min.  
30MHz to 80MHz = -12dB Min.  
Rise time: 30nS Max.  
Cross talk: 1MHz to 100MHz = 40dB TYP.  
Common to Common mode Attenuation: 35dB TYP.

**MECHANICAL:**

Insertion force: 8 Contacts: 22.5N  
10 Contacts: 24.5N

**TEMPERATURE RATING:**

Operation Temperature: -40°C ~ +85°C

**PACKAGING:**

Anti-ESD plastic trays or tubes

**SAFETY AGENCY APPROVALS:**

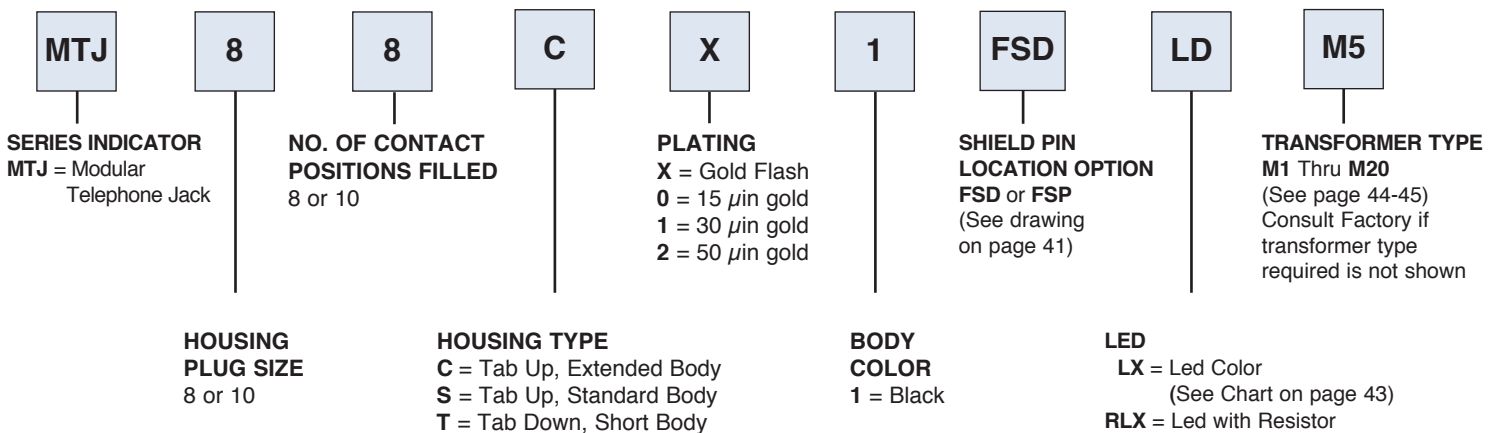
UL Recognized & CSA Certified, File no. E224049

**Contact Plating:**

Gold over Nickel underplate on contact area, Tin over Copper underplate on solder tails.



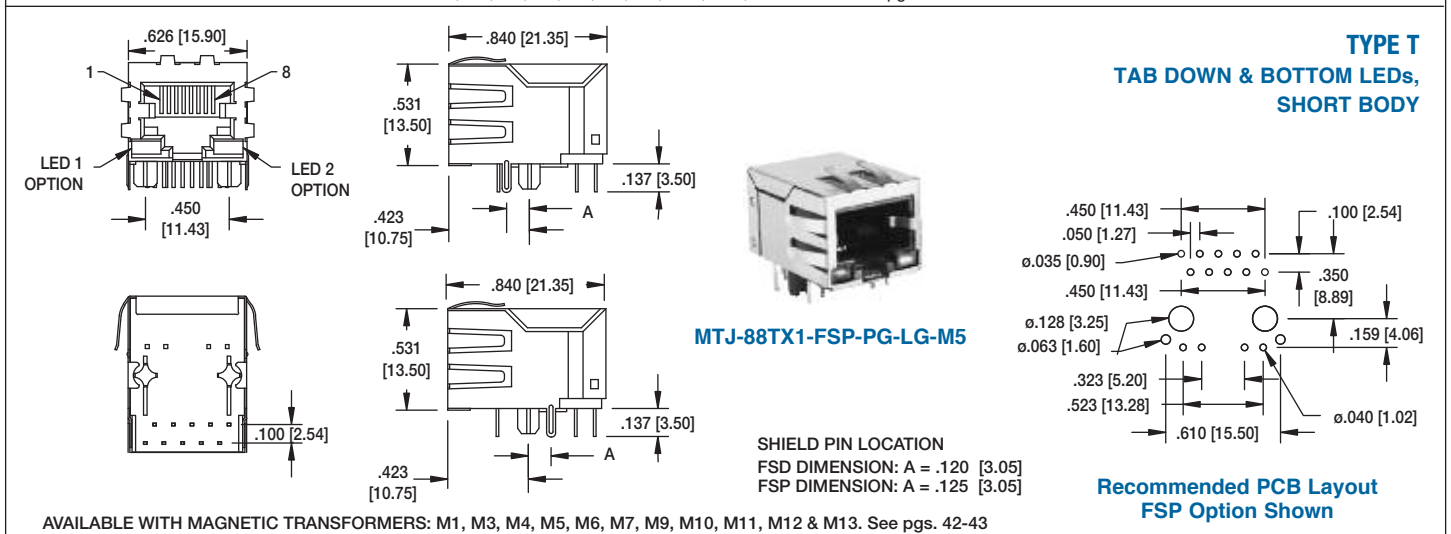
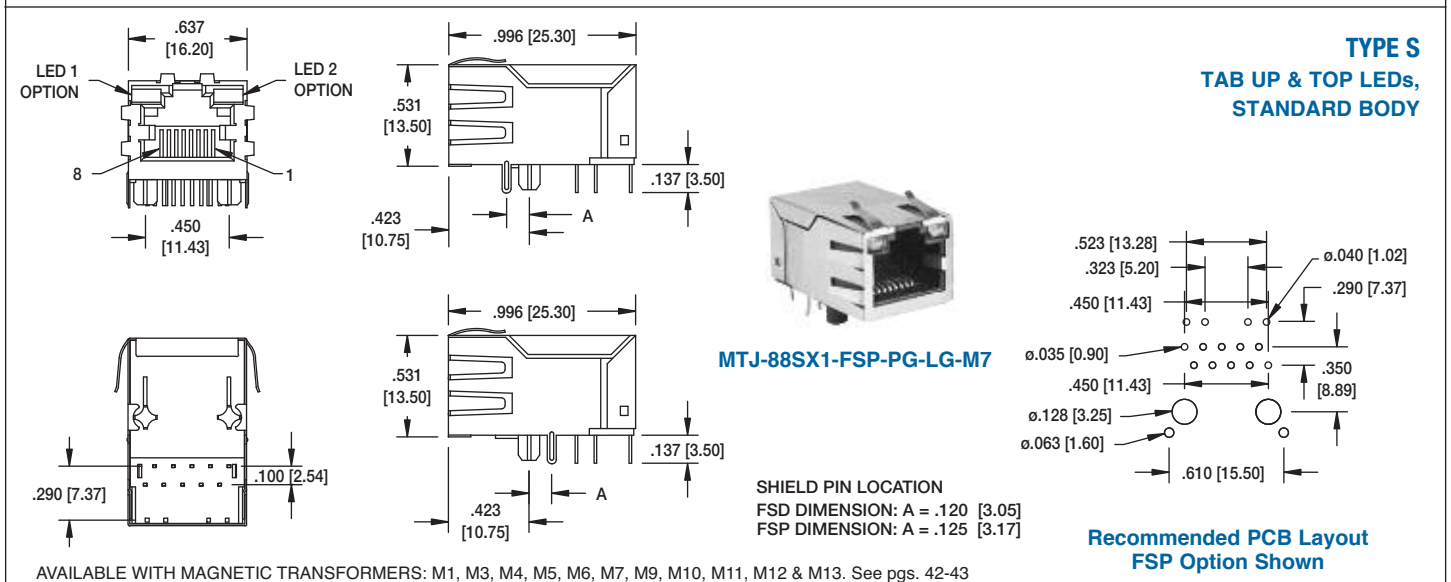
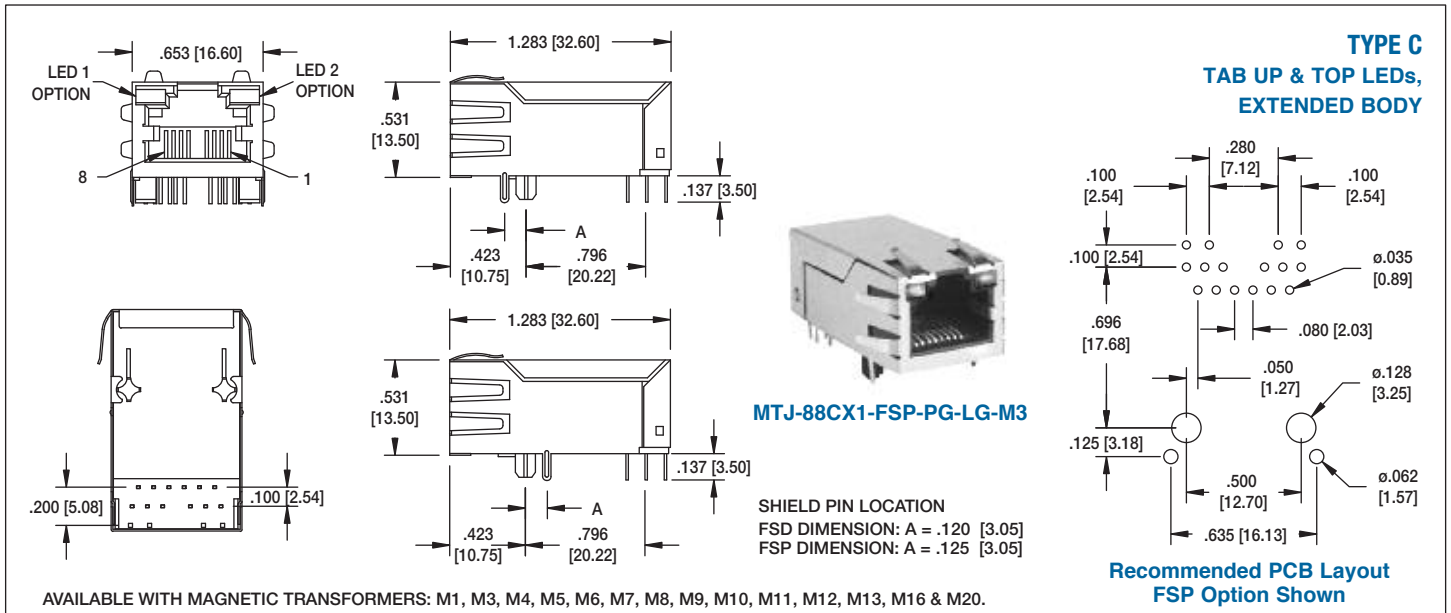
**MAGNETICS TELEPHONE JACK ORDERING INFORMATION**



**OPTIONS:**

Add designator(s) to end of part number  
HT = Hi-Temp insulator for Hi-Temp soldering processes up to 260°C  
PG = Panel ground tabs

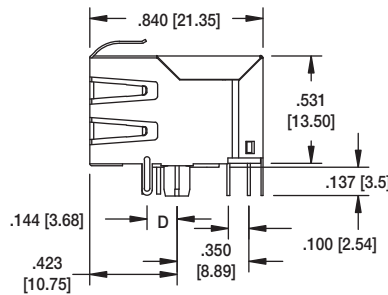
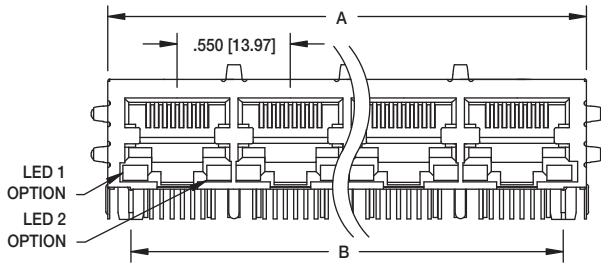




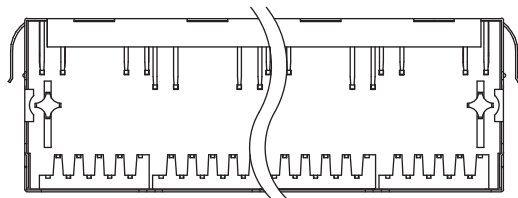
Ordering Information pg. 40

TYPE T

TAB DOWN, SHORT BODY  
MAGNETICS & LEDs  
2, 4 & 5 PORTS GANGED



"D" DIM.  
FSA = .170 [4.32]  
FSB = .144 [3.65]  
FSG = .180 [4.57]  
FSE = .120 [3.05]

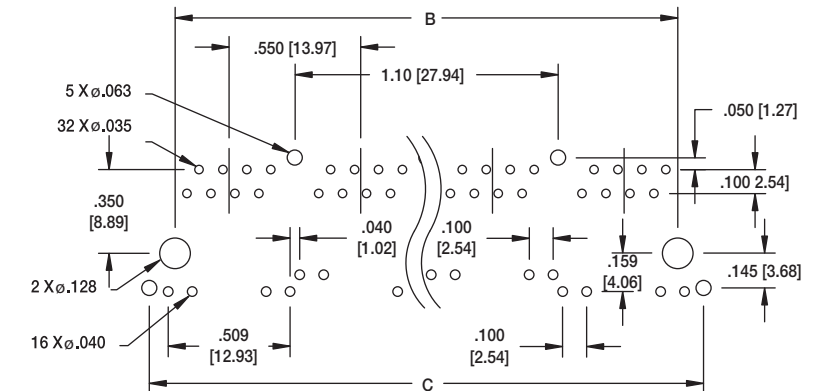


**MTJG-4-88TX1-FSB-PG**

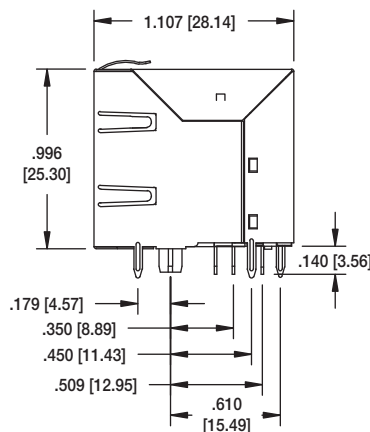
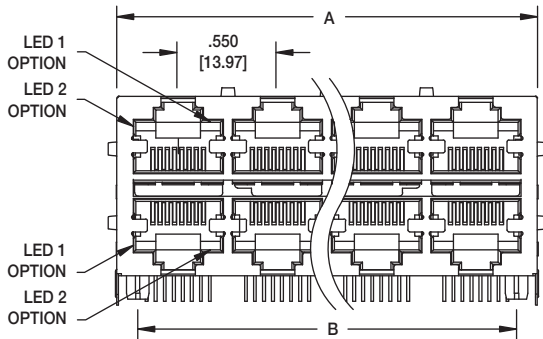
Drawing shown with metal shield, panel ground tabs, LEDs and magnetics option

A = .550 [13.97] X (NO OF PORTS - 1) + .679 [17.27]  
B = .550 [13.97] X (NO OF PORTS - 1) + .450 [11.43]

AVAILABLE WITH MAGNETIC TRANSFORMERS: M1, M3, M4, M5, M6, M7, M9, M10, M11, M12 & M13. See pgs. 44-45

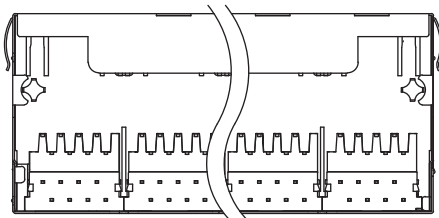


Recommended PCB Layout



TYPE J  
STACKED

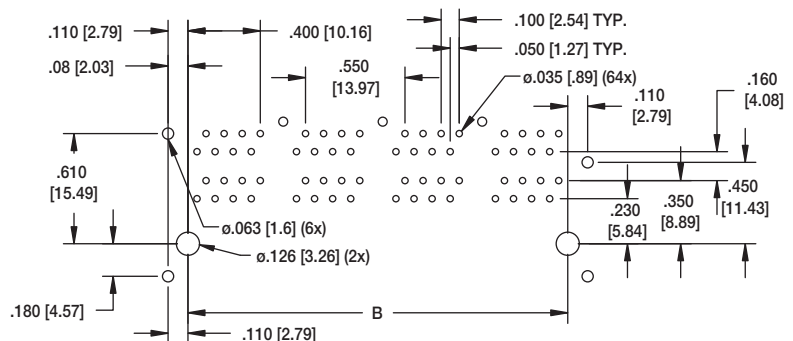
DIMENSIONS		
PORTS	A	B
2 X 1	.677 [17.20]	.450 [11.43]
2 X 2	1.227 [31.17]	1.00 [25.40]
2 X 4	2.331 [59.22]	2.100 [53.34]
2 X 5	2.876 [73.07]	2.650 [67.31]
2 X 6	3.426 [87.04]	3.200 [81.28]
2 X 8	4.527 [115.00]	4.300 [109.22]



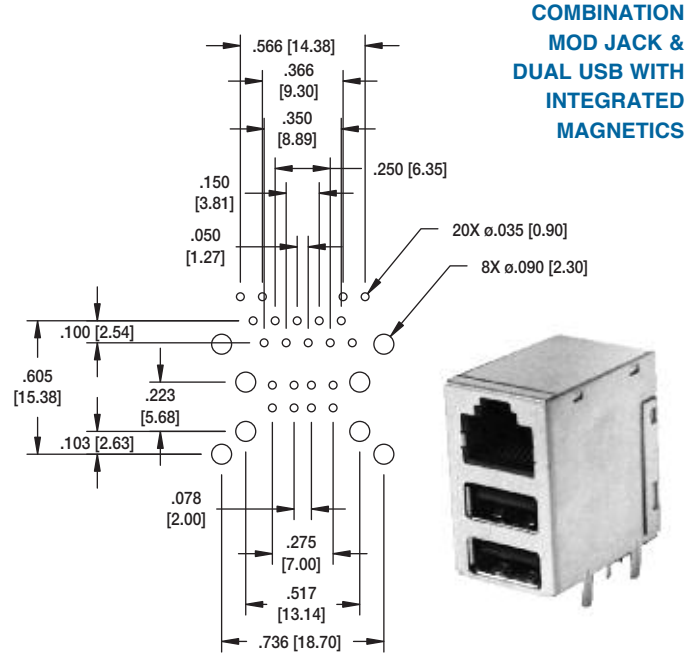
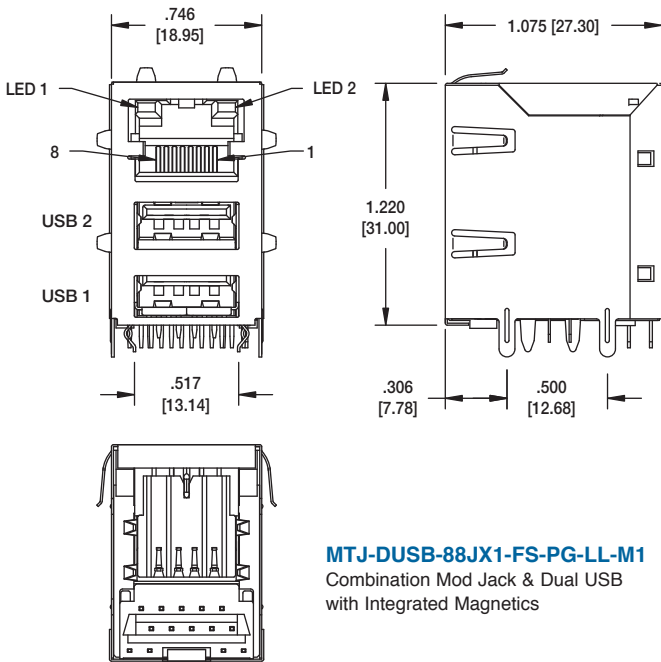
**MTJG-8-88JX1-FSE-LD-M1**

Drawing shown with metal shield, panel ground tabs & LEDs.

AVAILABLE WITH MAGNETIC TRANSFORMERS: M1, M3, M4, M5, M6, M7, M9, M10, M11, M12 & M13. See pgs. 44-45



Recommended PCB Layout



Recommended PCB Layout

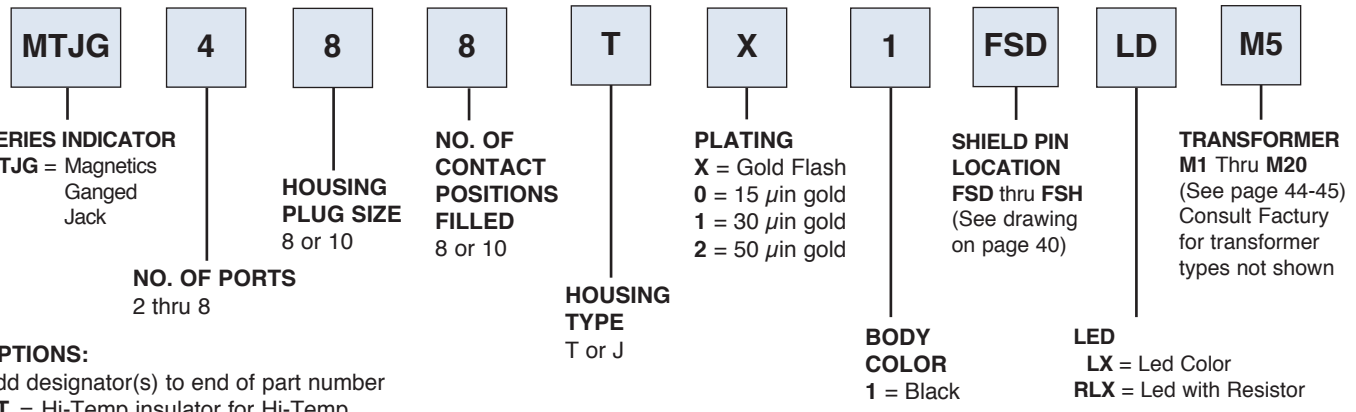
LED CONFIGURATION (Add suffix to end of part no.)		
SUFFIX	LED 1	LED 2
LA	YELLOW	YELLOW
LD	GREEN	GREEN
LG	YELLOW	GREEN
LH	GREEN	YELLOW
LI	ORANGE/GREEN	ORANGE/GREEN
LP	YELLOW/GREEN	YELLOW/GREEN
LQ	YELLOW/GREEN	—
L11	RED	GREEN

LED SPECIFICATION			
STANDARD LED	WAVE LENGTH	FORWARD VOLT / CURRENT	TYP
GREEN	565 nm	5.5V / 20mA	5.0V
YELLOW	590 nm	5.5V / 20mA	5.0V
ORANGE	610 nm	5.5V / 20mA	5.0V
RED	637 nm	5.5V / 20mA	5.0V

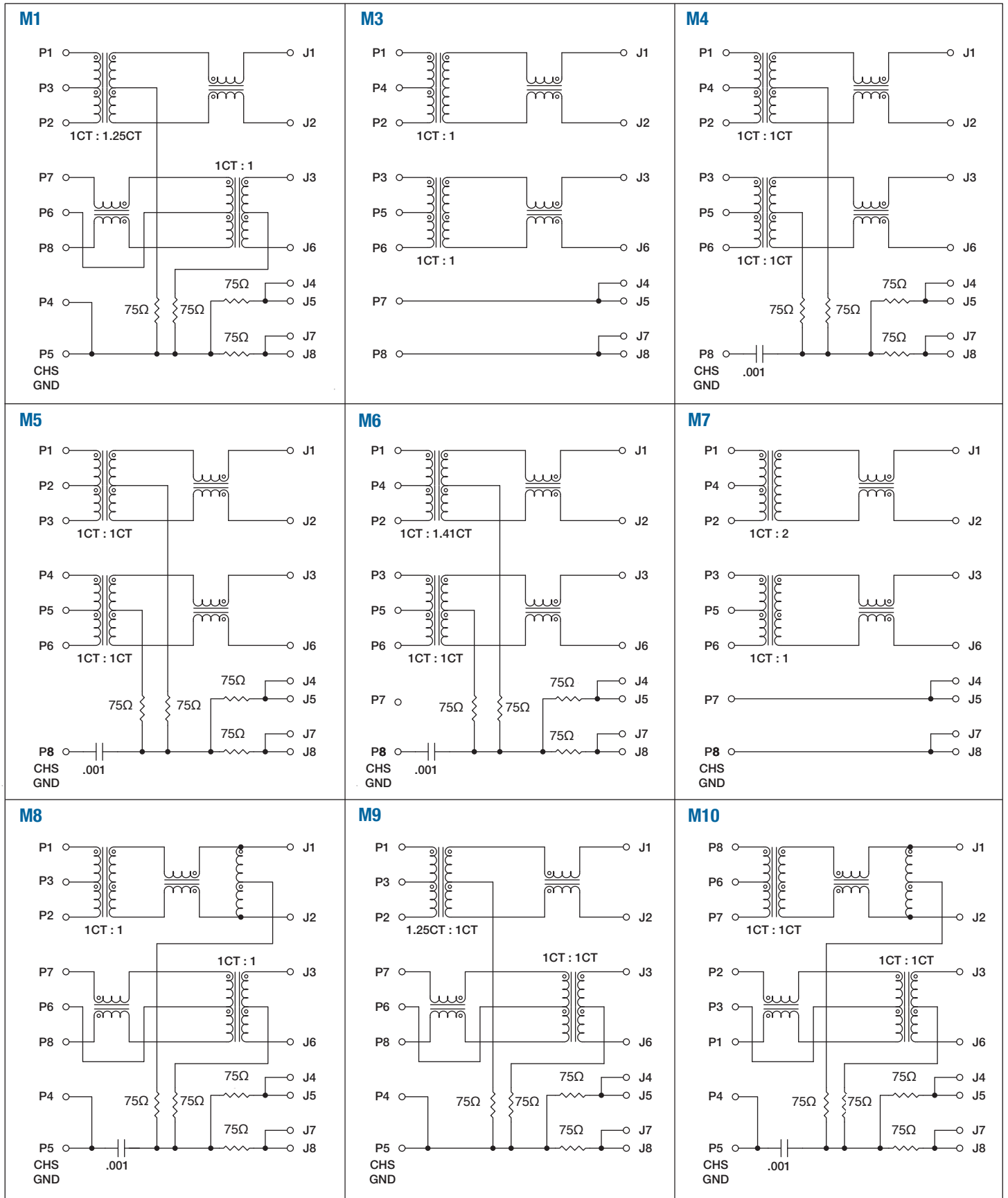
OTHER LED COLOR COMBINATIONS AVAILABLE

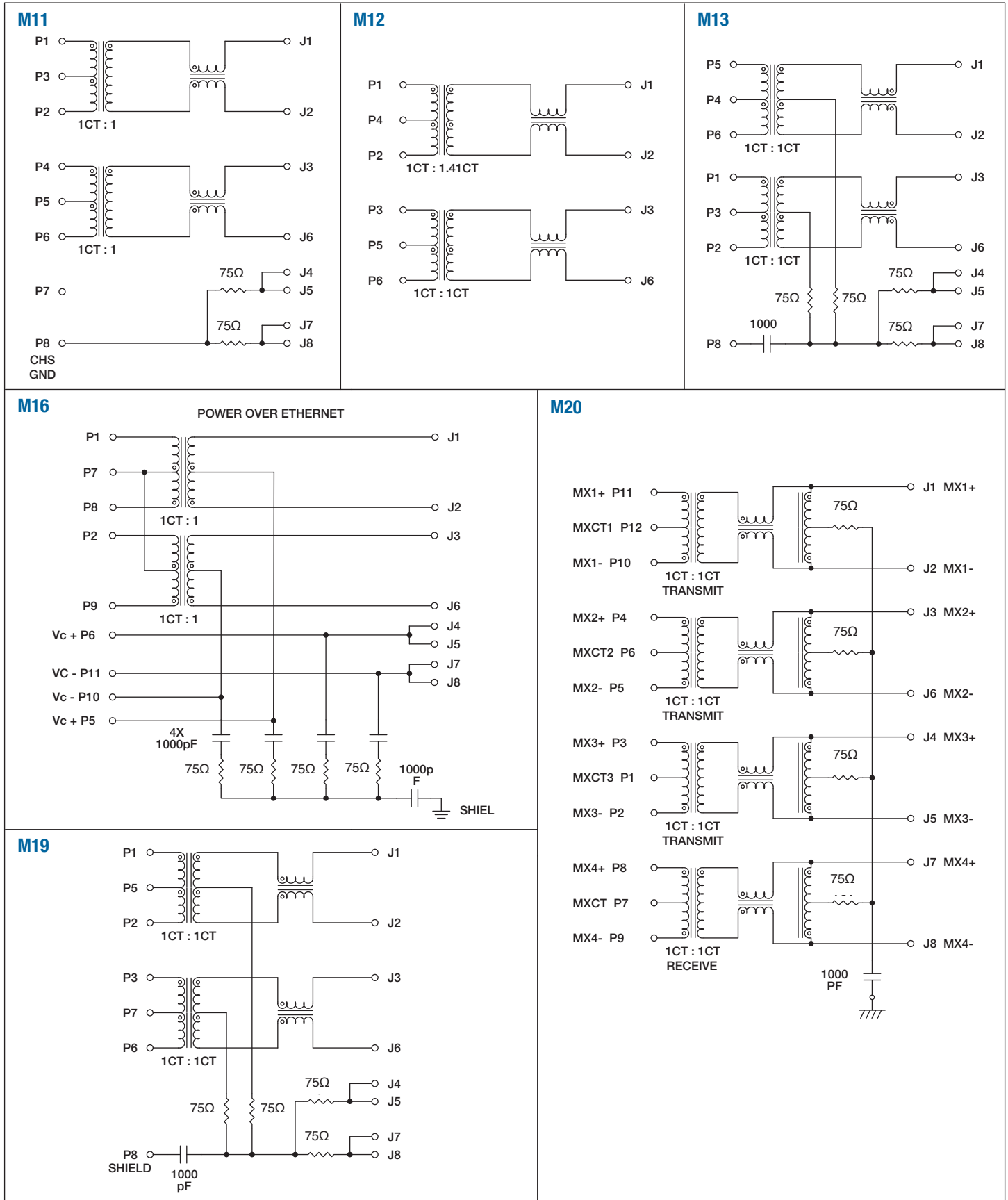
AVAILABLE WITH MAGNETIC TRANSFORMERS M1, M3, M4, M5, M6, M7, M8, M9, M10, M11, M12, M13, M16 & M20  
See Pgs 42-43:

## ORDERING INFORMATION FOR JACKS WITH INTEGRATED MAGNETICS & LEDs



**OPTIONS:**  
Add designator(s) to end of part number  
**HT** = Hi-Temp insulator for Hi-Temp soldering processes up to 260°C  
**PG** = Panel ground tabs





**INTRODUCTION:**

Adam Tech MTJP Series Wire Leaded Handset and Panel Jacks are conveniently prepared with wire leads ready for final assembly. This series has a multitude of housing shapes to fit many specific applications. They are offered in 4, 6 & 8 positions with choice of Stripped and Tinned leads or leads with Spade Terminals, Adam Tech Jacks are UL and CSA approved and meet all required FCC rules and regulations.

**FEATURES:**

- UL & CSA approved
- FCC compliant to No. 47 CFR part 68
- Prepared for Final Assembly
- 4P, 6P and 8P versions
- Custom Jacks available

**MATING PLUGS:**

All industry standard line cords manufactured with telephone plugs

**SPECIFICATIONS:**

**Material:**

- Insulator: ABS, (Nylon 66 optional), rated UL94V-0
- Insulator Colors: Medium gray or black
- Contacts: Phosphor Bronze
- Wires: 26 Awg, UL-1061, 80°C, VW-1, 300V.

**Contact Plating:**

Gold over Nickel underplate on contact area.

**Electrical:**

- Operating voltage: 150V AC max.
- Current rating: 1.5 Amps max.
- Contact resistance: 20 mΩ max. initial
- Insulation resistance: 500 MΩ min.
- Dielectric withstanding voltage: 500V AC for 1 minute

**Mechanical:**

- Insertion force: 4 Contacts: 500g, 6 contacts 750g
- 8 contacts: 900g, 10 contacts: 1000g
- Durability: 500 Cycles min.

**Temperature Rating:**

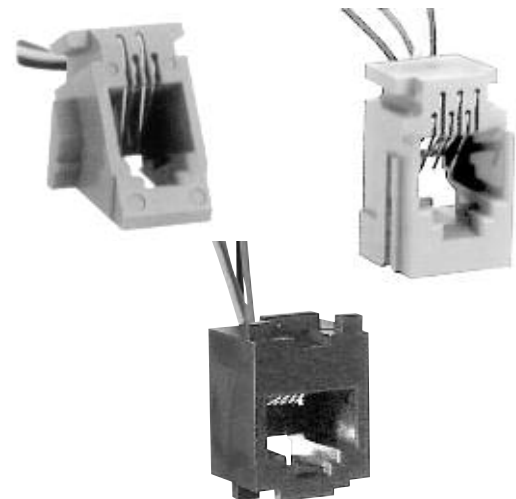
Operating temperature: -40°C to +85°C

**PACKAGING:**

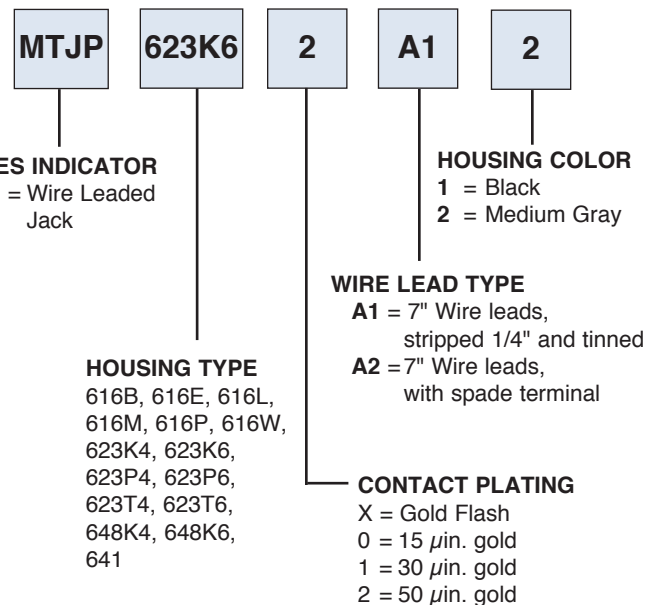
Anti-ESD plastic bags

**APPROVALS AND CERTIFICATIONS:**

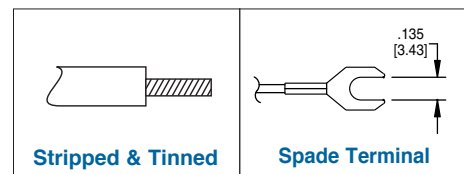
UL Recognized & CSA Certified, File no. E224049



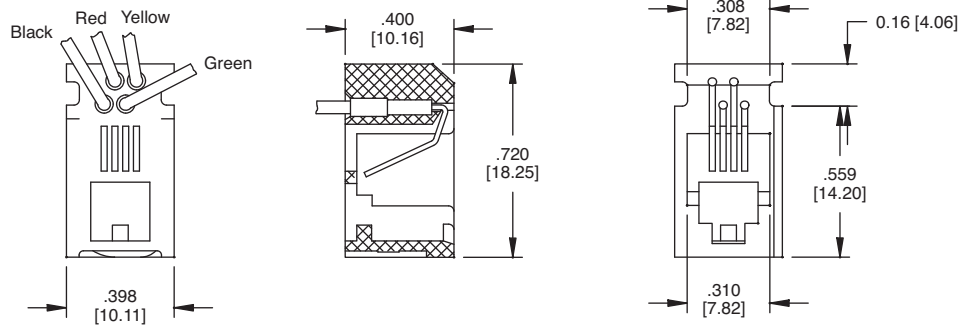
**ORDERING INFORMATION  
WIRE LEADED JACKS**



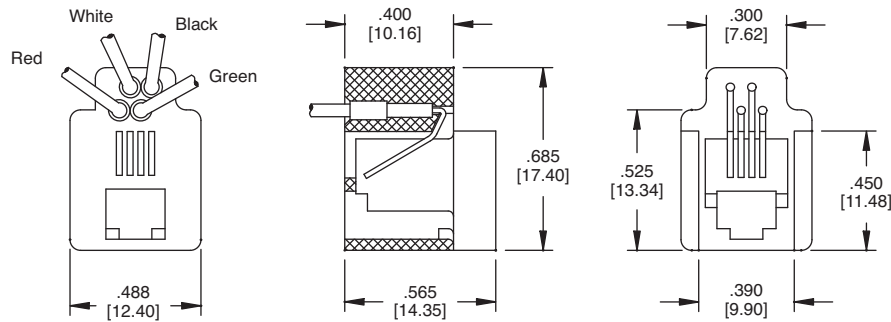
Wire Lead Options



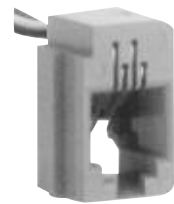
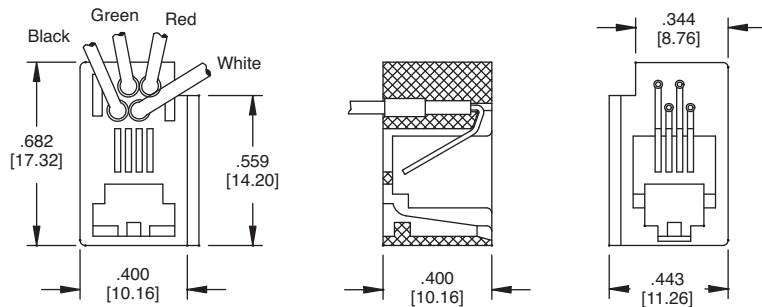
**MTJP-616L**



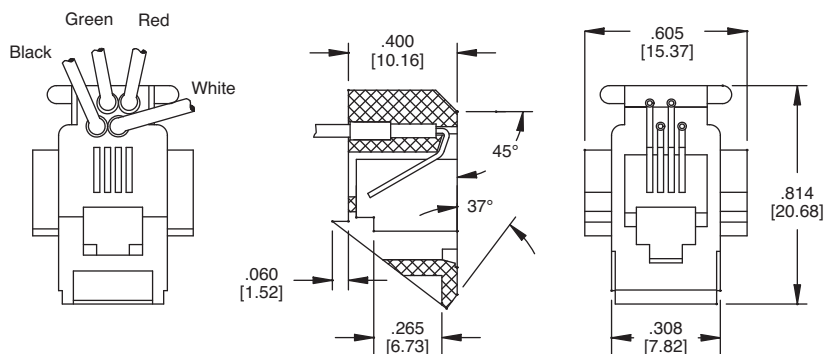
**MTJP-616M**



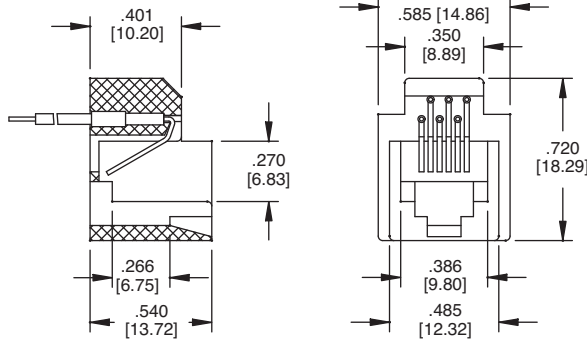
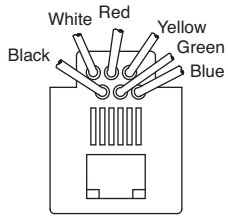
**MTJP-616E**



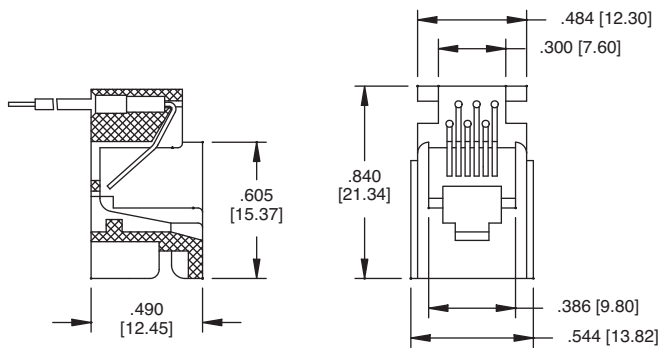
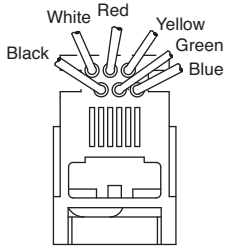
**MTJP-616W**



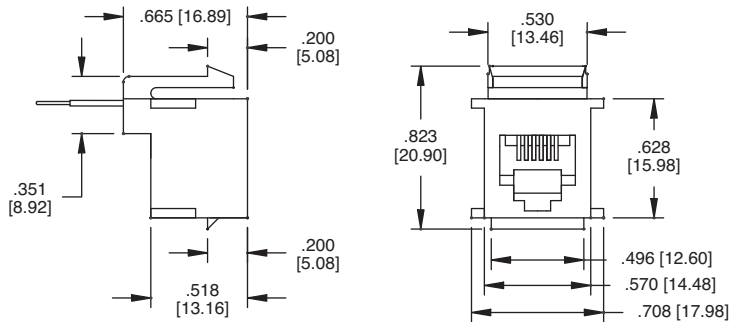
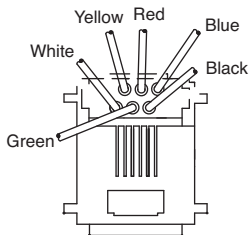
**MTJP-623K4**  
**MTJP-623K6**



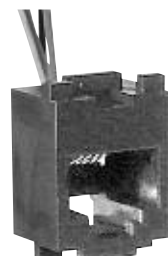
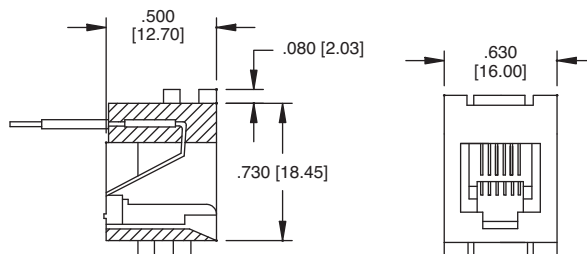
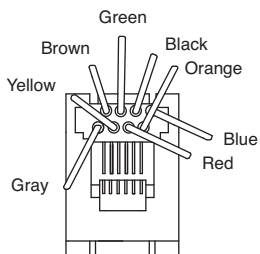
**MTJP-623P4**  
**MTJP-623P6**



**MTJP-648K4**  
**MTJP-648K6**



**MTJP-641**  
**MTJP-641**





### ORDERING INFORMATION



**SERIES INDICATOR**  
**MTJC** = Modular Jack Coupler

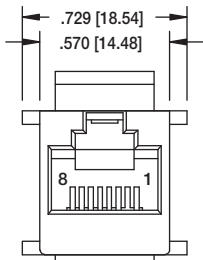
**HOUSING SIZE = 8**

**POSITIONS FILLED**  
 4, 6, or 8

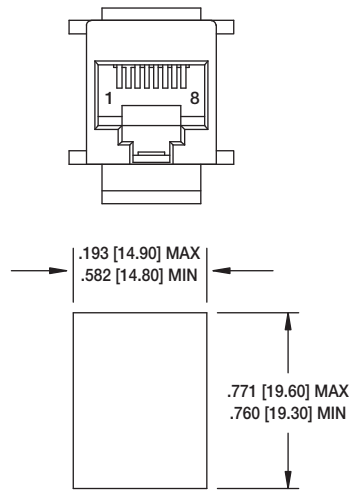
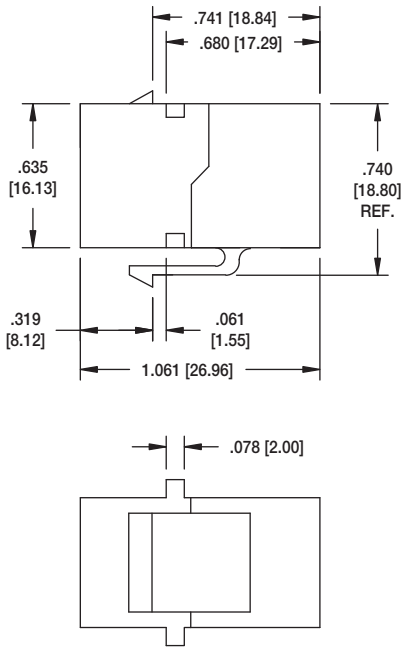
**PLATING**  
**X** = Gold Flash  
**0** = 15  $\mu$ in gold  
**1** = 30  $\mu$ in gold  
**2** = 50  $\mu$ in gold

**INSULATOR COLOR**  
**B** = Black    **Y** = Yellow  
**W** = White    **R** = Red  
**IV** = Ivory    **G** = Green  
**GY** = Gray    **BL** = Blue

**OPTIONS:**  
 Add designator to end of part number  
**S** = Shielded



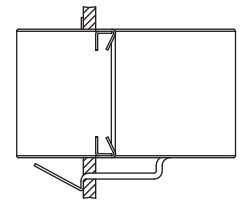
**MTJC-88XIV**



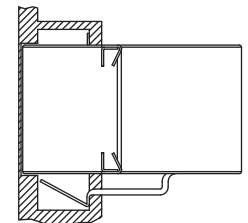
**RECOMMENDED PANEL CUT-OUT**  
**PANEL THICKNESS .062 [1.57]**

**MTJC-88-XB**  
**PLASTIC HOUSING**

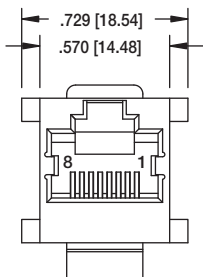
MTJC Couplers can be used in either of the following mounting applications



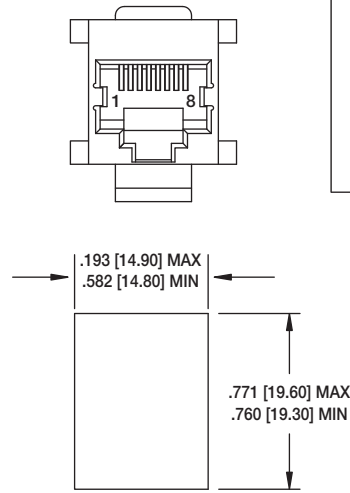
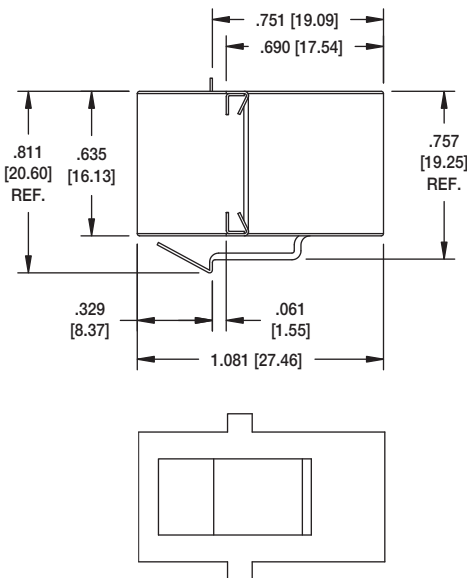
Single Wall Plate Mounting



Double Wall Plate Mounting



**MTJC-88XB-S**



**RECOMMENDED PANEL CUT-OUT**  
**PANEL THICKNESS .062 [1.57]**

**MTJC-88-XBS**  
**METAL SHIELDED**