

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:

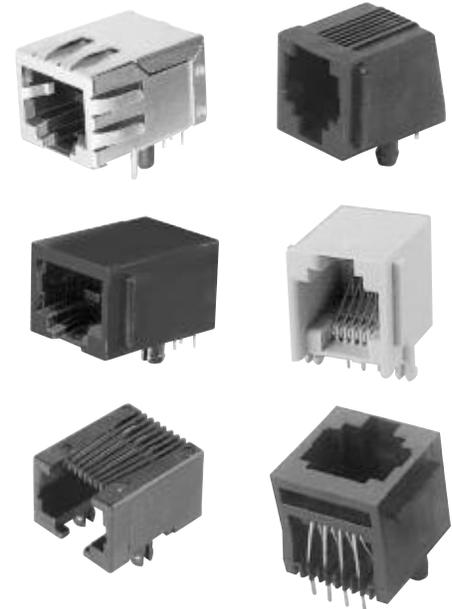
- Operating temperature: -40°C to +85°C
- Soldering process temperature:
 - Standard insulator: 235°C
 - Hi-Temp insulator: 260C

PACKAGING:

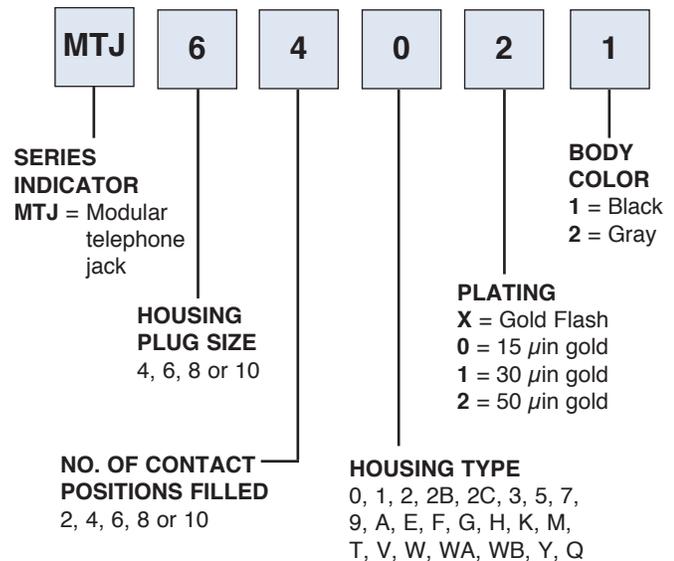
Anti-ESD plastic trays

SAFETY AGENCY APPROVALS:

UL Recognized & CSA Certified,
File no. E224049



ORDERING INFORMATION



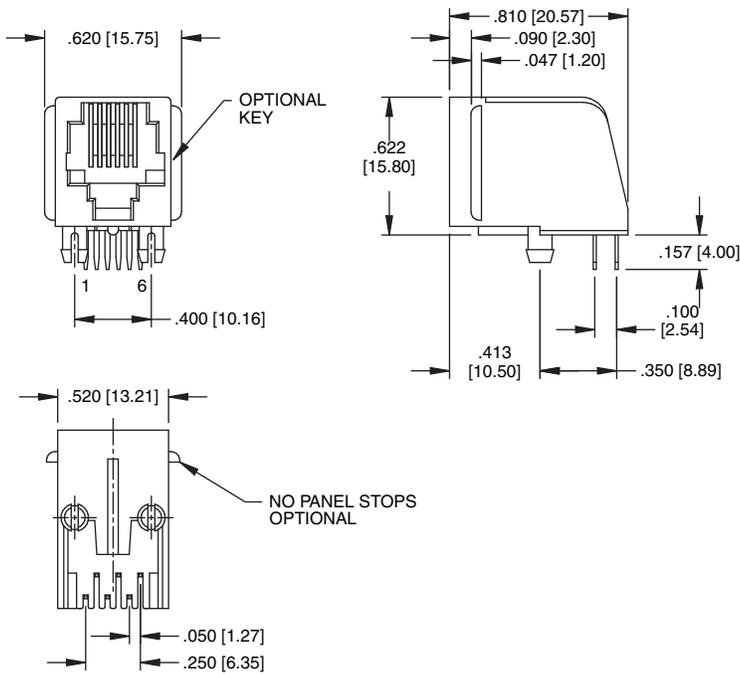
OPTIONS:

- 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

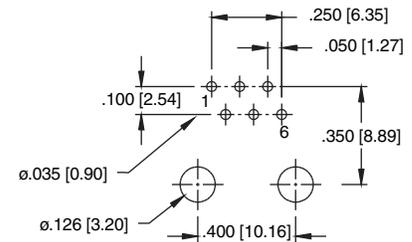
6P6C

6P4C



MTJ-661X1

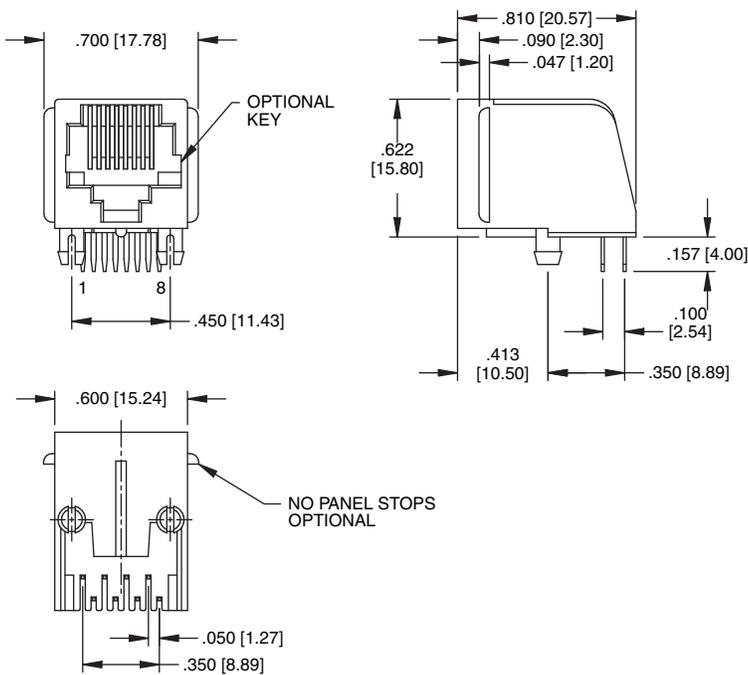
[Ordering Information pg. 9](#)



[Recommended PCB Layout](#)

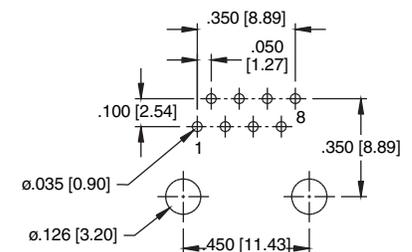
TYPE 1

8P8C



MTJ-881X1

[Ordering Information pg. 9](#)

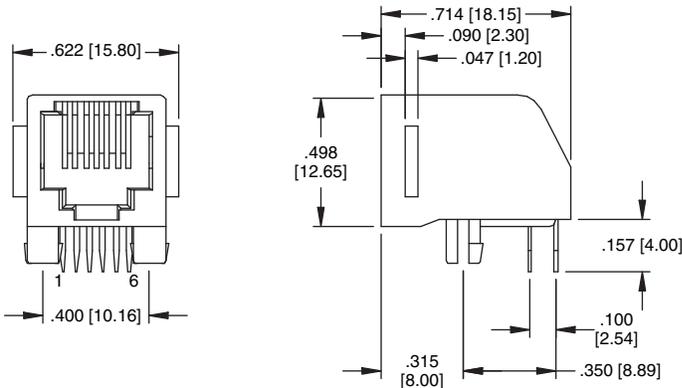


[Recommended PCB Layout](#)

TYPE 0

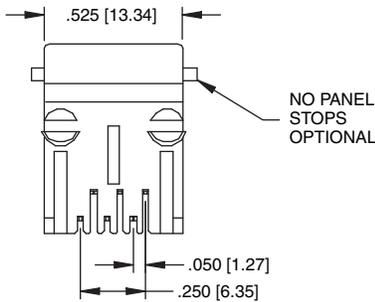
6P6C

6P4C

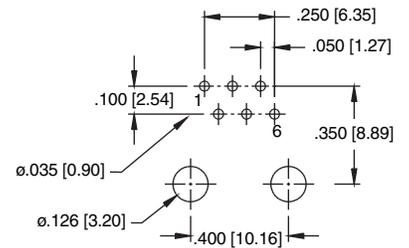


MTJ-660X1

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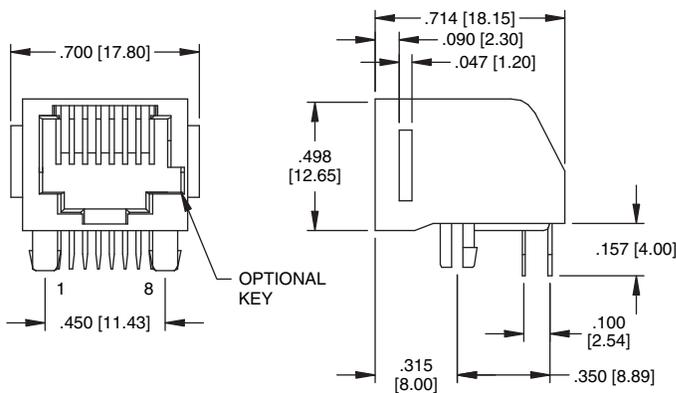
Face Shield Option



Recommended PCB Layout

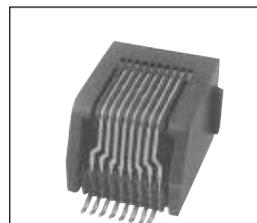
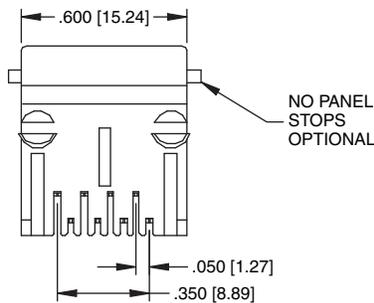
TYPE 0

8P8C

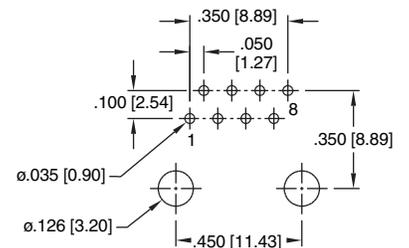


MTJ-880X1

[Ordering Information pg. 9](#)



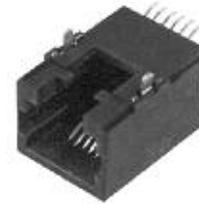
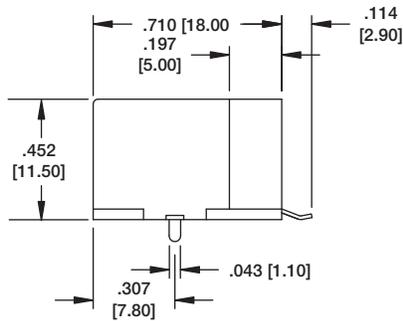
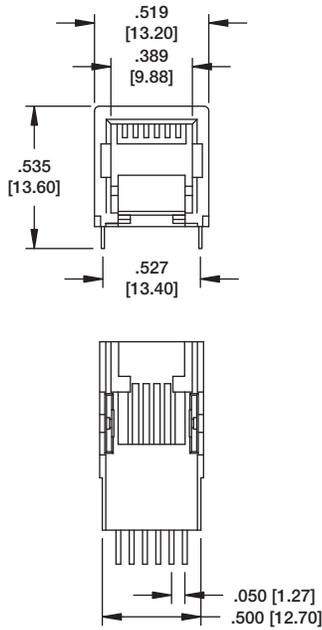
SMT Option



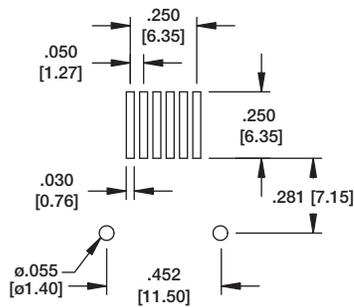
Recommended PCB Layout

Ordering Information pg. 9

TYPE Y
6P6C
6P4C

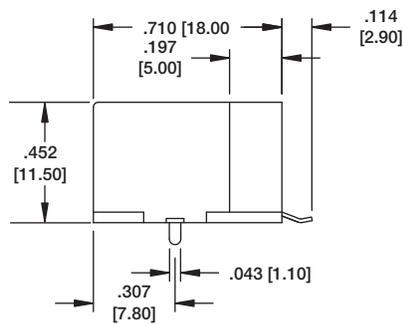
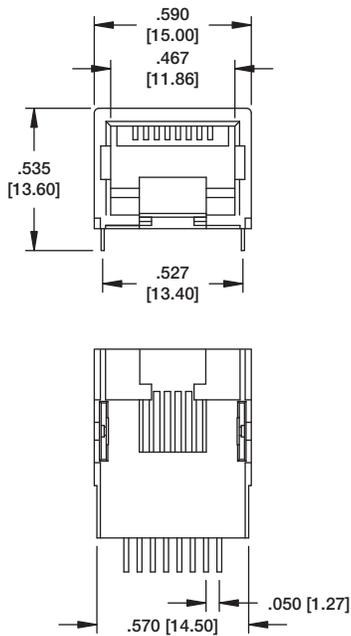


MTJ-66YX1

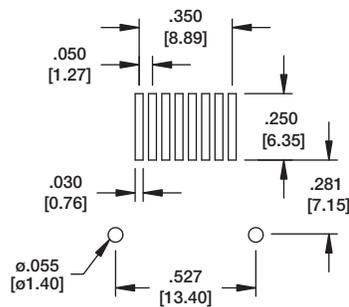


Recommended PCB Layout

TYPE Y
8P8C

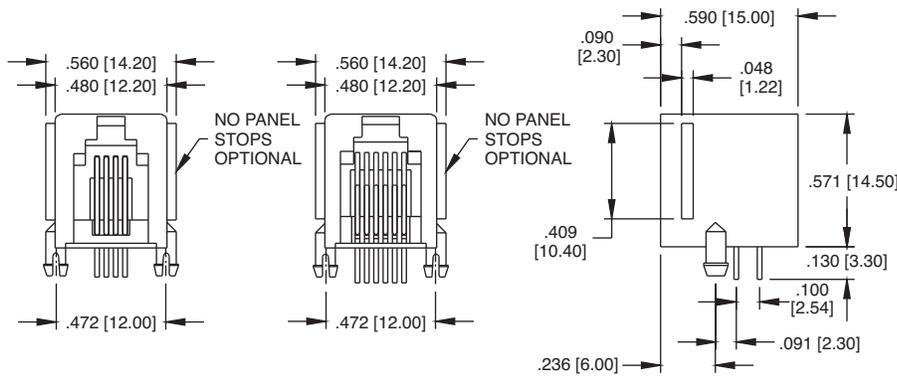


MTJ-88YX1



Recommended PCB Layout

Ordering Information pg. 9

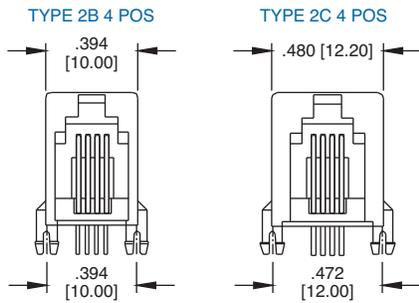


MTJ-662X2



MTJ-442X2

TYPE 2
4P4C
6P6C
6P4C

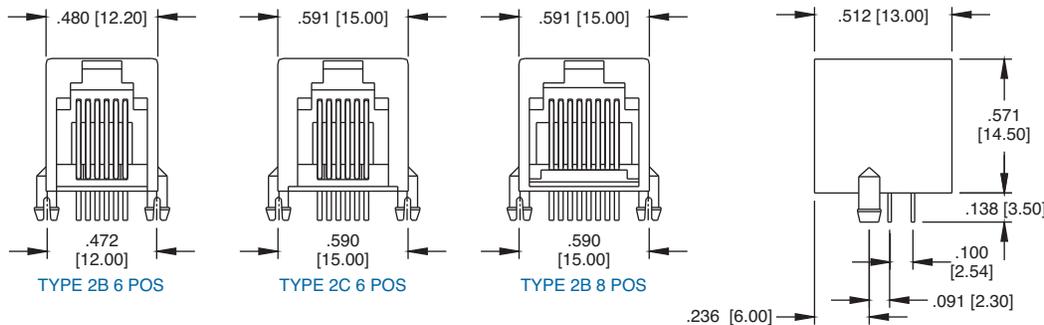


MTJ-442BX2



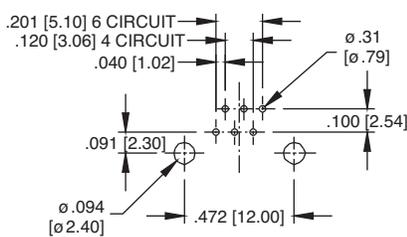
MTJ-642BX2

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

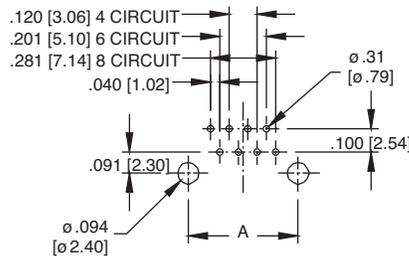


MTJ-882BX1

TYPE 2



TYPE 2B & 2C



Recommended PCB Layout

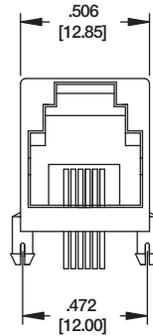
DIM. "A"	
TYPE 2B 4P4C	.394 [10.00]
TYPE 2C 4P4C	.472 [12.00]
TYPE 2B 6P6C	.472 [12.00]
TYPE 2C 6P6C	.591 [15.00]
TYPE 2B 8P8C	.590 [15.00]

Ordering Information pg. 9

**TYPE 2B
SHIELDED**

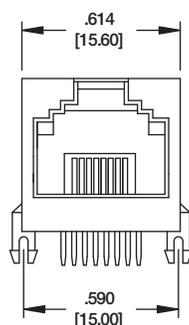
6P6C
6P4C
8P8C

MTJ-662BX1-FS

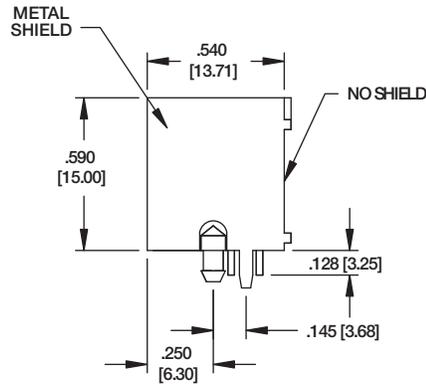


6 POS
2B SHIELDED

MTJ-882BX1-FS



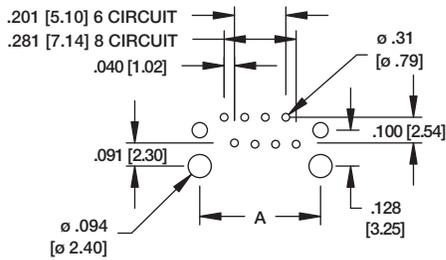
8 POS
2B SHIELDED



MTJ-662BX1-FS



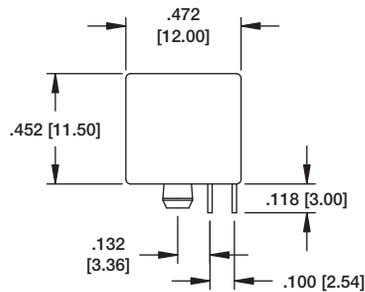
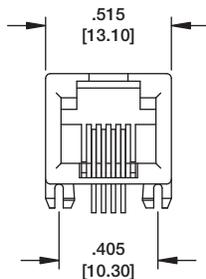
MTJ-882BX1-FS



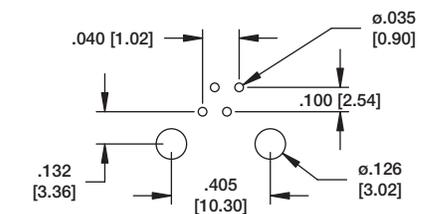
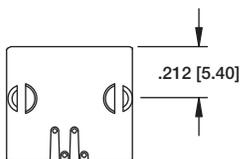
Recommended PCB Layout

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

**TYPE Q
COMPACT JACK
4P4C**



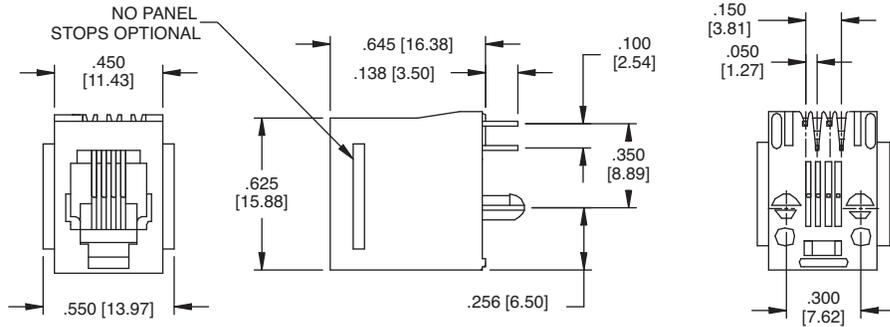
MTJ-44QX1



Recommended PCB Layout

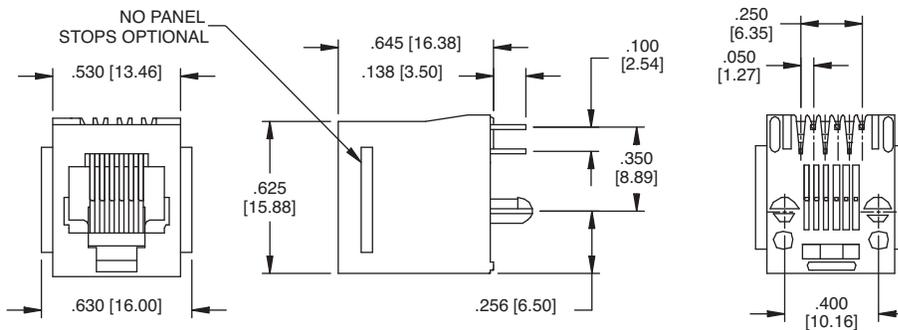
Ordering Information pg. 9

TYPE 3
4P4C



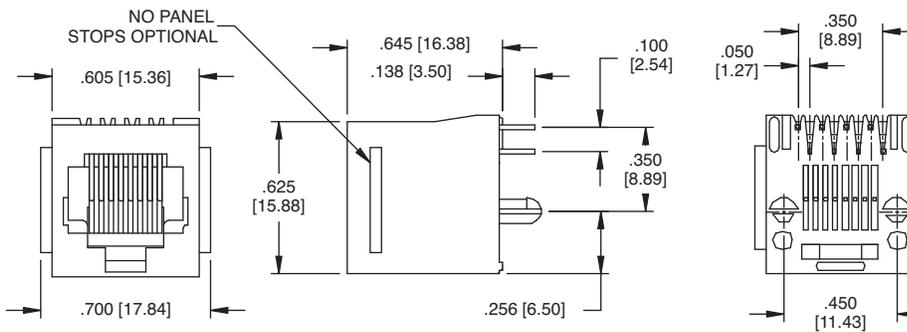
MTJ-443X1

TYPE 3
6P4C



MTJ-663X1

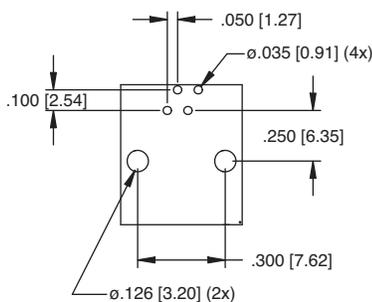
TYPE 3
8P8C



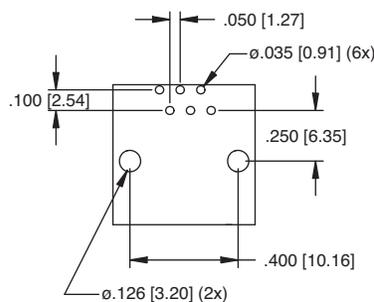
MTJ-883X1

Recommended PCB Layout

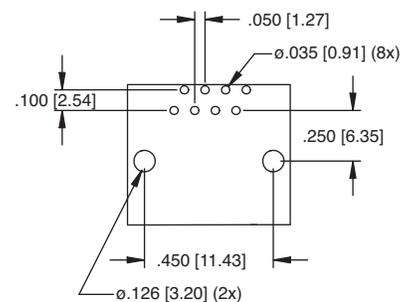
4p4c



6p4c
6p6c

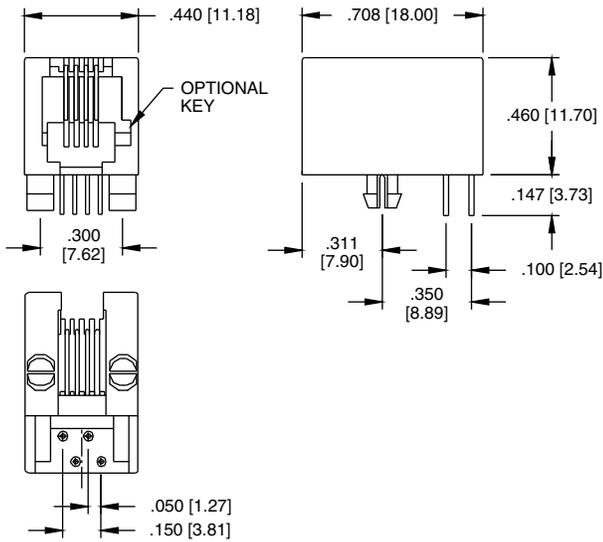


8p8c



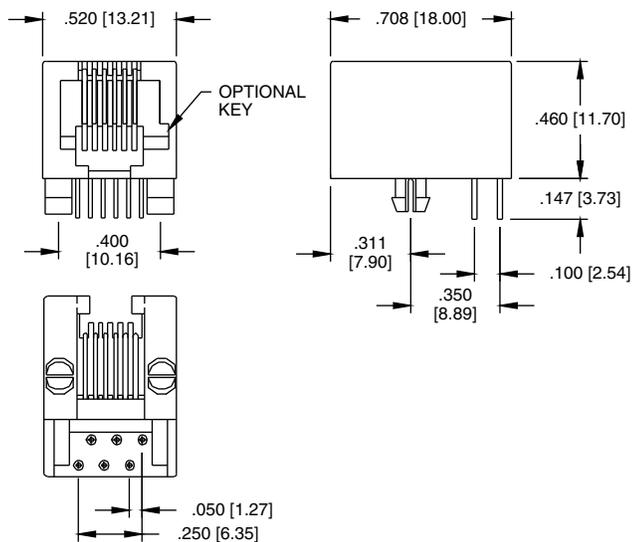
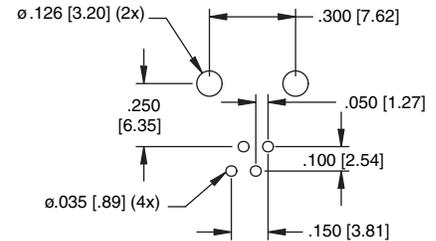
Ordering Information pg. 9

TYPE 5
4P4C



MTJ-445X1

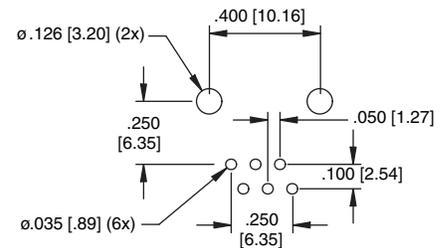
Recommended PCB Layout



MTJ-665X1

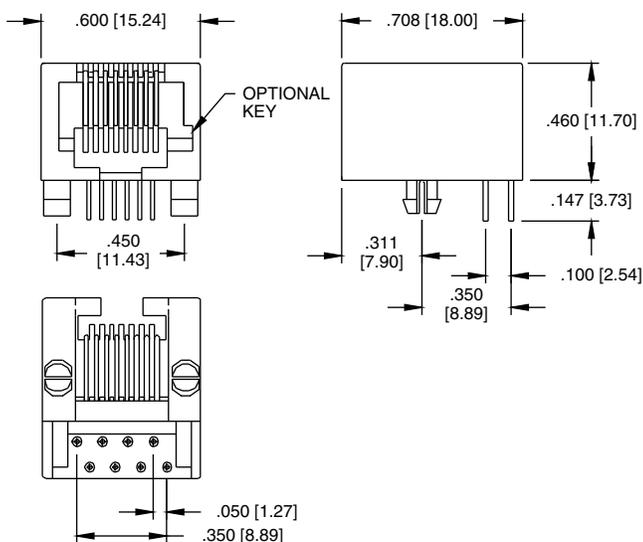
TYPE 5
6P4C
6P6C

Recommended PCB Layout



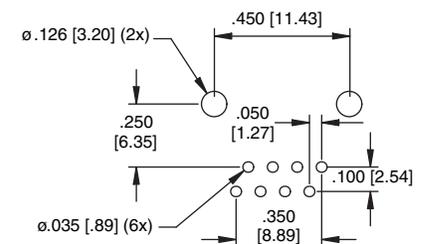
TYPE 5
8P8C

SMT Option



MTJ-885X1

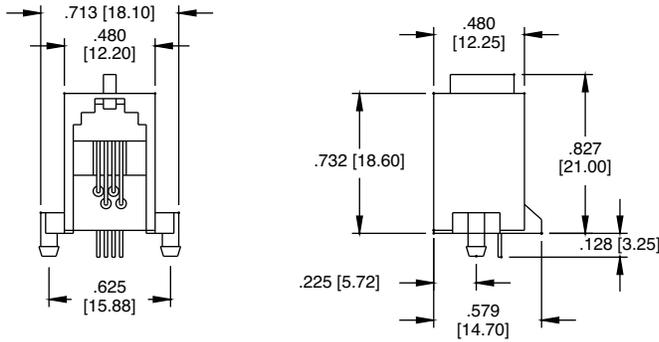
Recommended PCB Layout



Ordering Information pg. 9

TYPE 7

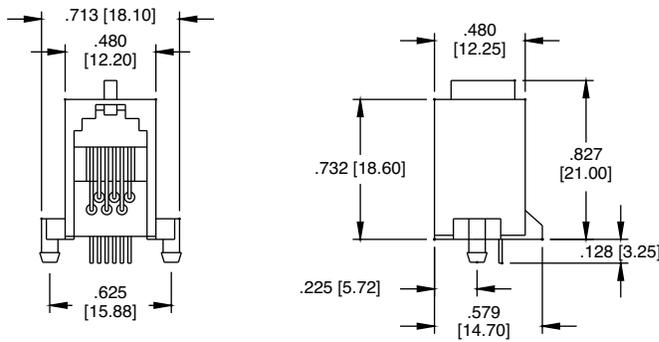
4P4C



MTJ-447X1

TYPE 7

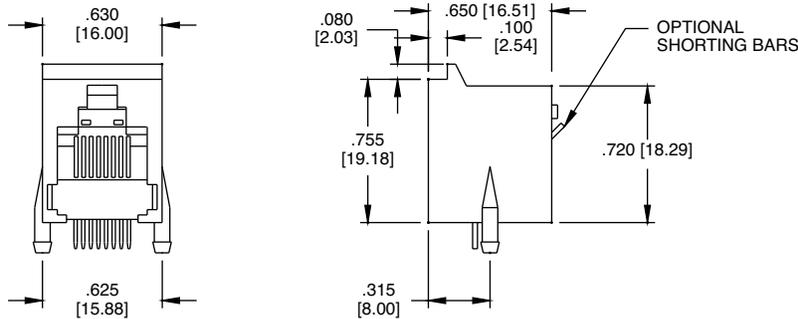
**6P4C
6P6C**



MTJ-647X1

TYPE 7

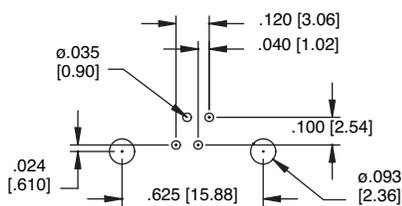
8P8C



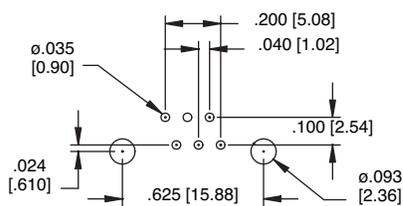
MTJ-887X1

Recommended PCB Layout

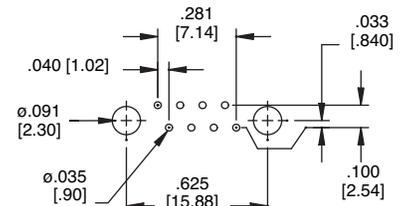
4p4c



**6p4c
6p6c**



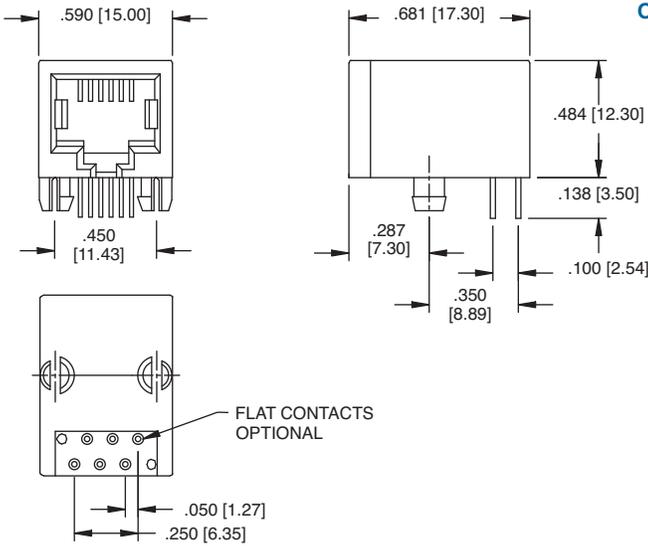
8p8c



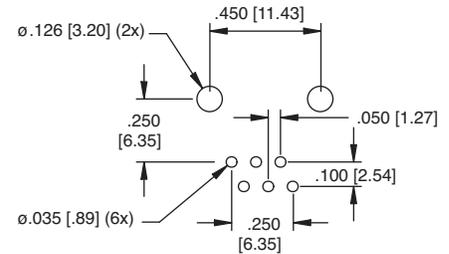
Ordering Information pg. 9

TYPE 9

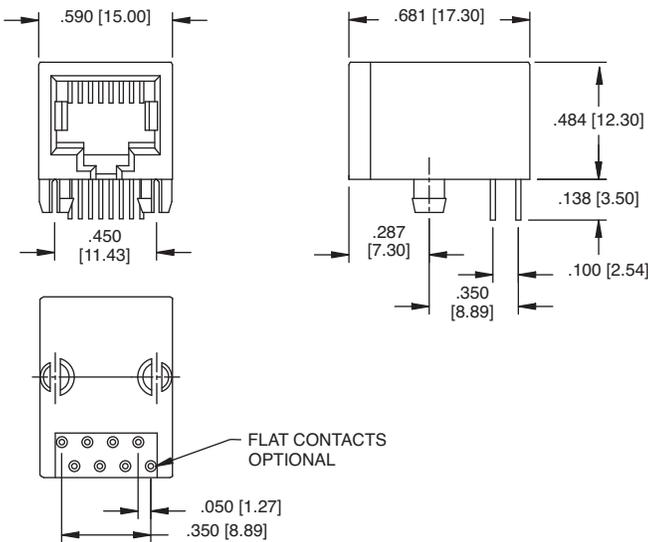
**6P4C
6P6C**



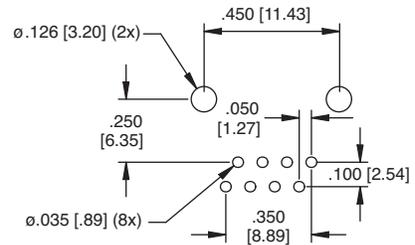
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Recommended PCB Layout



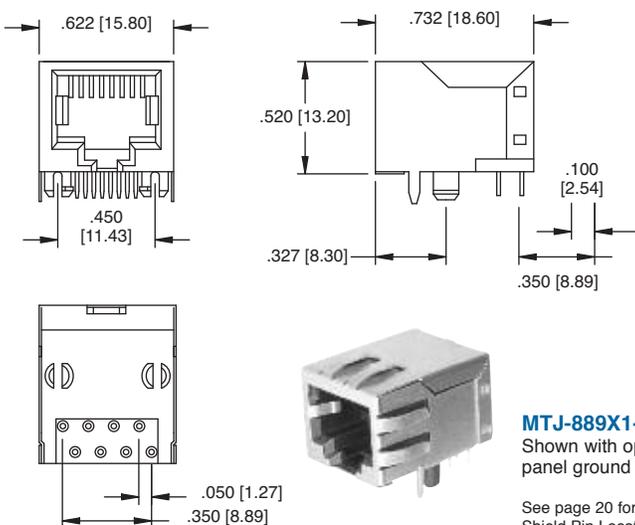
MTJ-889X1



Recommended PCB Layout

TYPE 9

8P8C



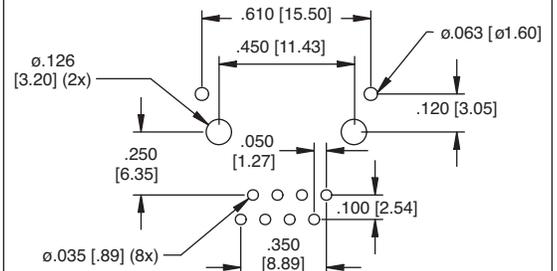
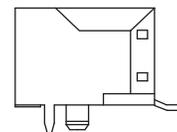
MTJ-889X1-FSE-PG

Shown with optional panel ground tabs

See page 20 for other Shield Pin Location Options

**TYPE 9
8P8C
SHIELDED**

SMT Option

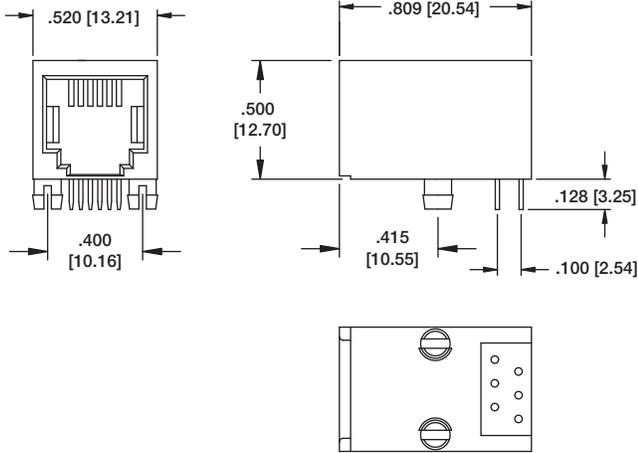


Recommended PCB Layout

<p>MTJ-66FX1</p>	<p>Ordering Information pg. 9</p> <p>TYPE F 6P6C</p> <p>Recommended PCB Layout</p>
<p>MTJ-88FX1</p>	<p>TYPE F 8P8C</p> <p>Recommended PCB Layout</p>
<p>MTJ-88FX1-FS</p>	<p>TYPE F SHIELDED 8P8C</p> <p>Recommended PCB Layout</p>

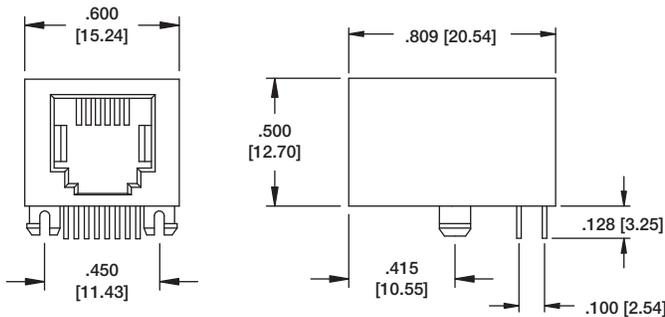
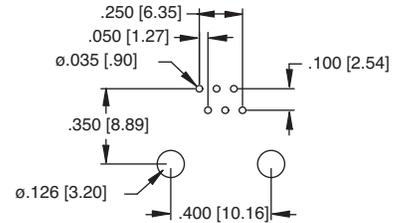
Ordering Information pg. 9

TYPE G
6P6C



MTJ-64GX1

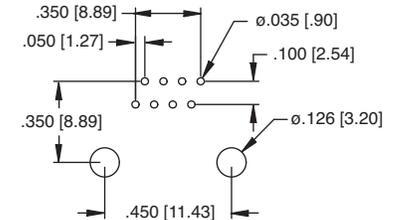
Recommended PCB Layout



MTJ-88GX1

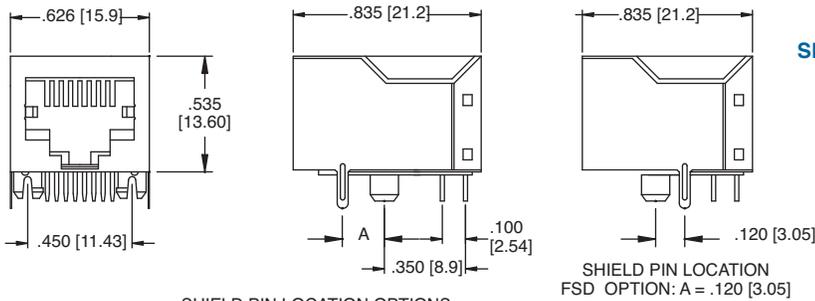
TYPE G
8P8C

Recommended PCB Layout



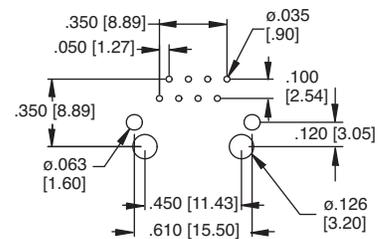
Panel Stops
Available with optional panel stops
Add -PS to end of part No.

TYPE G
SHIELDED
8P8C

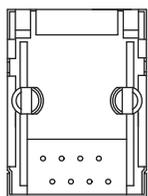
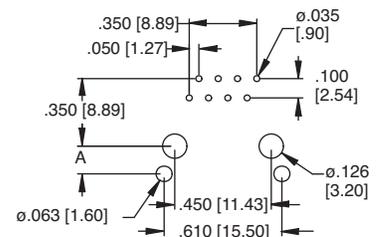


SHIELD PIN LOCATION OPTIONS
FSA OPTION: A = .170 [4.32]
FSB OPTION: A = .144 [3.66]
FSE OPTION: A = .120 [3.05]

Recommended PCB Layout (FSD)



PCB Layout (FSA, FSB, & FSE)



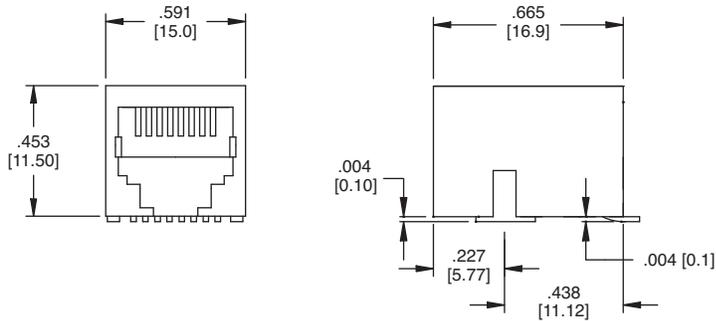
MTJ-88GX1-FSB-PG
Shown with Full Metal Shield
& Panel Ground Tab options



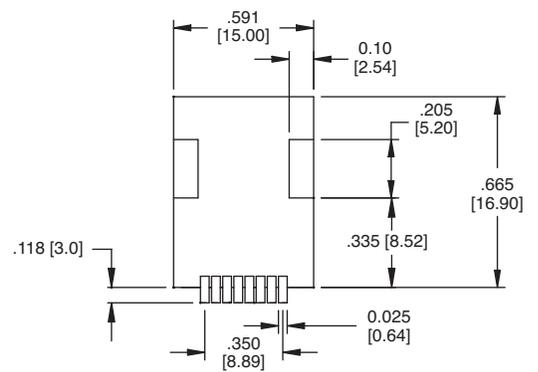
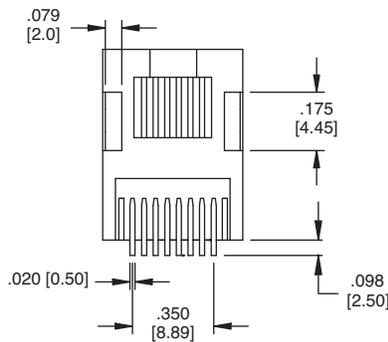
MTJ-88GX1-FSD
Shown with Full
Metal Shield option

Ordering Information pg. 9

TYPE WA
SMT TABS IN
8P8C

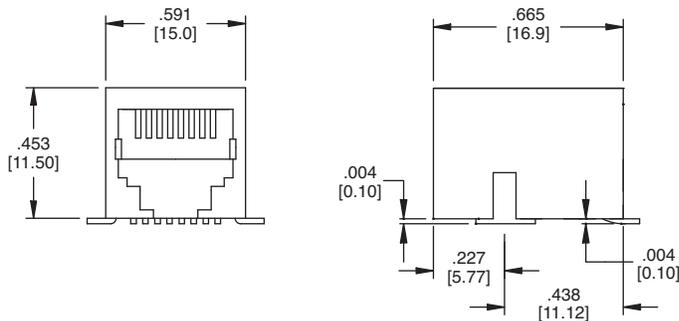


MTJ-88WAX1

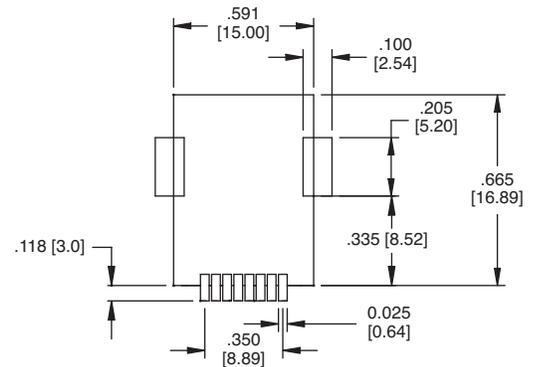
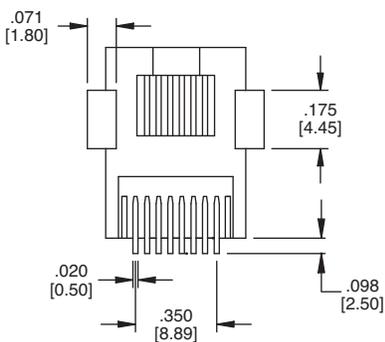


Recommended Solder Pad Layout

TYPE WB
SMT TABS OUT
8P8C



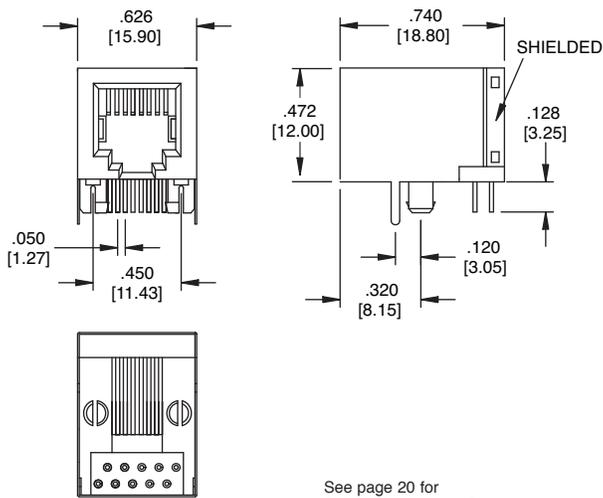
MTJ-88WBX1



Recommended Solder Pad Layout

Ordering Information pg. 9

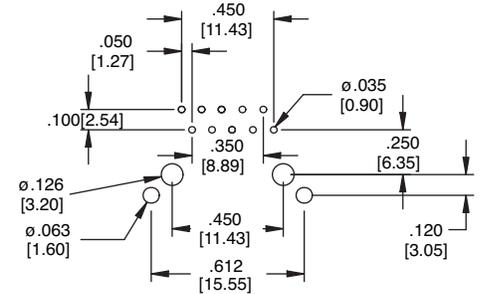
TYPE W
SHIELDED, THRU HOLE
8P8C
10P10C



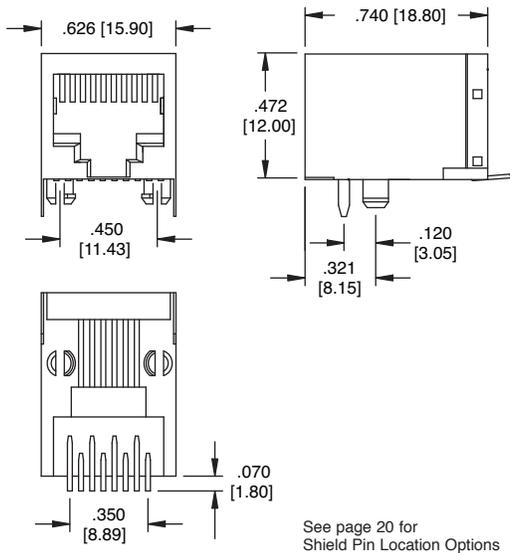
MTJ-88WX1-FSE



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



Recommended PCB Layout

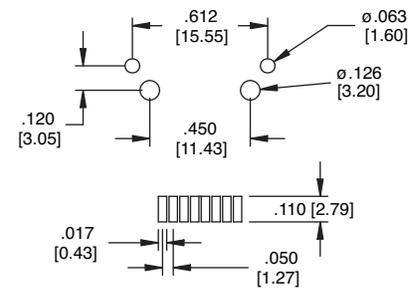


MTJ-88WX1-FSE-SMT

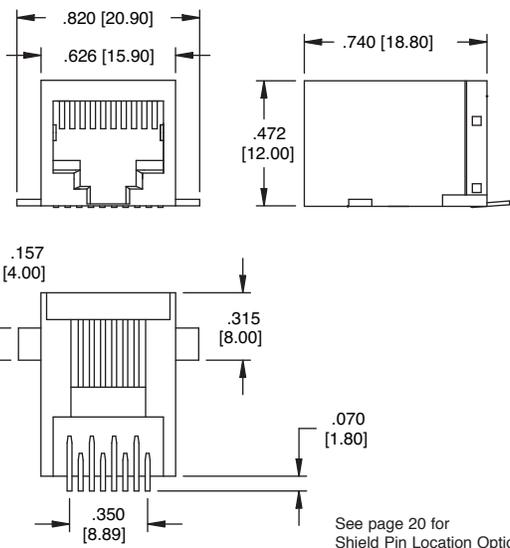


MTJ-88WX1-FSE-SMT-PG
Shown with optional panel ground tabs

TYPE W
SHIELDED SMT WITH PLASTIC PEG
8P8C



Recommended Solder Pad Layout

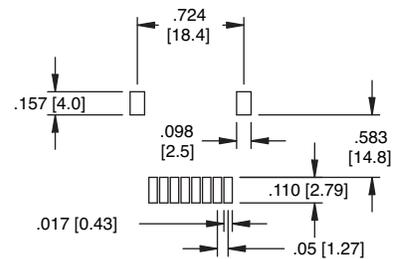


MTJ-88WX1-FS-TSMT



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

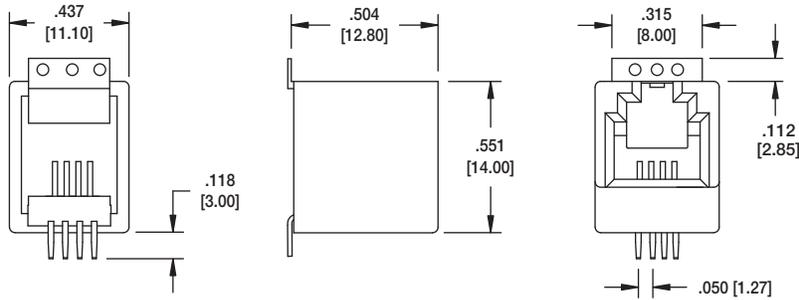
TYPE W
SHIELDED TRUE SMT
8P8C



Recommended Solder Pad Layout

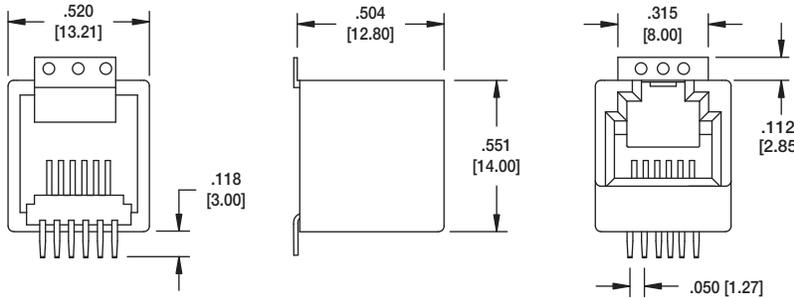
Ordering Information pg. 9

TYPE H
4P4C



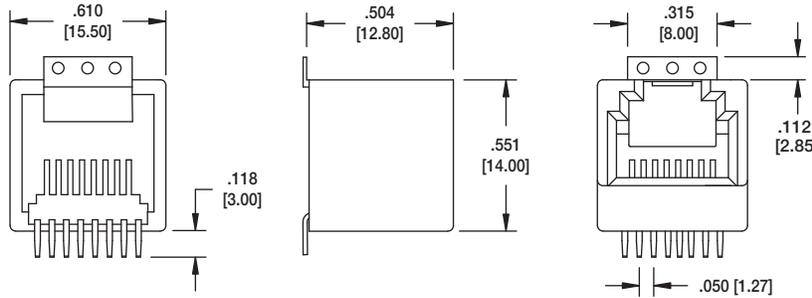
MTJ-44HX1

TYPE H
6P6C

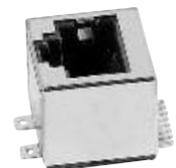


MTJ-66HX1

TYPE H
8P8C



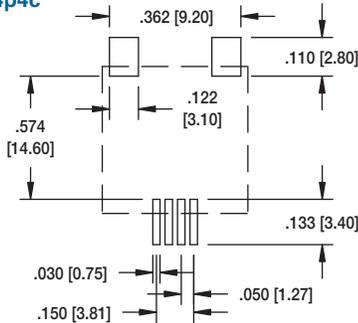
MTJ-88HX1



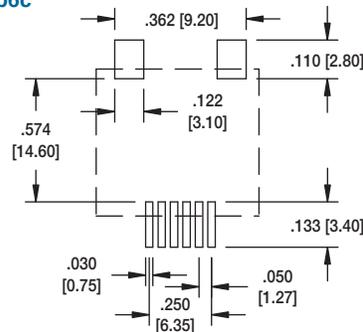
MTJ-88HX1-FS

Recommended PCB Layout

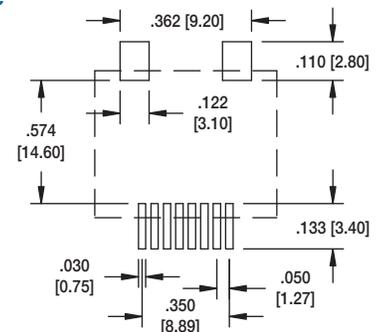
4p4c



6p6c

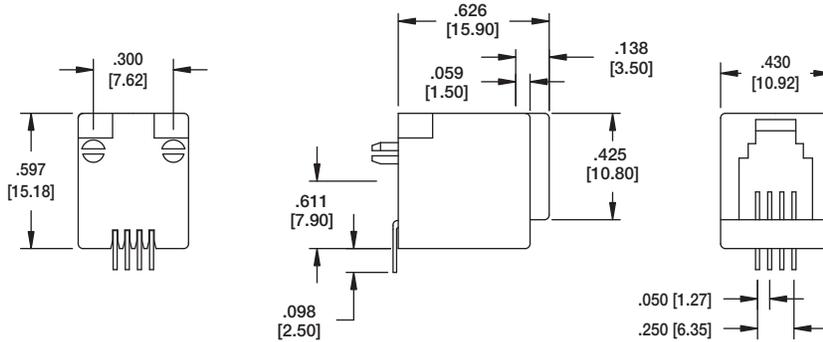


8p8c



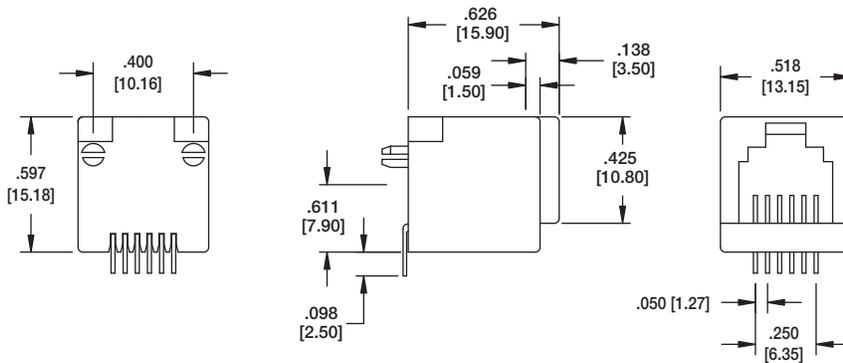
Ordering Information pg. 9

TYPE K
4P4C



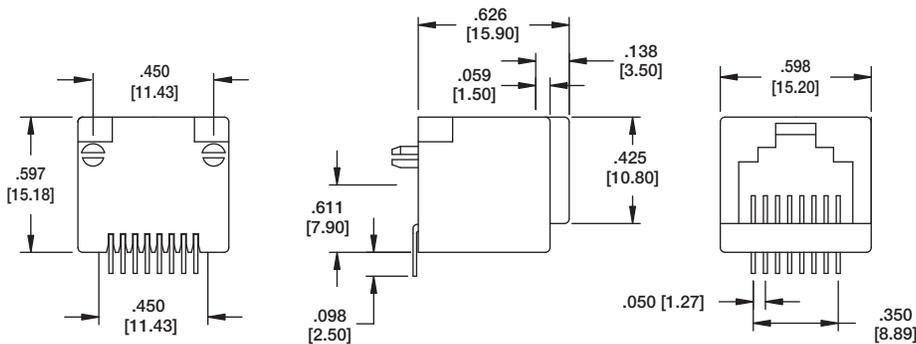
MTJ-44KX1

TYPE K
6P4C
6P6C



MTJ-66KX1

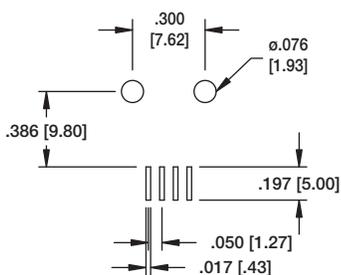
TYPE K
8P8C



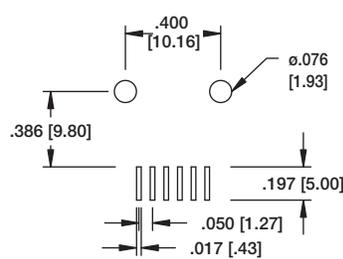
MTJ-88KX1

Recommended PCB Layout

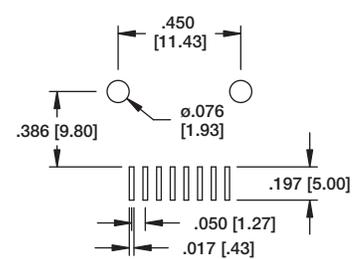
4p4c



6p6c



8p8c



Ordering Information pg. 9

TYPE V
4P4C

TYPE V
6P6C
6P4C

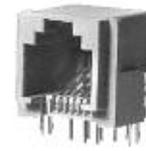
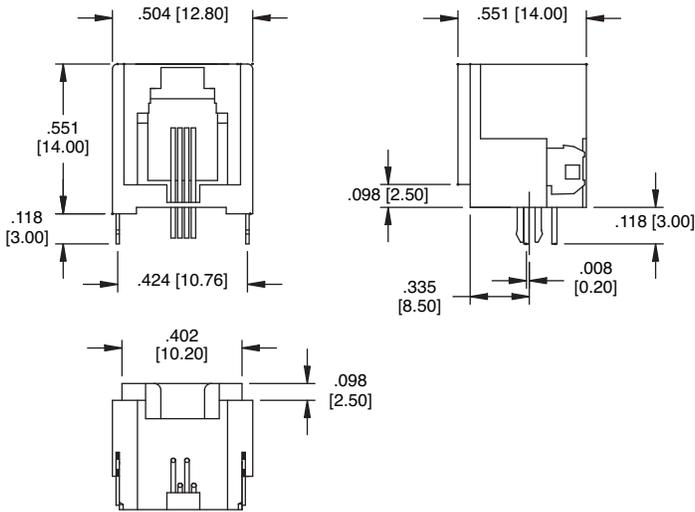
TYPE V
8P8C

Recommended PCB Layout

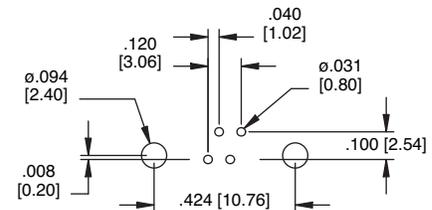
<p>4p4c</p>	<p>6p6c</p>	<p>8p8c</p>
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Ordering Information pg. 9

TYPE E
4P4C

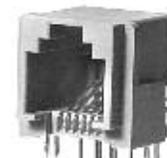
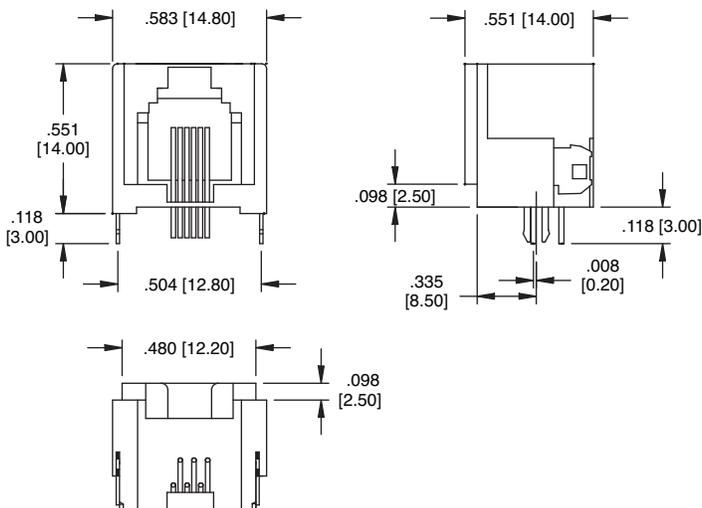


MTJ-44EX1

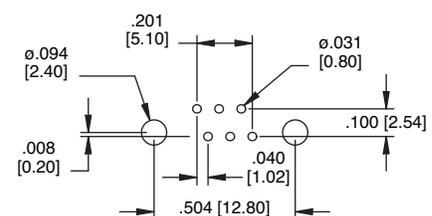


Recommended PCB Layout

TYPE E
6P4C
6P6C

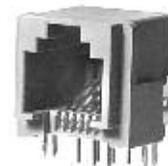
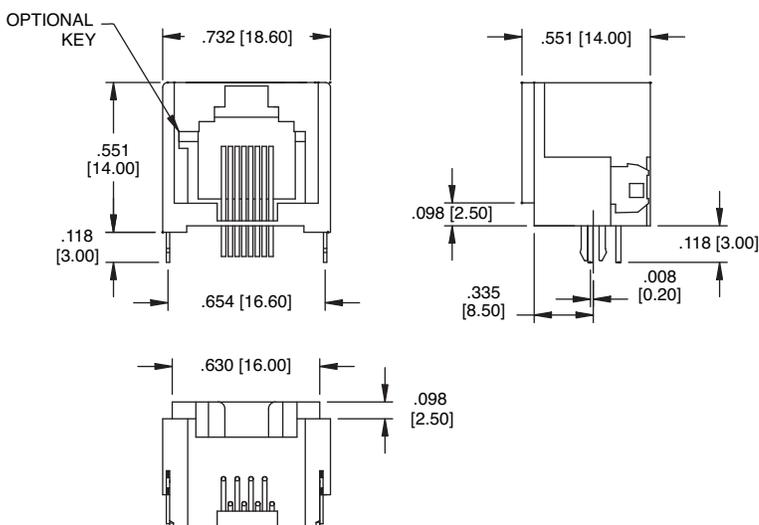


MTJ-66EX1

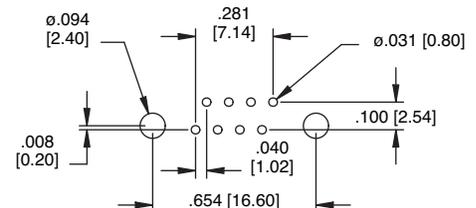


Recommended PCB Layout

TYPE E
8P8C

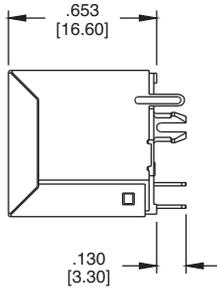
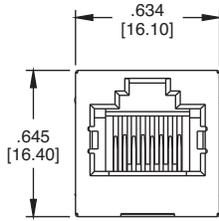


MTJ-88EX1



Recommended PCB Layout

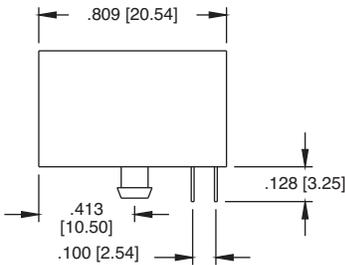
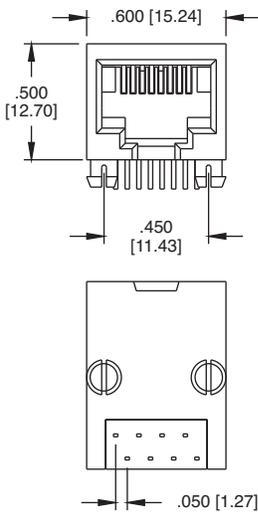
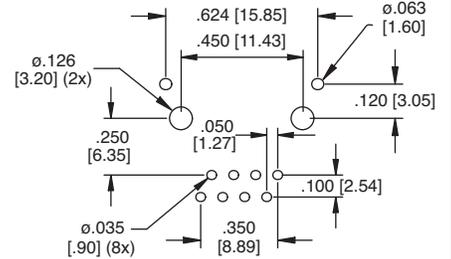
Ordering Information pg. 9



MTJ-88AX1-FSE

TYPE A
CAT. 5, TOP ENTRY
8P8C

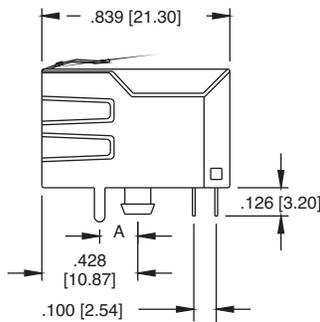
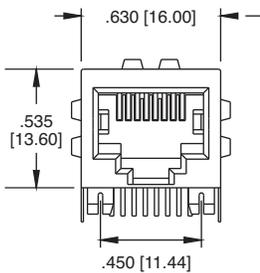
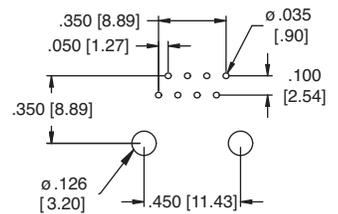
Recommended PCB Layout



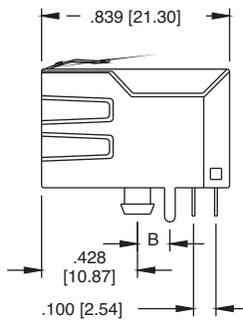
MTJ-88TX1

TYPE T
CAT. 5e, SIDE ENTRY
8P8C

Recommended PCB Layout



FSA, FSB & FSE

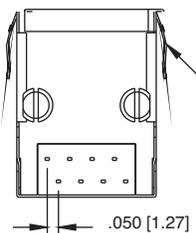


FSD = .120 [3.05]



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

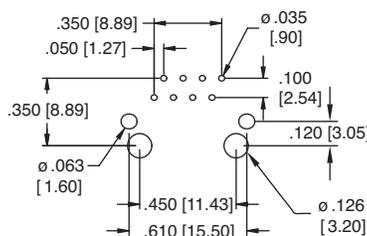
TYPE T
CAT. 5e, SHIELDED
8P8C



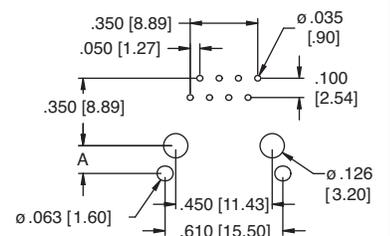
OPTIONAL
PANEL GROUND TABS

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]

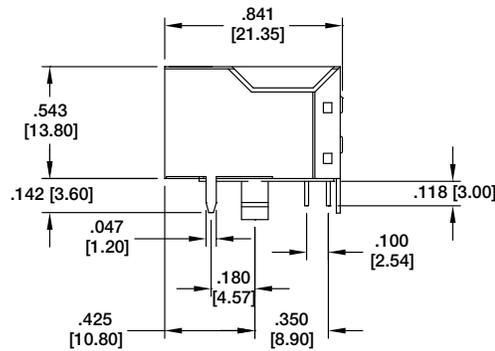
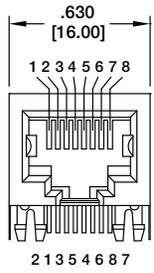
PCB Layout (FSD)



PCB Layout (FSA, FSB & FSE)



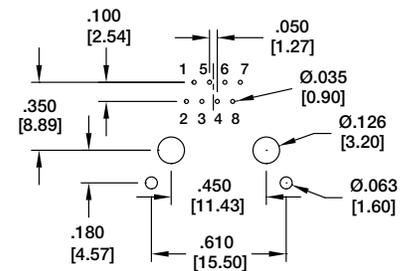
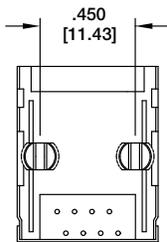
TYPE T
CAT. 5e, SHIELDED



MTJ-88TX1-FSG

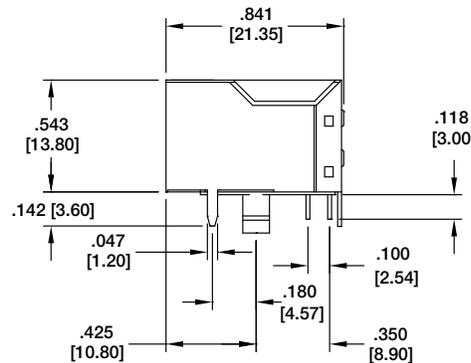
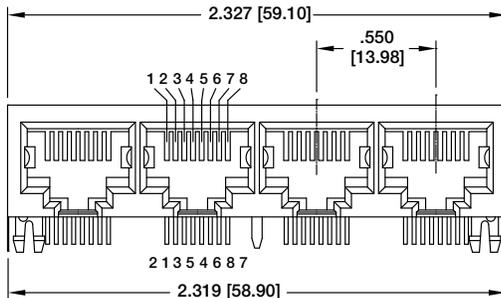


MTJ-88TX1-FSG-PG

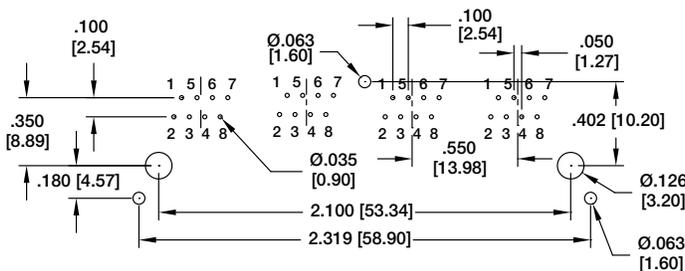
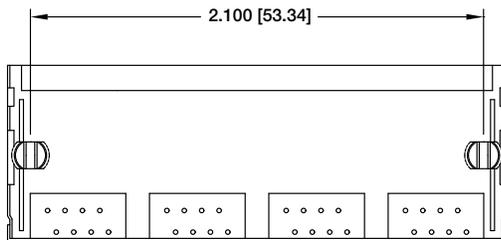


Recommended PCB Layout

TYPE T
GANGED
CAT. 5e, SHIELDED



MTJG-4-88TX1-FSG



Recommended PCB Layout

LED 1 OPTION LED 2 OPTION

SHIELD

Dimensions: .649 [16.50], .531 [13.50], .620 [15.75], .540 [13.72], .360 [9.14], .281 [7.14], .135 [3.43], .040 [1.02], .070 [1.78], .500 [12.70], .639 [16.25], .360 [9.14], .103 [2.62], .212 [5.40], .135 [3.43]

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

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

LED 1 OPTION LED 2 OPTION

SHIELD

Dimensions: .649 [16.50], .445 [11.30], .055 [1.41], .452 [11.48], .063 [1.60], .630 [16.00], .594 [15.10], .531 [13.50], .441 [11.20], .086 [2.20], .063 [1.60], .177 [4.50], .171 [4.35], .552 [14.02], .452 [11.48], .070 [1.78], .352 [8.94], .142 [3.60], .057 [1.45], .281 [7.14], .171 [4.35], .031 [0.80], .630 [16.00]

TYPE AA
LED JACK BOTTOM TAB &
BOTTOM LEDTHRU HOLE
8P8C

MTJ-88AAX1-FS-LG-PG

LED 1 OPTION LED 2 OPTION

SHIELD

Dimensions: .720 [18.30], .620 [15.75], .505 [12.83], .610 [15.50], .195 [4.95], .085 [2.16], .135 [3.43], .230 [5.84], .540 [13.72], .020 [0.51], .090 [2.29], .035 [0.90], 12 PLCS, .100 [2.54], .230 [5.84], 0.40 [1.02], .281 [7.14], .500 [12.70], .128 [3.25]

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

Recommended PCB Layout

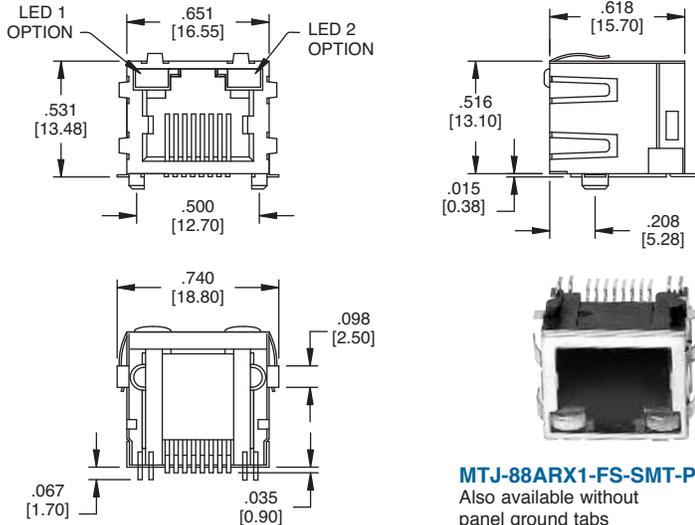
JACKS WITH LEDs ORDERING INFORMATION

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

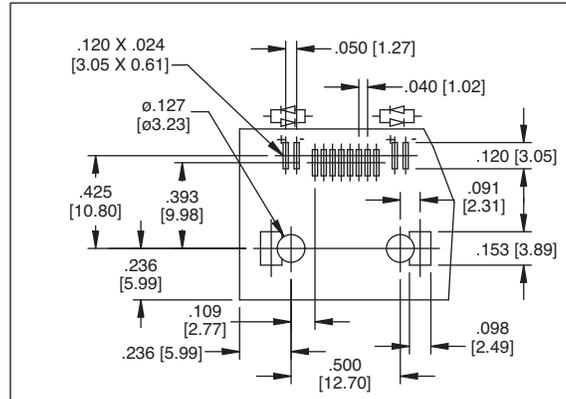
OPTIONS:
SMT = Surface mount tails with Hi-Temp insulator
PG = Panel Ground Tabs
LX = LED's, use LA, LD, LG, LH, LI, see LED Configuration Chart

Ordering Information pg. 29

**TYPE AR
WITH SMT OPTION
8P8C**



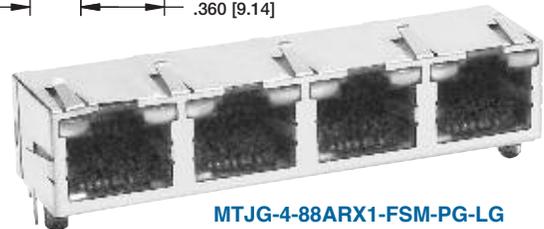
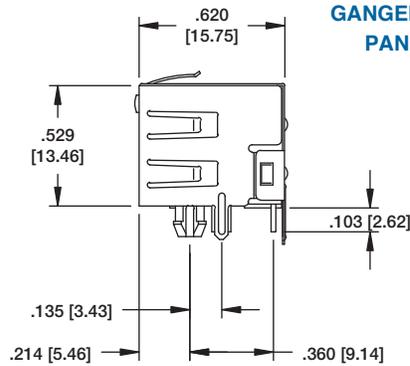
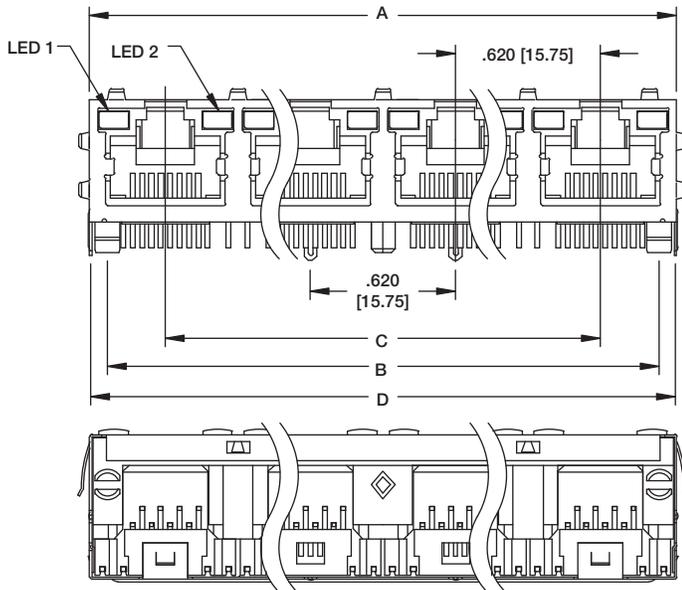
MTJ-88ARX1-FS-SMT-PG-LG
Also available without panel ground tabs



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

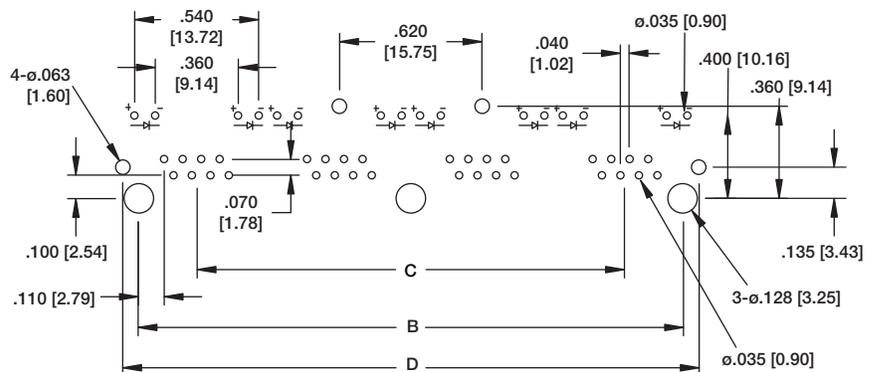
Shown with metal shield, panel ground tabs and LED options

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

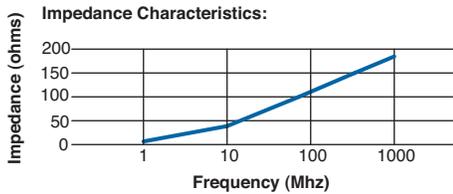
A = .620 [15.75] x No. of Ports + .029 [0.75]
B = .620 [15.75] x No. of Ports - 1 + .500 [12.70]
C = .620 [15.75] x No. of Ports - 1
D = .620 [15.75] x No. of Ports + .019 [0.50]



Recommended PCB Layout

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

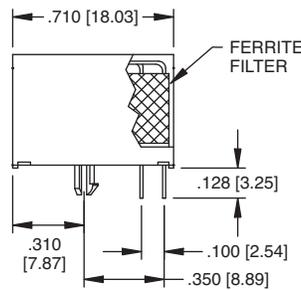
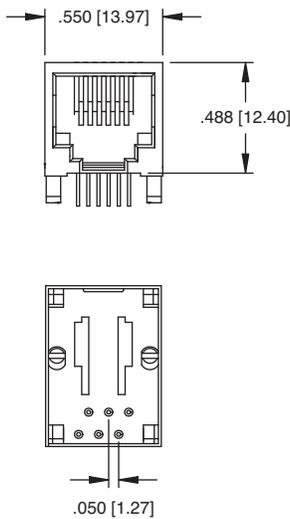


MTJ-88MX1-FSE
Metal Shielded

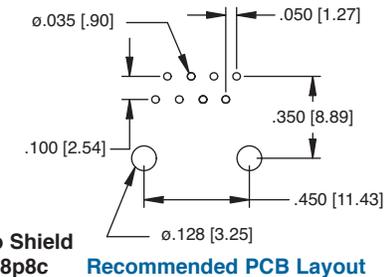
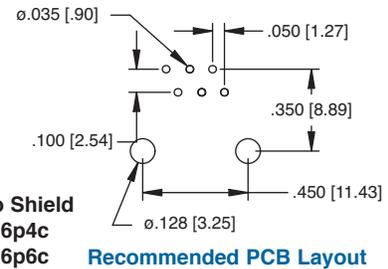


MTJ-88MX1-FSE-PG
Metal Shielded with
panel ground tabs

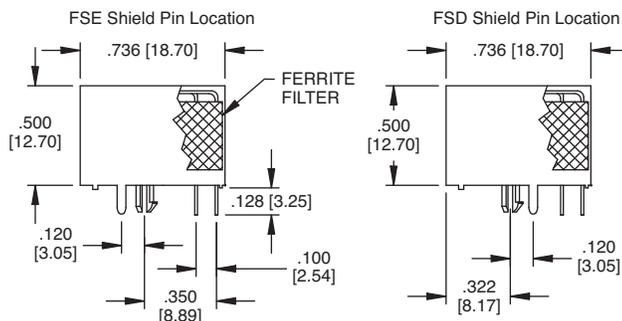
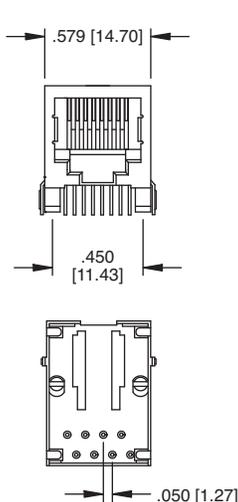
EMI FERRITE FILTERED JACK



Type M
6P6C
6P4C



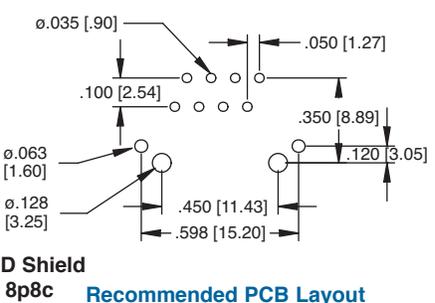
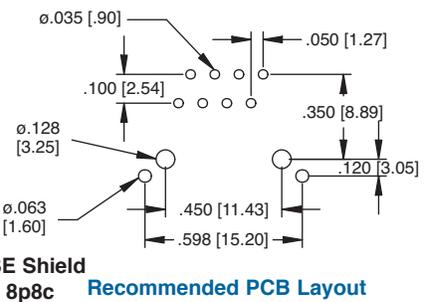
EMI FERRITE FILTERED & SHIELDED JACK



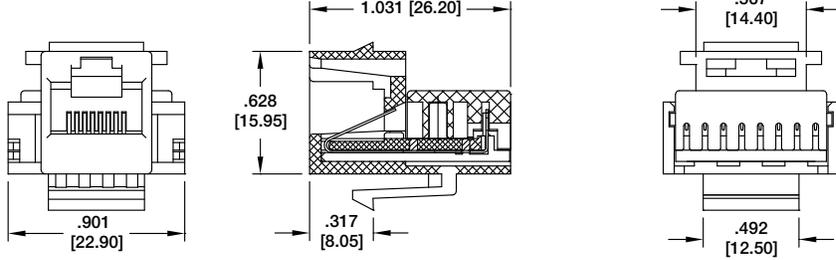
MTJ-88MX1-FSE

MTJ-88MX1-FSD

Type M
8P8C

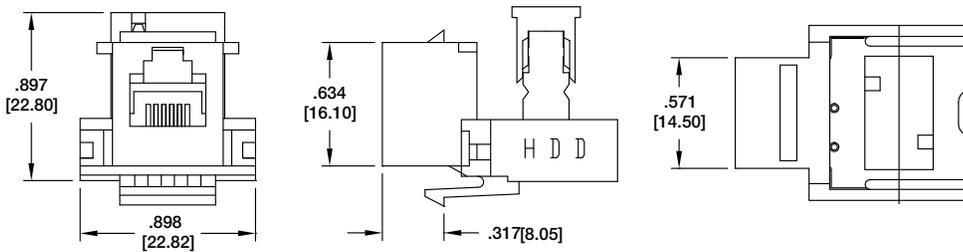


CAT. 3 KEYSTONE JACK
8 POSITION 8 CONTACT



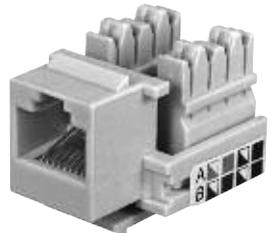
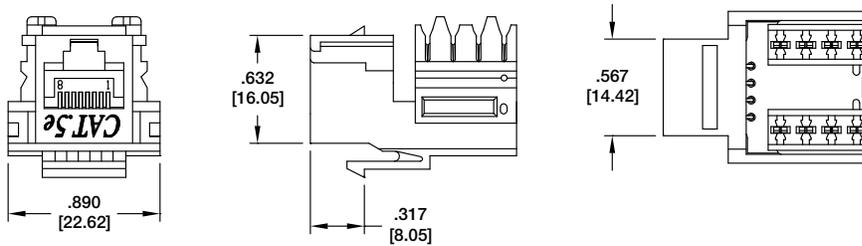
MTJK-88-10

CAT. 3 KEYSTONE JACK
6 POSITION 4 CONTACT



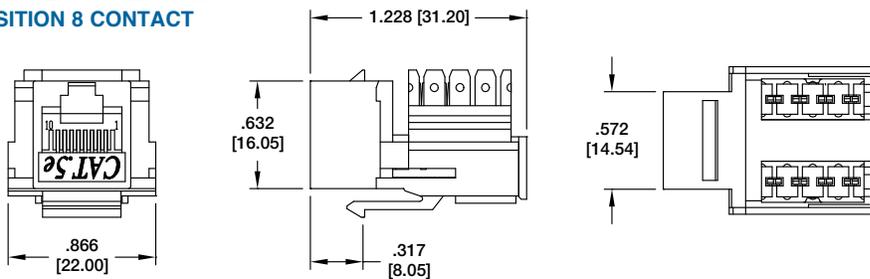
MTJK-64-29

CAT. 5e KEYSTONE JACK
8 POSITION 8 CONTACT



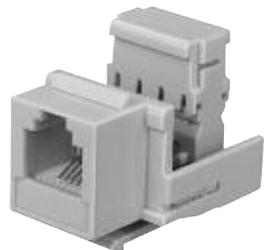
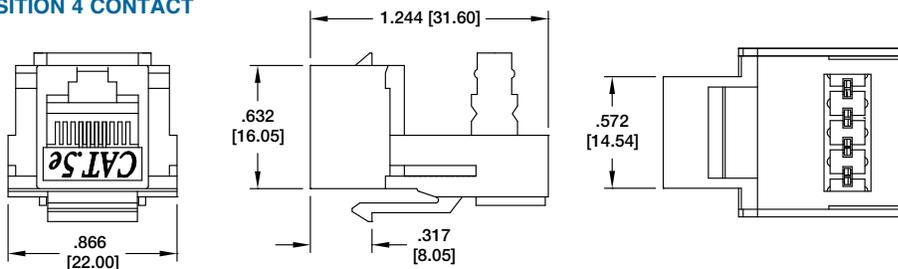
MTJK-88-02-C5E

CAT. 5e KEYSTONE JACK
8 POSITION 8 CONTACT



MTJK-88-05-C5E

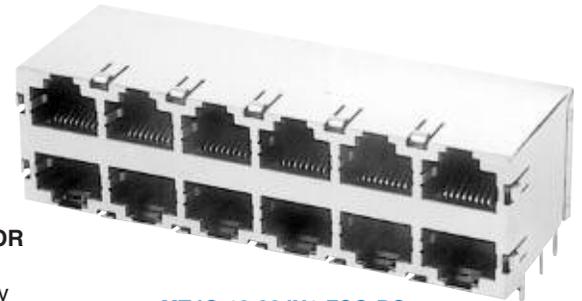
CAT. 5e KEYSTONE JACK
8 POSITION 4 CONTACT



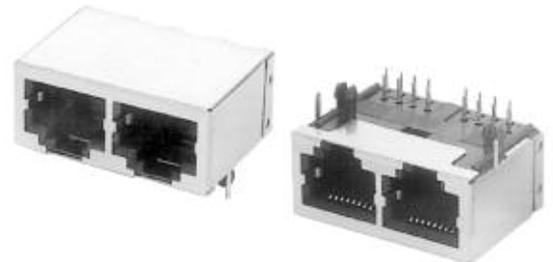
MTJK-84-01-C5E

ORDERING INFORMATION GANGED JACKS WITHOUT LEDs

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

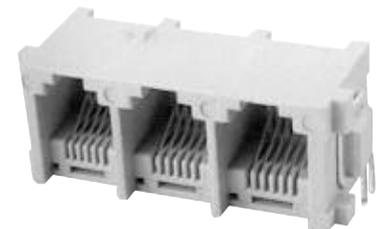
MTJG	2	64	AR	2	1	LD
<p>SERIES INDICATOR MTJG = Ganged Telephone Jack</p>	<p>NO. OF PORTS 2, 4, 6, 8, 12 or 16</p>	<p>PORT SIZE / POSITIONS FILLED 62 = 6 position, 2 contacts (6P2C) 64 = 6 position, 4 contacts (6P4C) 66 = 6 position, 6 contacts (6P6C) 88 = 8 position, 8 contacts (8P8C)</p>	<p>HOUSING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



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



MTJG-4-88GX1-FSB



MTJG-3-667HX2

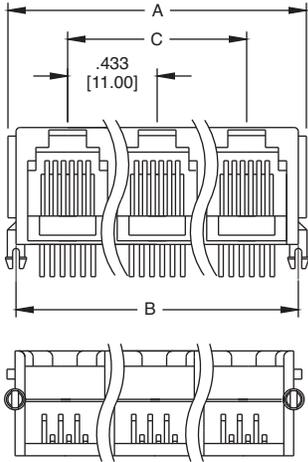
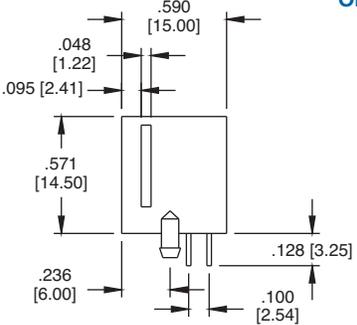
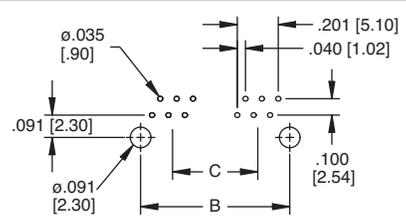
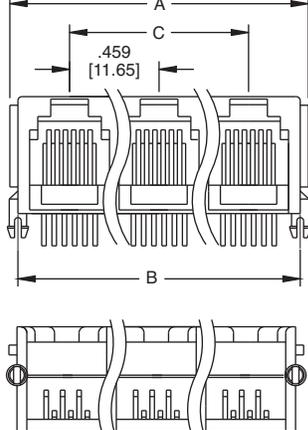
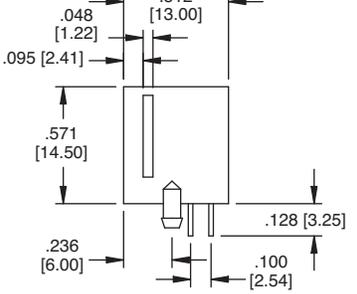
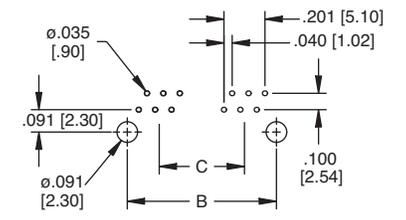
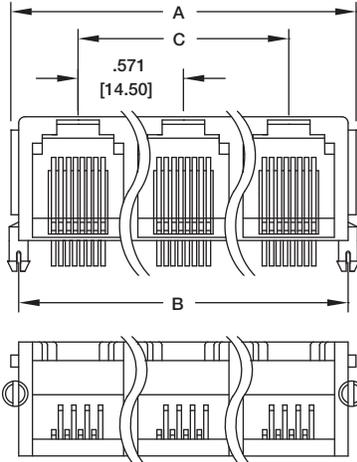
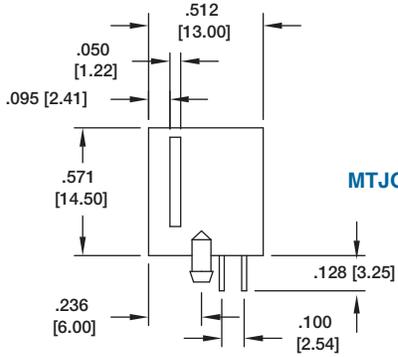
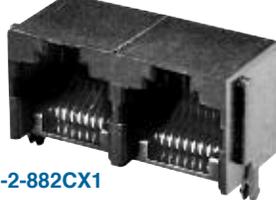
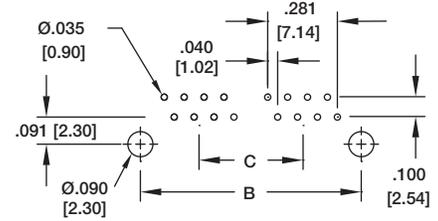
OPTIONS:

- 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

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



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

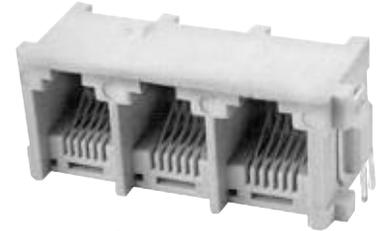
Ordering Information pg. 34

TYPE 7H

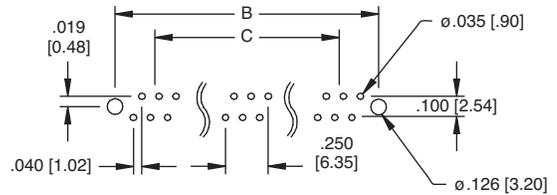
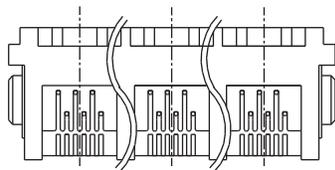
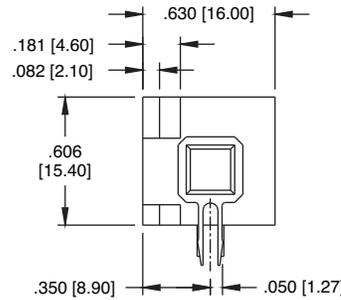
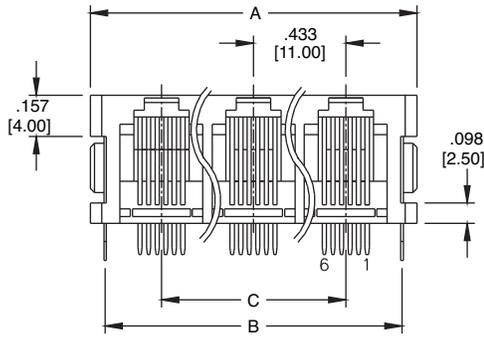
RIGHT ANGLE ENTRY

6P4C

6P6C



MTJG-3-667HX2



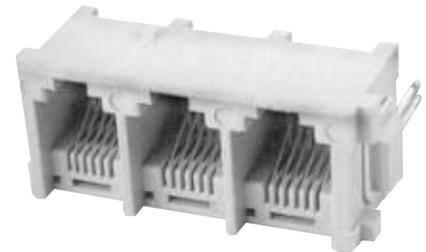
Recommended PCB Layout

TYPE 7V

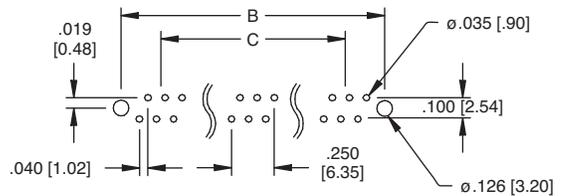
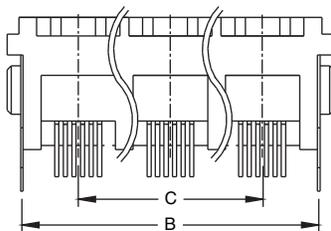
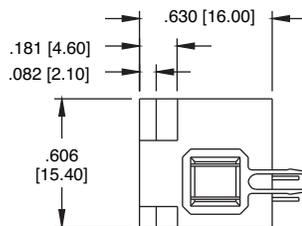
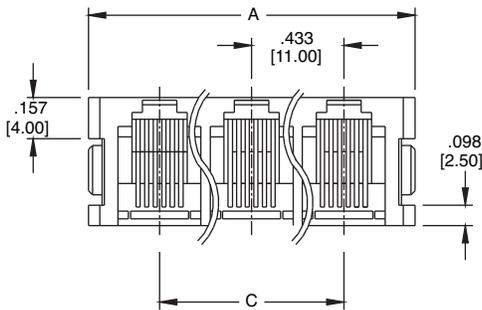
TOP ENTRY

6P4C

6P6C

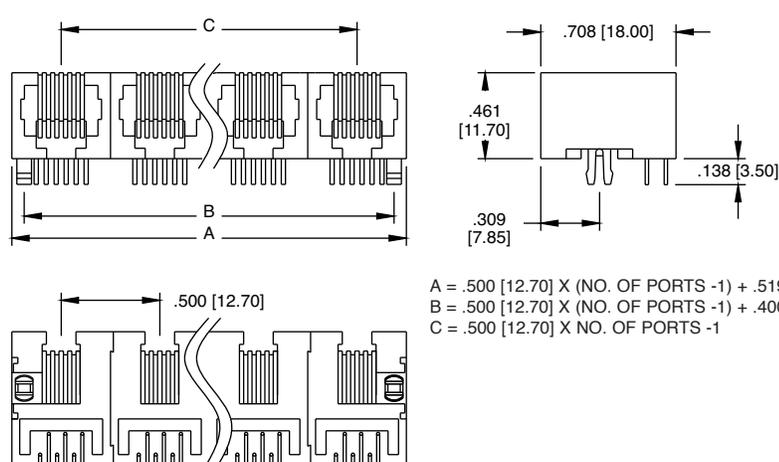
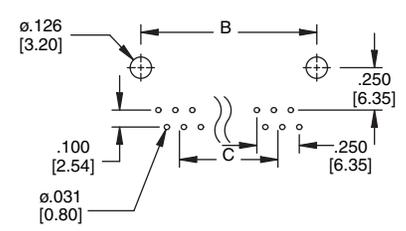
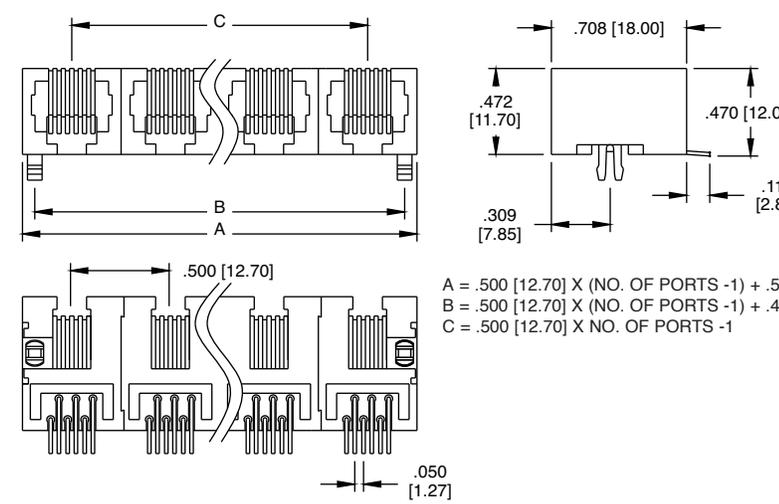
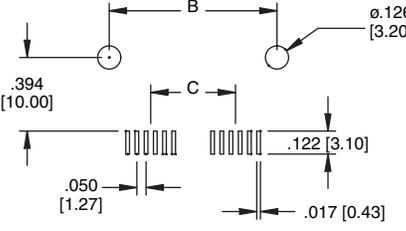
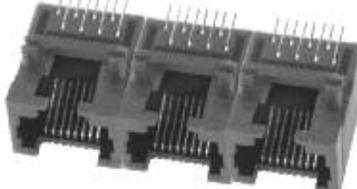
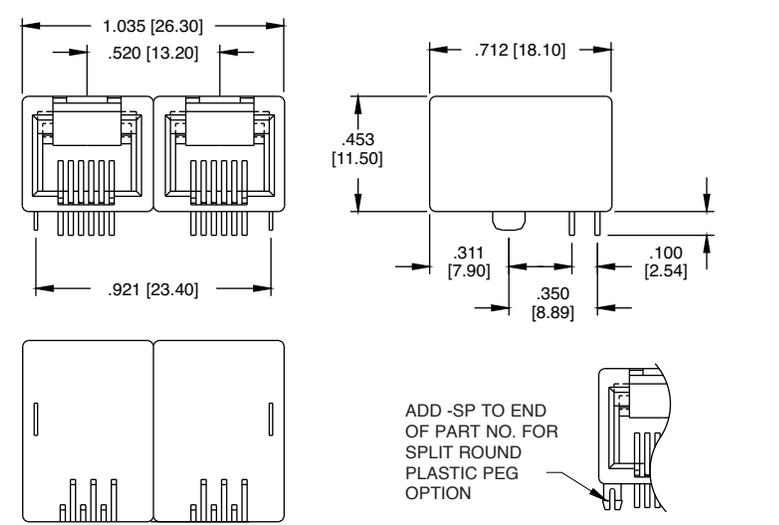
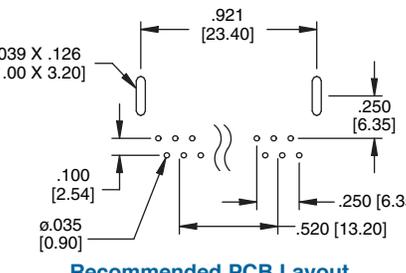


MTJG-3-667VX2



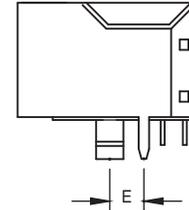
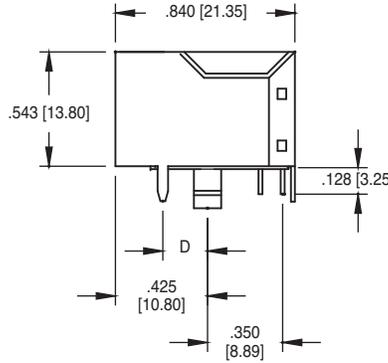
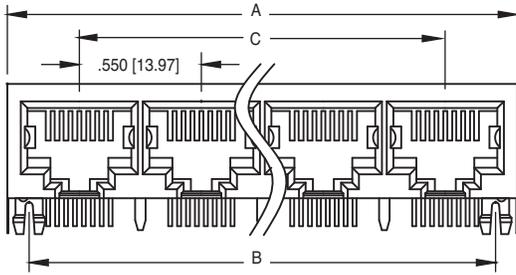
Recommended PCB Layout

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> $A = .500 [12.70] \times (\text{NO. OF PORTS} - 1) + .519 [13.20]$ $B = .500 [12.70] \times (\text{NO. OF PORTS} - 1) + .400 [10.16]$ $C = .500 [12.70] \times \text{NO. OF PORTS} - 1$ </p>	 <p>Recommended PCB Layout</p>	<p>TYPE 5 THRU HOLE 6P4C 6P6C</p>  <p>MTJG-3-665X1</p>
<p>Ordering Information pg. 34</p>		
 <p> $A = .500 [12.70] \times (\text{NO. OF PORTS} - 1) + .519 [13.20]$ $B = .500 [12.70] \times (\text{NO. OF PORTS} - 1) + .400 [10.16]$ $C = .500 [12.70] \times \text{NO. OF PORTS} - 1$ </p>	 <p>Recommended PCB Layout</p>	<p>TYPE 5 SMT 8P8C</p>  <p>MTJG-3-885X1-SMT Available in 6P6C or 8P8C Versions</p>
<p>Ordering Information pg. 34</p>		
 <p>ADD -SP TO END OF PART NO. FOR SPLIT ROUND PLASTIC PEG OPTION</p>	 <p>Recommended PCB Layout</p>	<p>TYPE N METAL PEG 6P4C 6P6C</p>  <p>MTJG-2-66NX1</p>

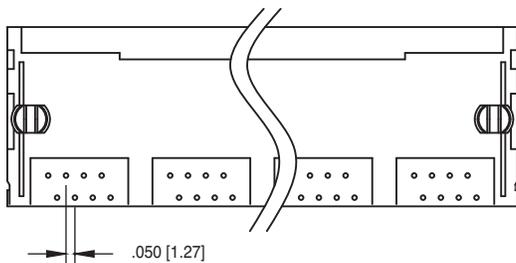
Ordering Information pg. 34

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]



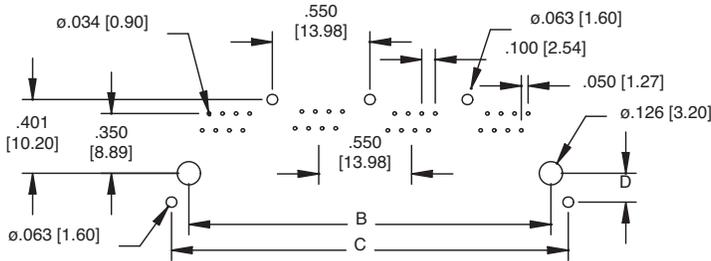
A = .550 [13.97] X (NO. OF PORTS - 1) + .679 [17.27]
B = .550 [13.97] X (NO. OF PORTS - 1) + .450 [11.43]
C = .550 [13.97] X NO. OF PORTS - 1



MTJG-4-88GX1-FSB

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

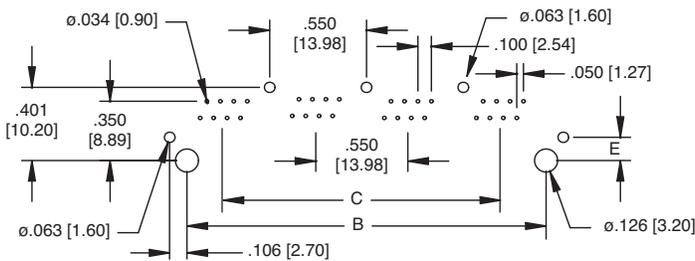
"D" DIM.
FSA = .170 [4.32] FSE = .120 [3.05]
FSB = .144 [3.65] FSG = .180 [4.57]



MTJG-4-88GX1-FSB-PG

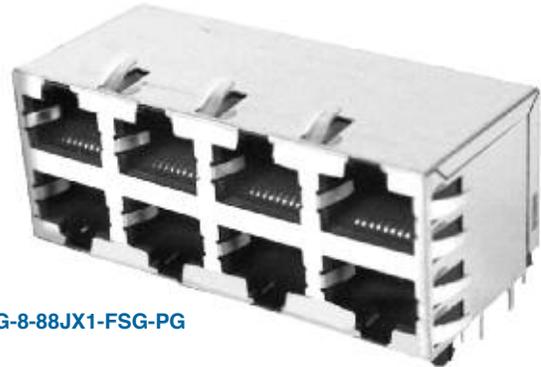
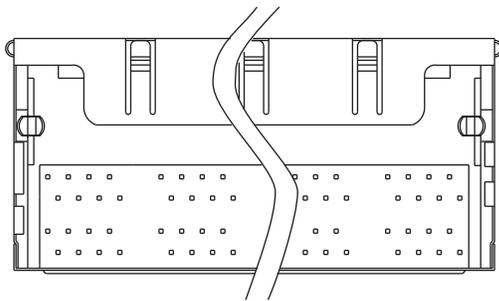
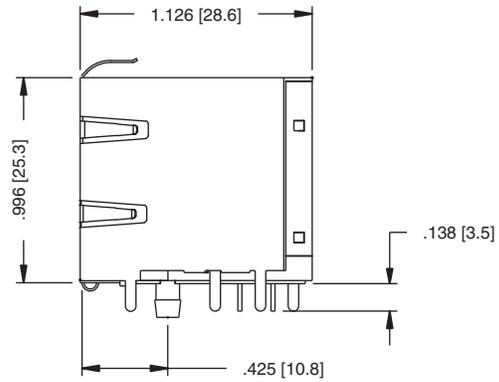
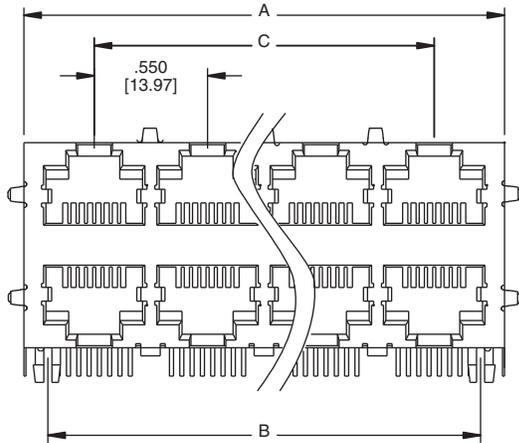
Recommended PCB Layout for shield ground pin locations specified as FSD & FSR

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

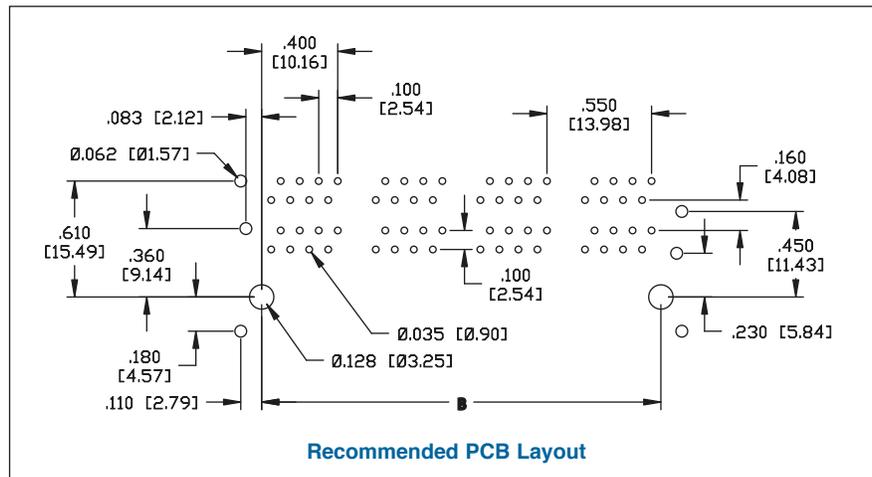


Ordering Information pg. 34

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

Contact Plating:

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

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:

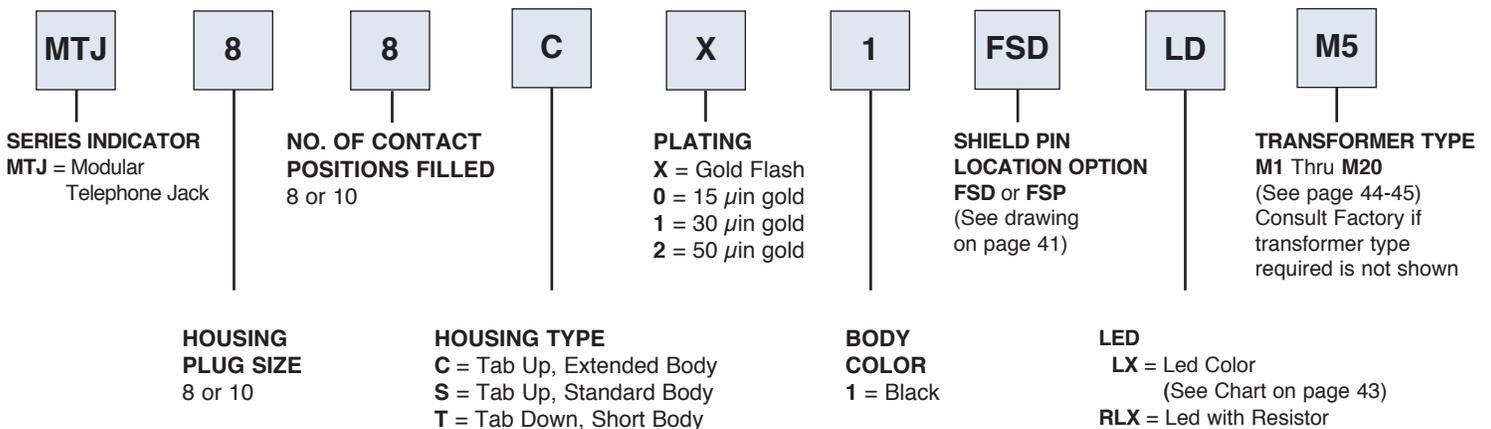
Anti-ESD plastic trays or tubes

SAFETY AGENCY APPROVALS:

UL Recognized & CSA Certified, File no. E224049



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

LED 1 OPTION
LED 2 OPTION

8

1

.653 [16.60]

.200 [5.08]

.100 [2.54]

1.283 [32.60]

.531 [13.50]

.137 [3.50]

.423 [10.75]

.796 [20.22]

A

MTJ-88CX1-FSP-PG-LG-M3

SHIELD PIN LOCATION
FSD DIMENSION: A = .120 [3.05]
FSP DIMENSION: A = .125 [3.05]

TYPE C
TAB UP & TOP LEDs,
EXTENDED BODY

.100 [2.54]

.100 [2.54]

.280 [7.12]

.080 [2.03]

.696 [17.68]

.050 [1.27]

.125 [3.18]

.500 [12.70]

.635 [16.13]

ø.035 [0.89]

ø.128 [3.25]

ø.062 [1.57]

Recommended PCB Layout
FSP Option Shown

AVAILABLE WITH MAGNETIC TRANSFORMERS: M1, M3, M4, M5, M6, M7, M8, M9, M10, M11, M12, M13, M16 & M20.

LED 1 OPTION
LED 2 OPTION

8

1

.637 [16.20]

.290 [7.37]

.100 [2.54]

.996 [25.30]

.531 [13.50]

.137 [3.50]

.423 [10.75]

A

MTJ-88SX1-FSP-PG-LG-M7

SHIELD PIN LOCATION
FSD DIMENSION: A = .120 [3.05]
FSP DIMENSION: A = .125 [3.17]

TYPE S
TAB UP & TOP LEDs,
STANDARD BODY

.523 [13.28]

.323 [5.20]

.450 [11.43]

.450 [11.43]

.610 [15.50]

.350 [8.89]

ø.040 [1.02]

ø.035 [0.90]

ø.128 [3.25]

ø.063 [1.60]

Recommended PCB Layout
FSP Option Shown

AVAILABLE WITH MAGNETIC TRANSFORMERS: M1, M3, M4, M5, M6, M7, M9, M10, M11, M12 & M13. See pgs. 42-43

LED 1 OPTION
LED 2 OPTION

1

8

.626 [15.90]

.450 [11.43]

.100 [2.54]

.840 [21.35]

.531 [13.50]

.137 [3.50]

.423 [10.75]

A

MTJ-88TX1-FSP-PG-LG-M5

SHIELD PIN LOCATION
FSD DIMENSION: A = .120 [3.05]
FSP DIMENSION: A = .125 [3.05]

TYPE T
TAB DOWN & BOTTOM LEDs,
SHORT BODY

.450 [11.43]

.050 [1.27]

.450 [11.43]

.450 [11.43]

.610 [15.50]

.350 [8.89]

ø.035 [0.90]

ø.128 [3.25]

ø.063 [1.60]

.323 [5.20]

.523 [13.28]

ø.040 [1.02]

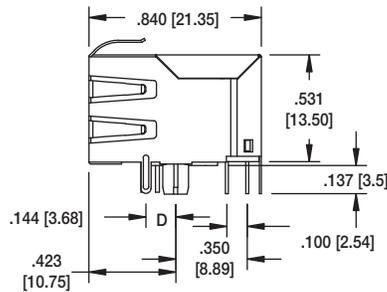
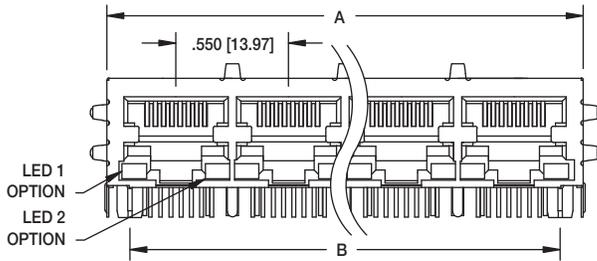
Recommended PCB Layout
FSP Option Shown

AVAILABLE WITH MAGNETIC TRANSFORMERS: M1, M3, M4, M5, M6, M7, M9, M10, M11, M12 & M13. See pgs. 42-43

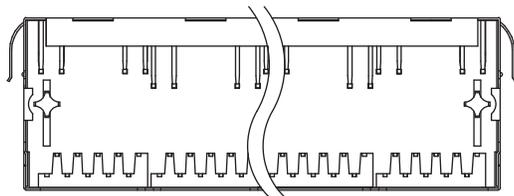
Ordering Information pg. 40

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]

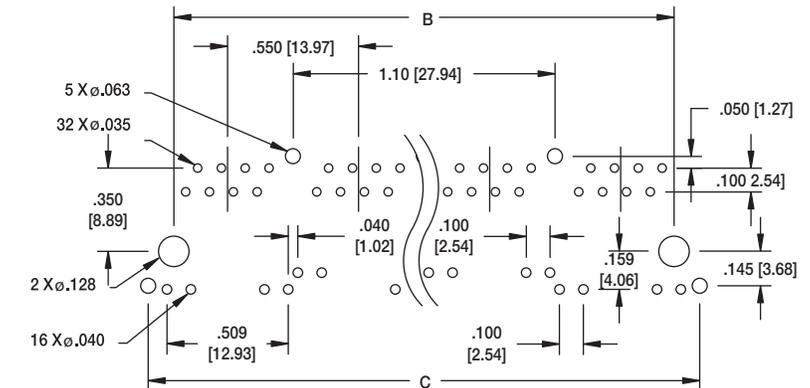


MTJG-4-88TX1-FSB-PG

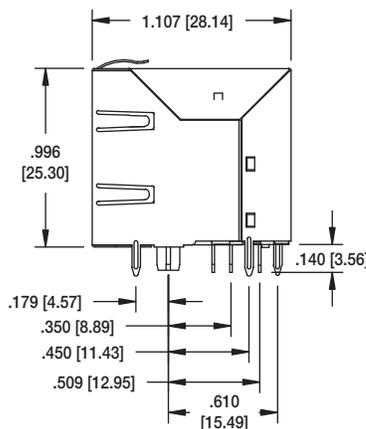
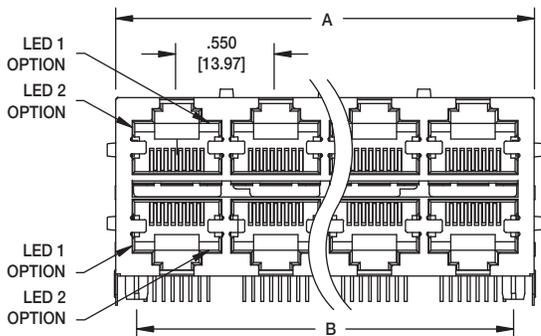
Drawing shown with metal shield, panel ground tabs, LEDs and magnetics option

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

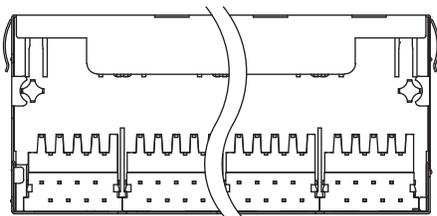


Recommended PCB Layout



TYPE J
STACKED

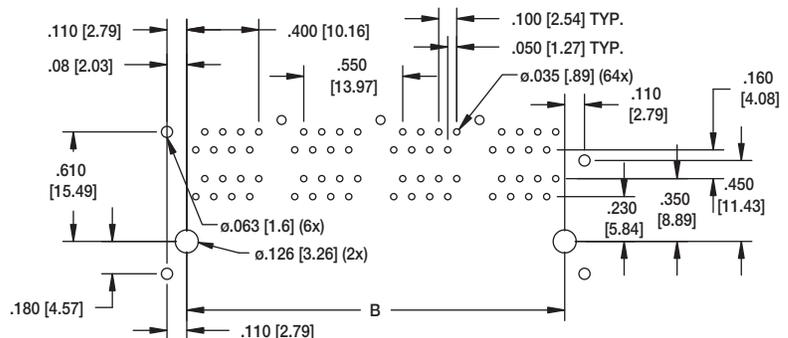
DIMENSIONS		
PORTS	A	B
2 X 1	.677 [17.20]	.450 [11.43]
2 X 2	1.227 [31.17]	1.00 [25.40]
2 X 4	2.331 [59.22]	2.100 [53.34]
2 X 5	2.876 [73.07]	2.650 [67.31]
2 X 6	3.426 [87.04]	3.200 [81.28]
2 X 8	4.527 [115.00]	4.300 [109.22]



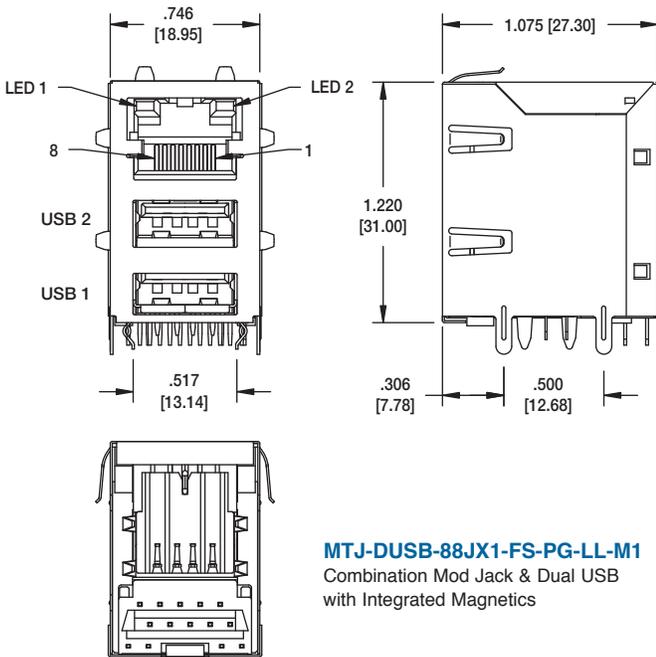
MTJG-8-88JX1-FSE-LD-M1

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

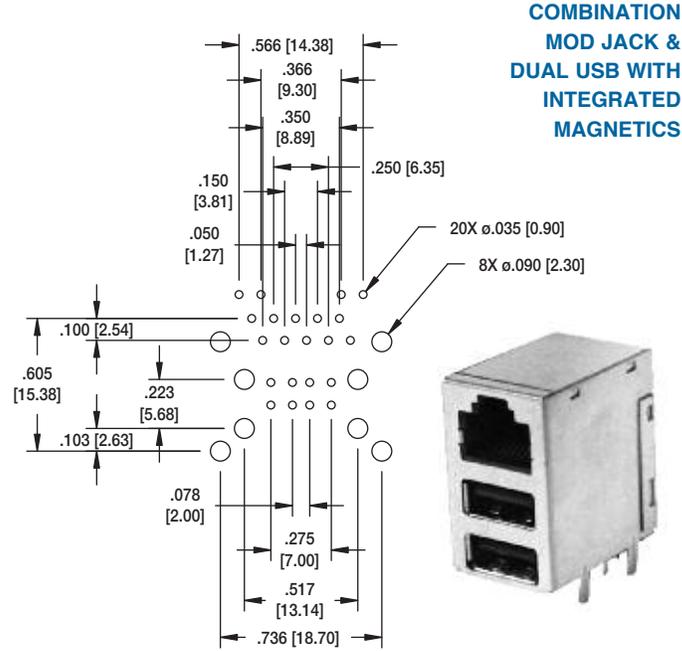
AVAILABLE WITH MAGNETIC TRANSFORMERS: M1, M3, M4, M5, M6, M7, M9, M10, M11, M12 & M13. See pgs. 44-45



Recommended PCB Layout



MTJ-DUSB-88JX1-FS-PG-LL-M1
Combination Mod Jack & Dual USB
with Integrated Magnetics



Recommended PCB Layout

**COMBINATION
MOD JACK &
DUAL USB WITH
INTEGRATED
MAGNETICS**



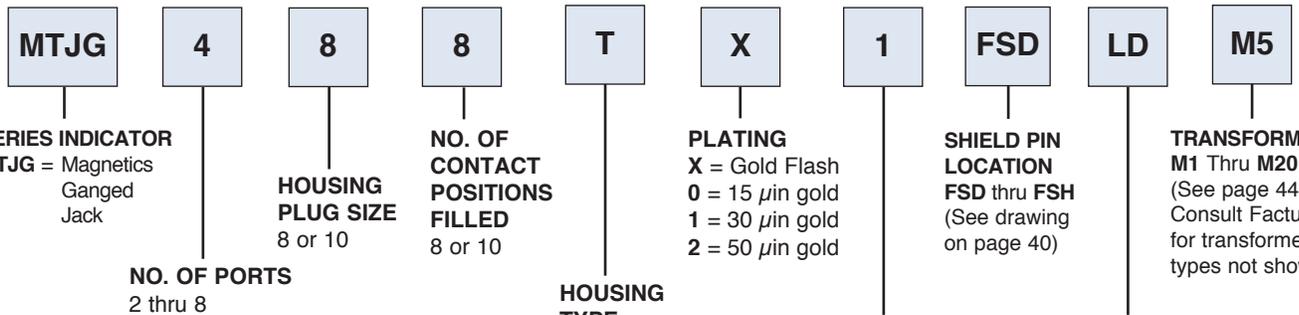
LED CONFIGURATION (Add suffix to end of part no.)		
SUFFIX	LED 1	LED 2
LA	YELLOW	YELLOW
LD	GREEN	GREEN
LG	YELLOW	GREEN
LH	GREEN	YELLOW
LI	ORANGE/GREEN	ORANGE/GREEN
LP	YELLOW/GREEN	YELLOW/GREEN
LQ	YELLOW/GREEN	—
L11	RED	GREEN

OTHER LED COLOR
COMBINATIONS AVAILABLE

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

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



SERIES INDICATOR
MTJG = Magnetics
Ganged
Jack

NO. OF PORTS
2 thru 8

**HOUSING
PLUG SIZE**
8 or 10

**NO. OF
CONTACT
POSITIONS
FILLED**
8 or 10

**HOUSING
TYPE**
T or J

PLATING
X = Gold Flash
0 = 15 μ in gold
1 = 30 μ in gold
2 = 50 μ in gold

**BODY
COLOR**
1 = Black

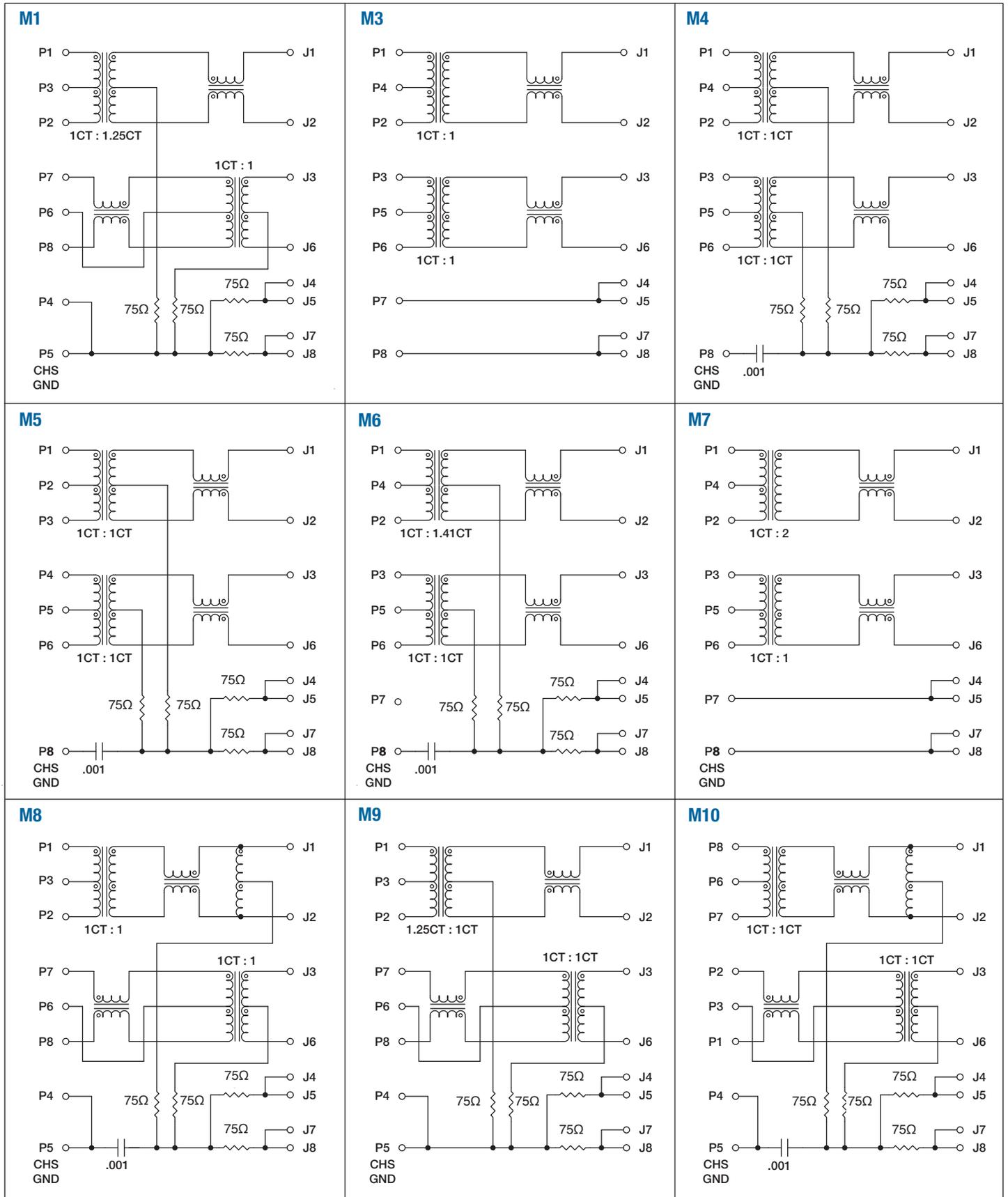
**SHIELD PIN
LOCATION**
FSD thru FSH
(See drawing
on page 40)

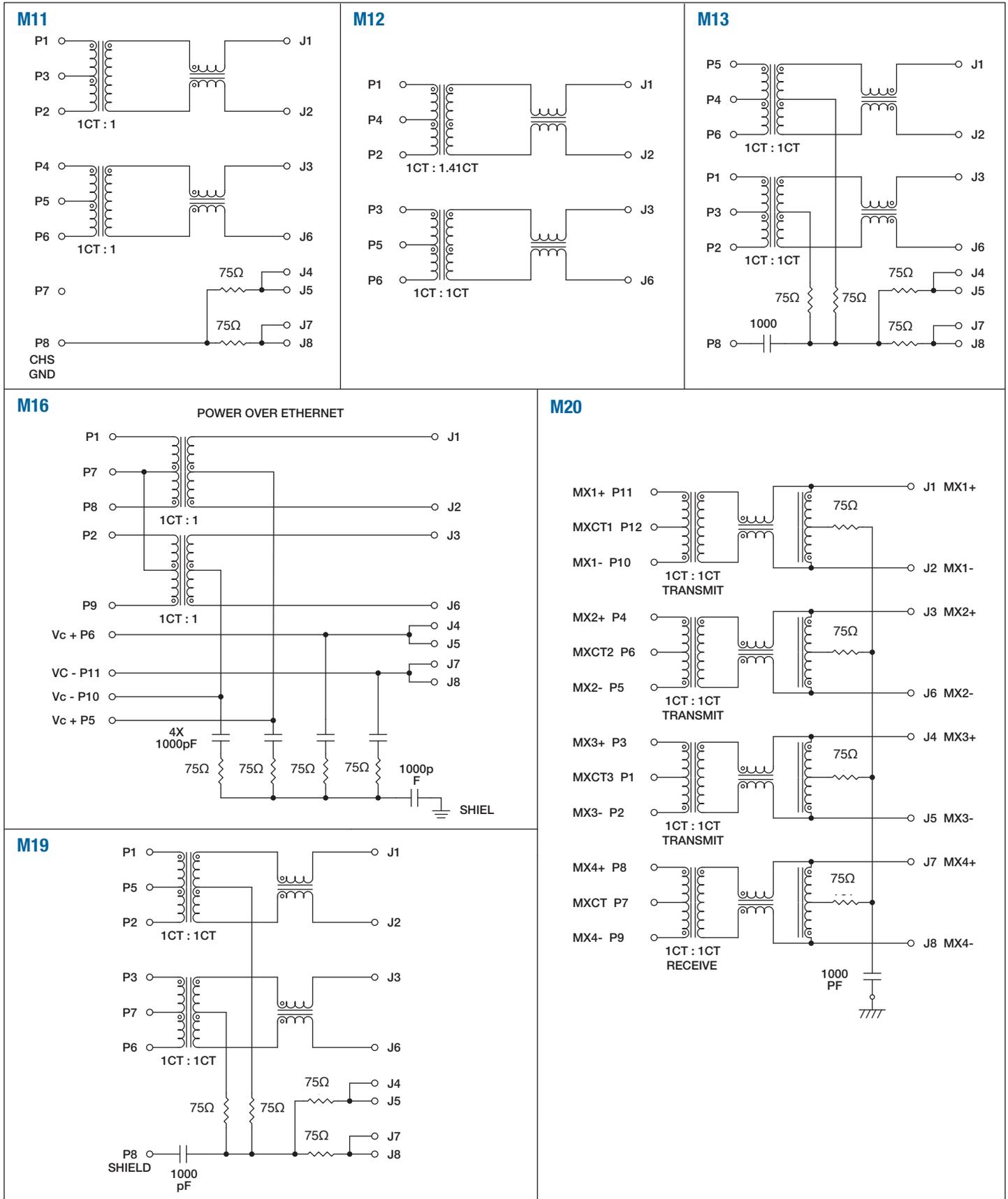
LED
LX = Led Color
RLX = Led with Resistor

TRANSFORMER
M1 Thru M20
(See page 44-45)
Consult Factory
for transformer
types not shown

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:

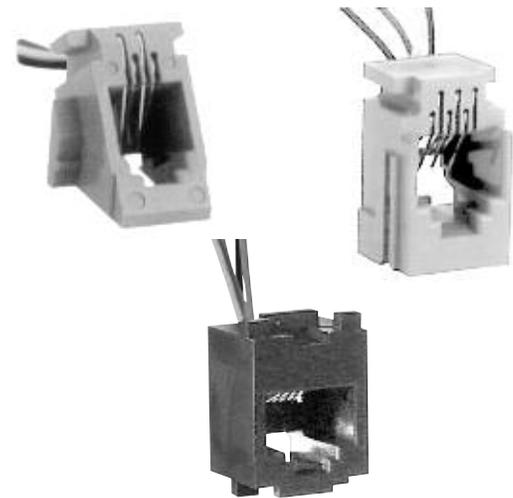
Operating temperature: -40°C to +85°C

PACKAGING:

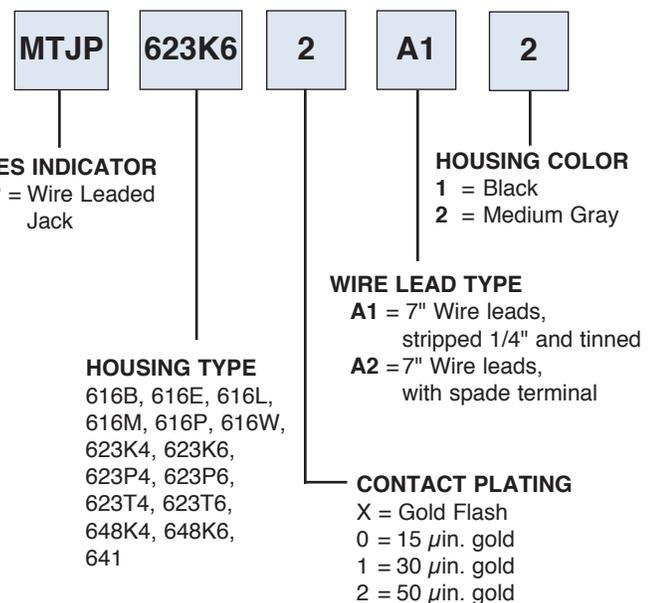
Anti-ESD plastic bags

APPROVALS AND CERTIFICATIONS:

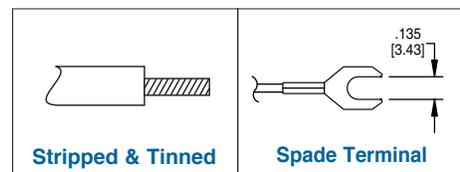
UL Recognized & CSA Certified, File no. E224049



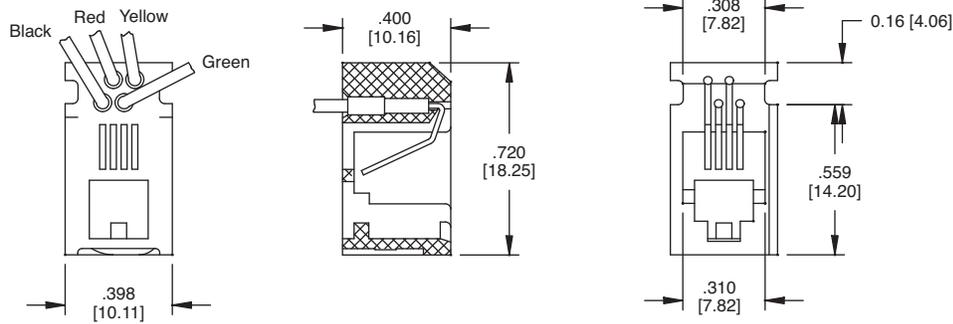
**ORDERING INFORMATION
WIRE LEADED JACKS**



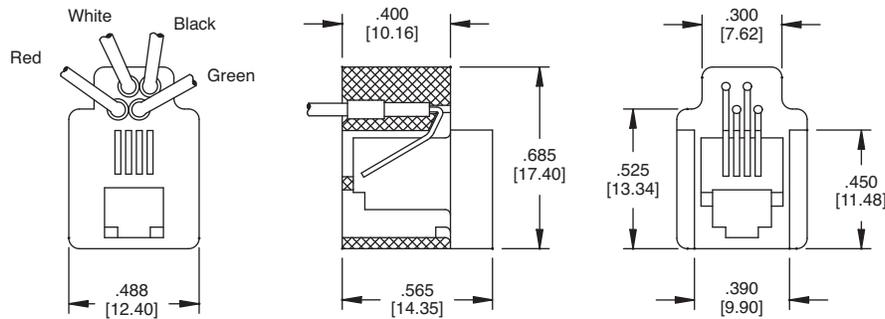
Wire Lead Options



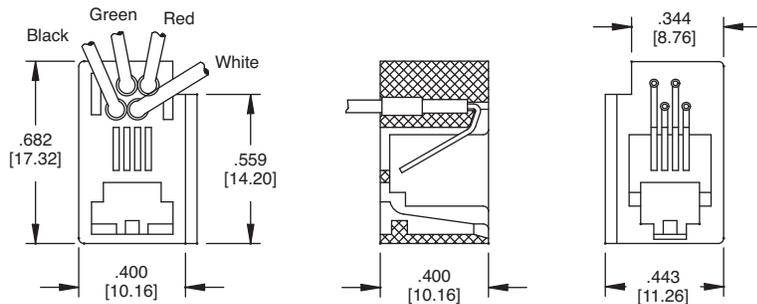
MTJP-616L



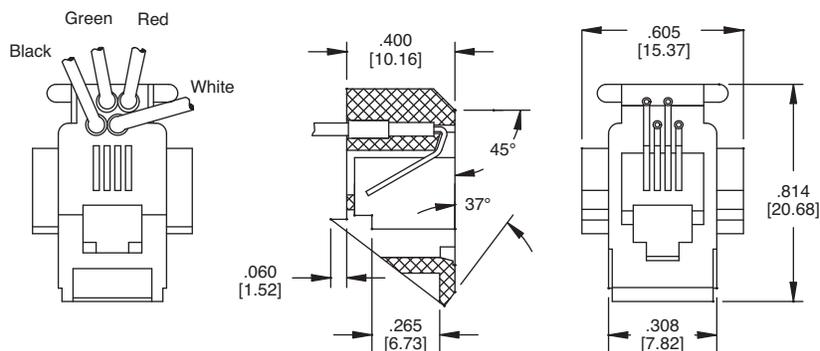
MTJP-616M



MTJP-616E



MTJP-616W



MTJP-623K4
MTJP-623K6

MTJP-623P4
MTJP-623P6

MTJP-648K4
MTJP-648K6

MTJP-641
MTJP-641

ORDERING INFORMATION

MTJC

SERIES INDICATOR
MTJC = Modular Jack
 Coupler

8

HOUSING SIZE = 8

6

POSITIONS FILLED
 4, 6, or 8

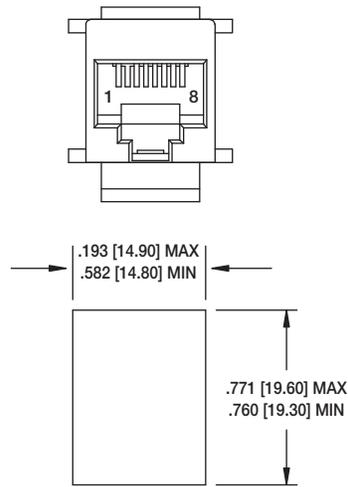
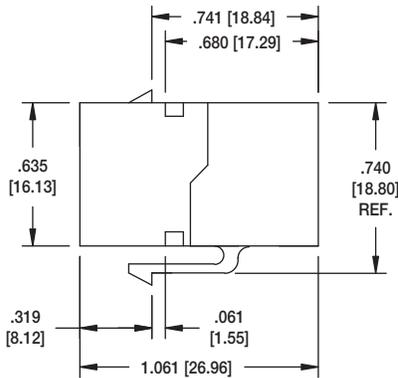
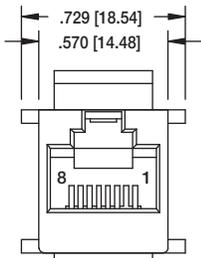
0

PLATING
X = Gold Flash
0 = 15 μ in gold
1 = 30 μ in gold
2 = 50 μ in gold

B

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



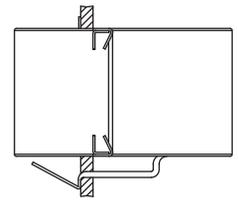
MTJC-88XB
PLASTIC HOUSING



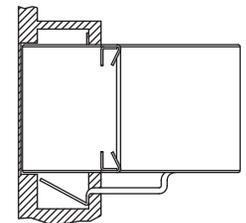
MTJC-88XBIV

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

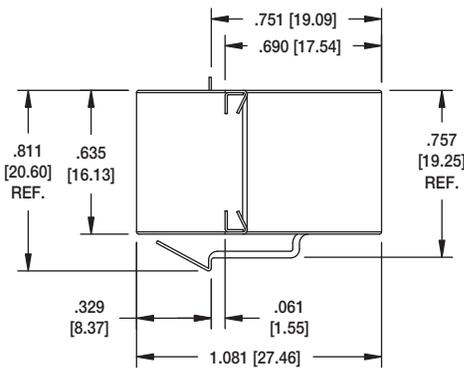
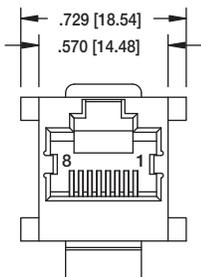
MTJC Couplers can be used in either of the following mounting applications



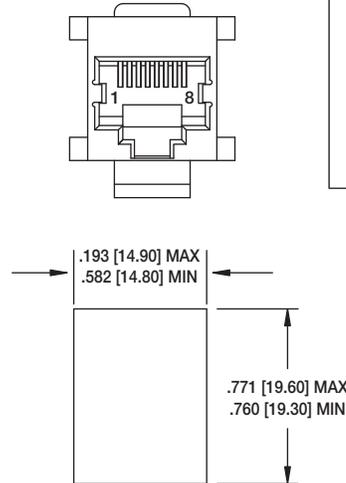
Single Wall Plate Mounting



Double Wall Plate Mounting



MTJC-88XB-S
METAL SHIELDED



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



MTJC-88XB-S