

Adam Technologies, Inc.

INTRODUCTION:

Adam Tech MTJ series Modular Telephone 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 telephone 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:

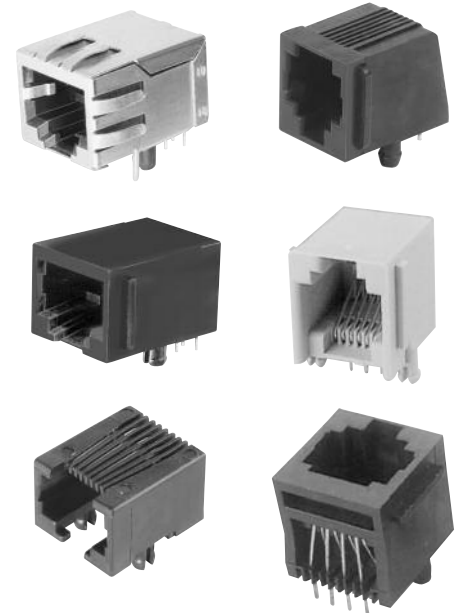
- Operating temperature: -40°C to +70°C
- Soldering process temperature:
 - Standard insulator: 235°C
 - Hi-Temp insulator: 260C

PACKAGING:

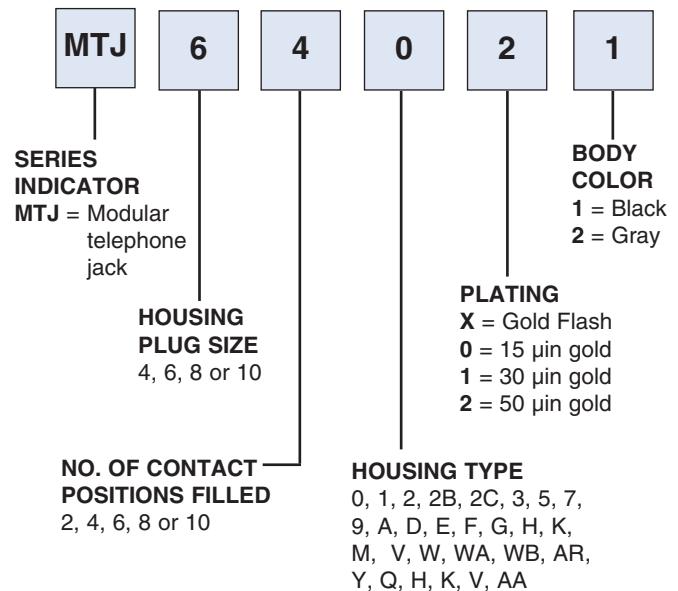
Anti-ESD plastic trays

SAFETY AGENCY APPROVALS:

UL Recognized E224049



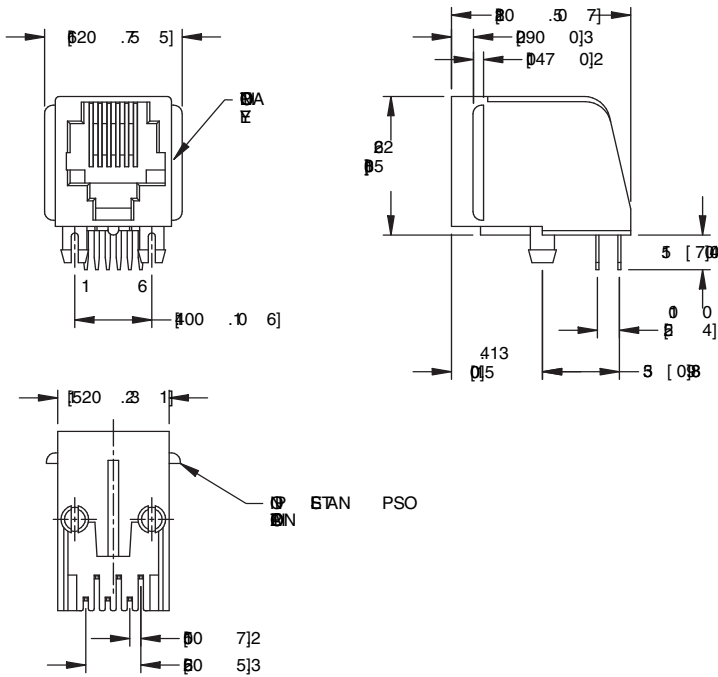
ORDERING INFORMATION



OPTIONS:

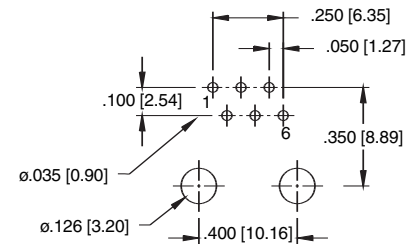
- Add designator(s) to end of part number
 - S = Face shielded jack (Body type 0 only)
 - FSX = Full metal shield (Use FSA, FSB, FSD, FSE)
 - SMT = Surface mount tails, housings 0, 5, 9, G & W with Hi-Temp insulator
 - N = No panel stops
 - K = Keyed telephone jack
 - HT = Hi-Temp insulator for Hi-Temp 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



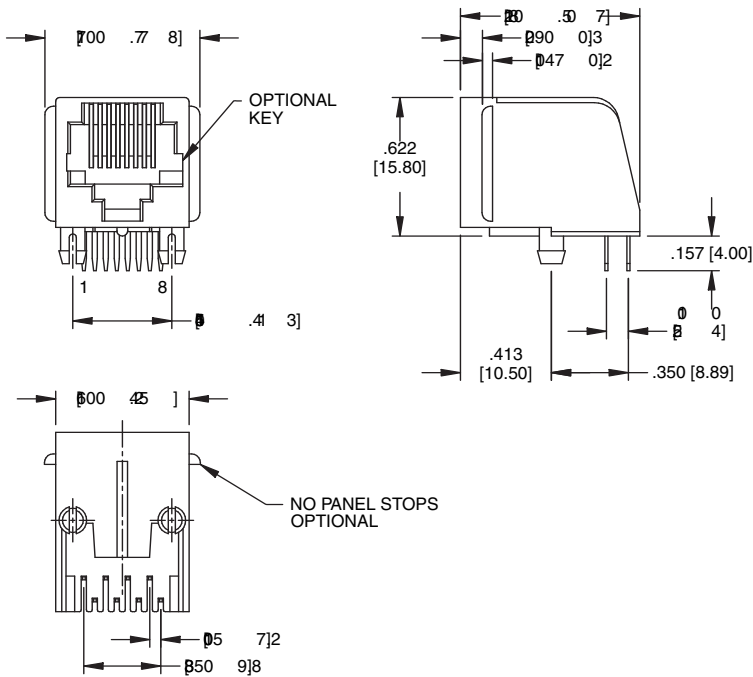
MTJ-661X1

[Ordering Information pg. 9](#)



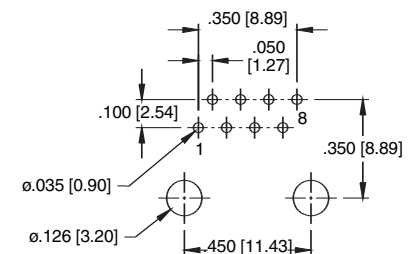
[Recommended PCB Layout](#)

TYPE 1
8P8C



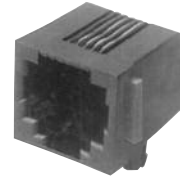
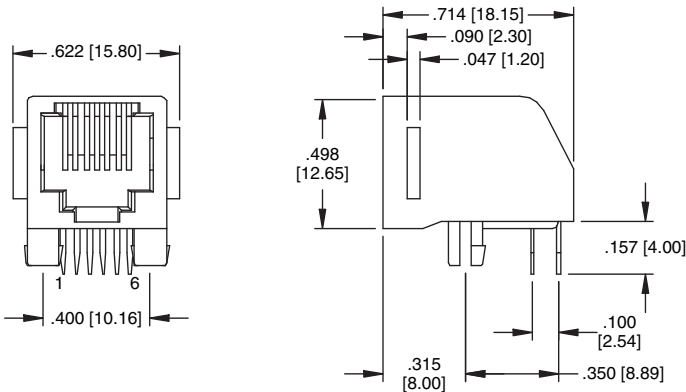
MTJ-881X1

[Ordering Information pg. 9](#)



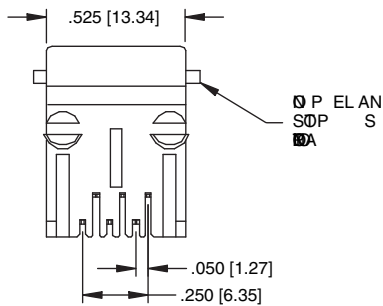
[Recommended PCB Layout](#)

TYPE 0
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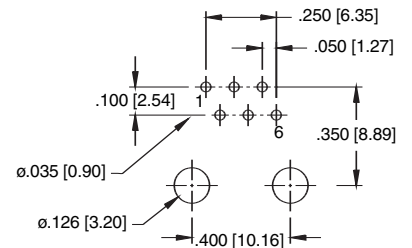


MTJ-660X1

[Ordering Information pg. 9](#)

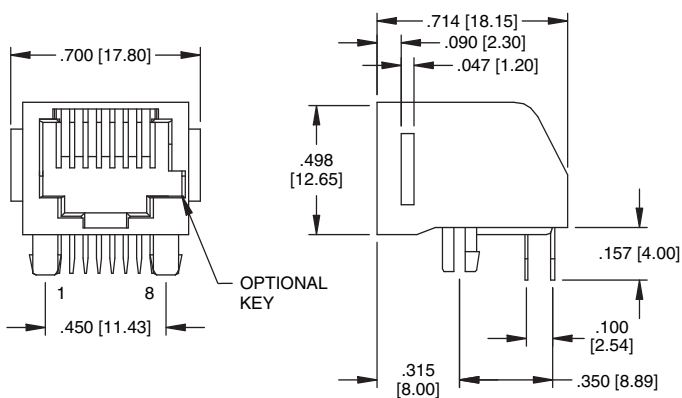


Face Shield Option



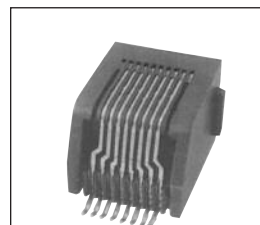
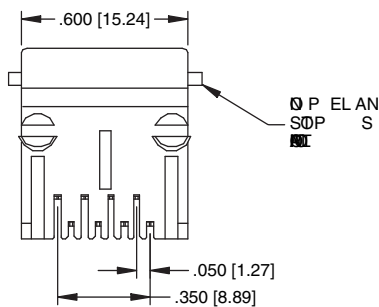
Recommended PCB Layout

TYPE 0
8P8C

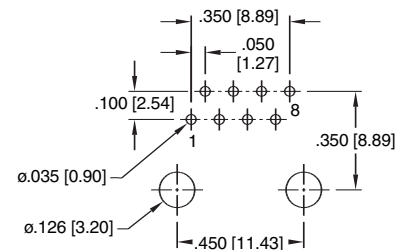


MTJ-880X1

[Ordering Information pg. 9](#)



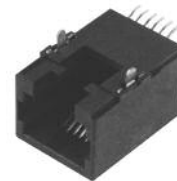
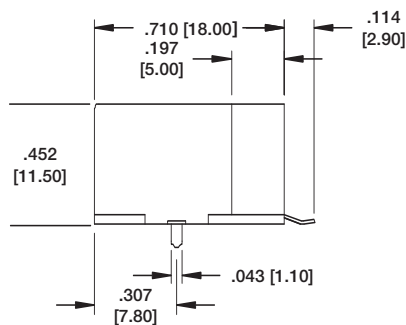
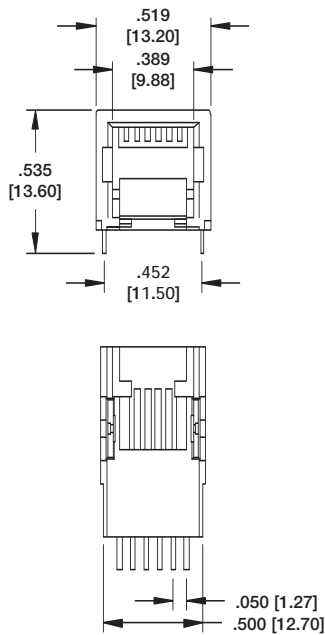
SMT Option



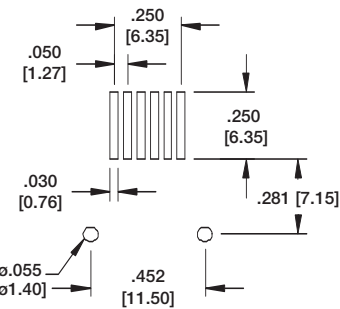
Recommended PCB Layout

Ordering Information pg. 9

TYPE Y
6P6C
6P4C

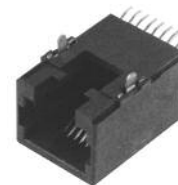
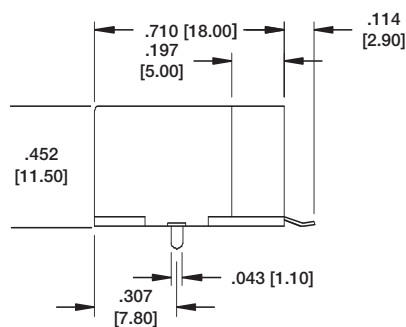
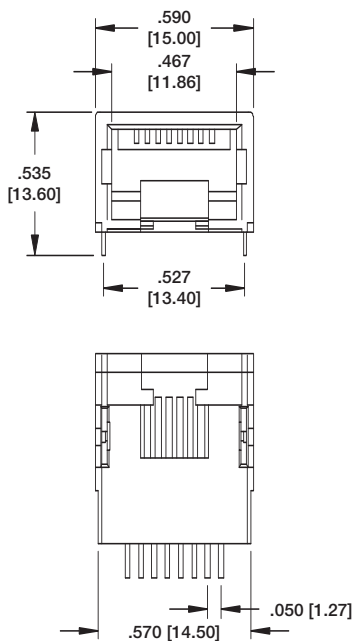


MTJ-66YX1

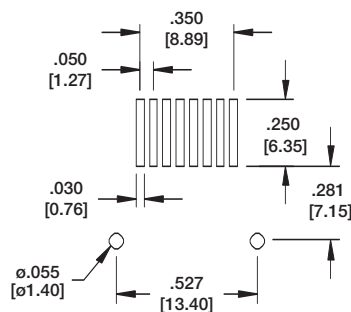


Recommended PCB Layout

TYPE Y
8P8C



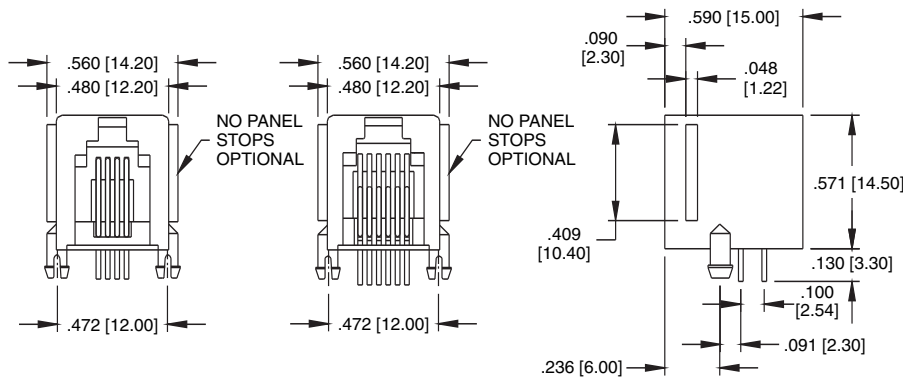
MTJ-88YX1



Recommended PCB Layout

Ordering Information pg. 9

TYPE 2
4P4C
6P6C
6P4C

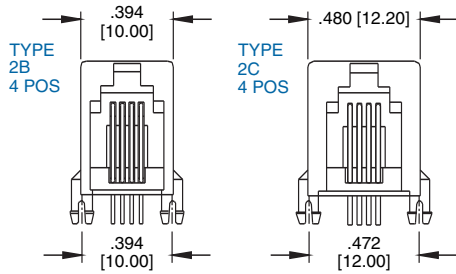


MTJ-662X2



MTJ-442X2

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



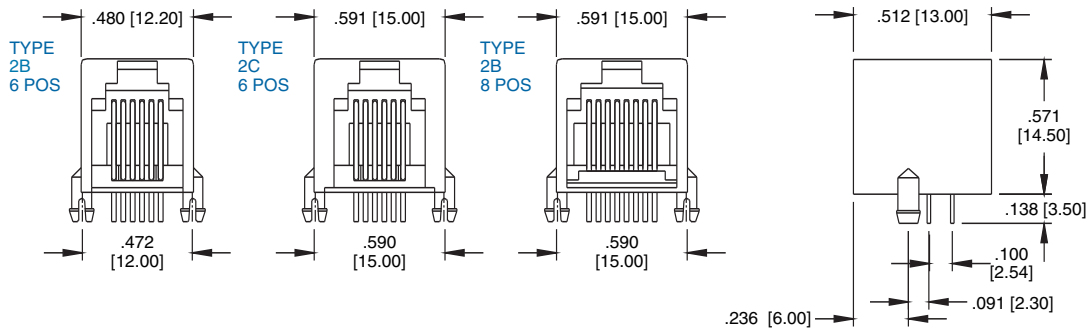
MTJ-442BX2



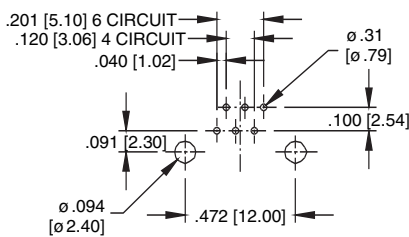
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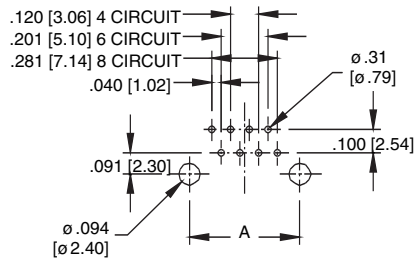
MTJ-882BX1



TYPE 2



TYPE 2B & 2C



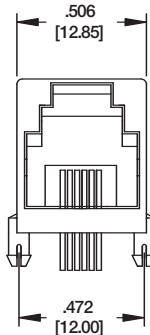
Recommended PCB Layout

| 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

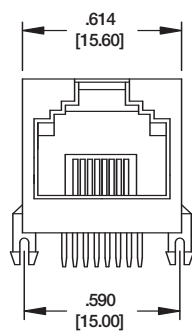
**TYPE 2B
SHIELDED**
6P6C
6P4C
8P8C

MTJ-662BX1-FS

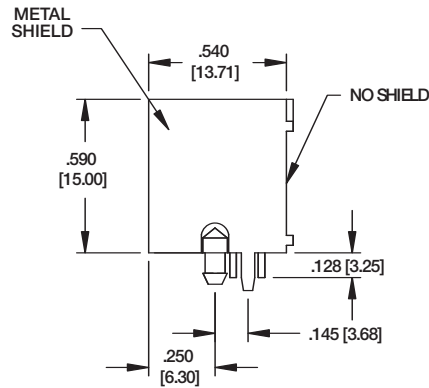


**6 POS
2B SHIELDED**

MTJ-882BX1-FS



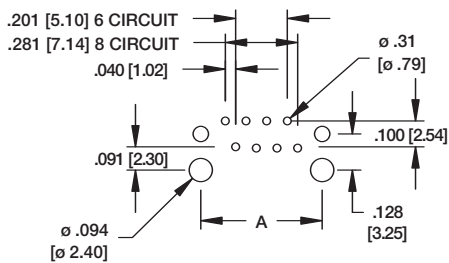
**8 POS
2B SHIELDED**



MTJ-662BX1-FS



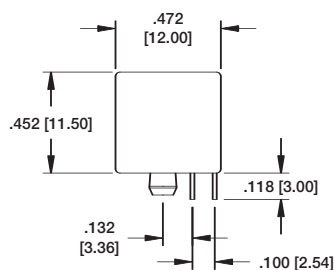
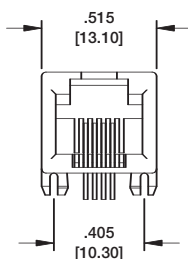
MTJ-882BX1-FS



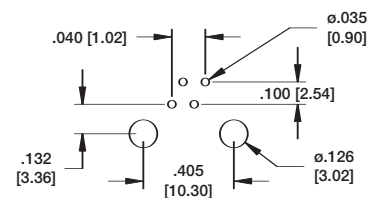
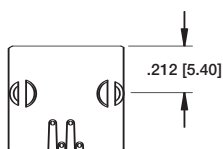
Recommended PCB Layout

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

**TYPE Q
COMPACT JACK
4P4C**



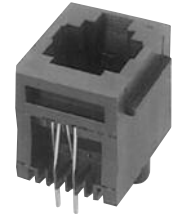
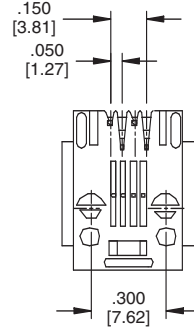
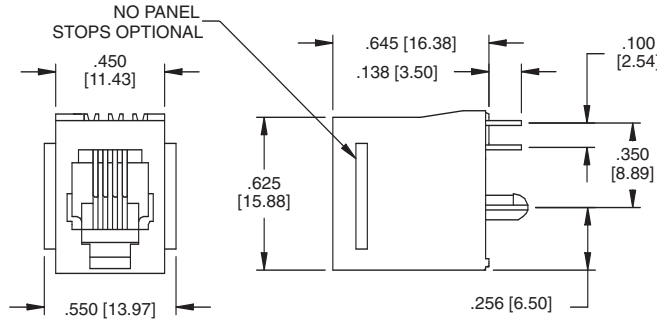
MTJ-44QX1



Recommended PCB Layout

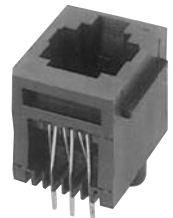
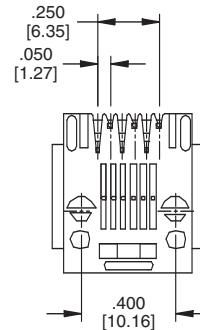
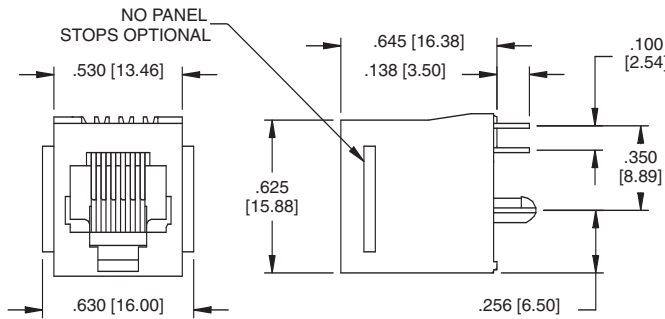
Ordering Information pg. 9

TYPE 3
4P4C



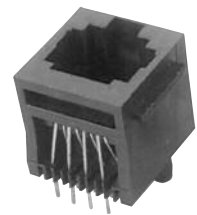
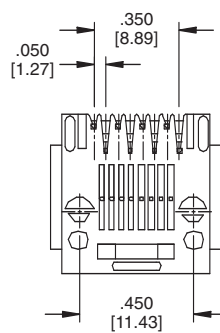
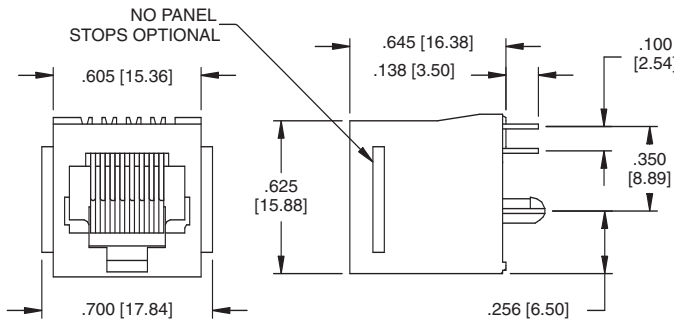
MTJ-443X1

TYPE 3
6P4C
6P6C



MTJ-663X1

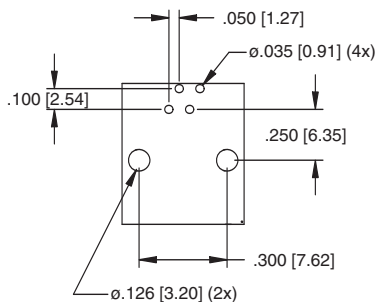
TYPE 3
8P8C



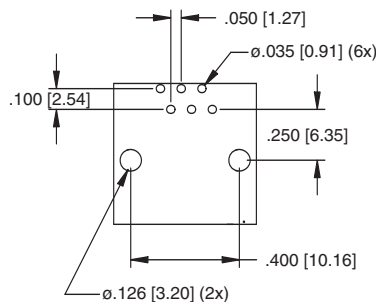
MTJ-883X1

Recommended PCB Layout

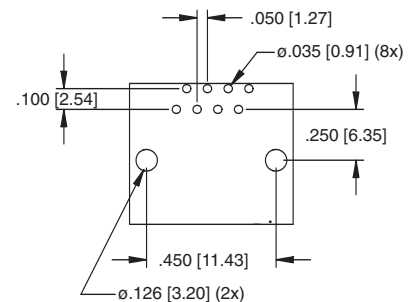
4p4c



6p4c
6p6c

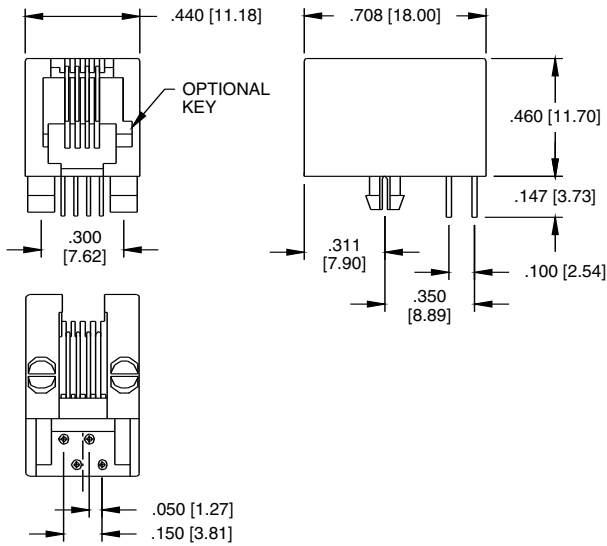


8p8c



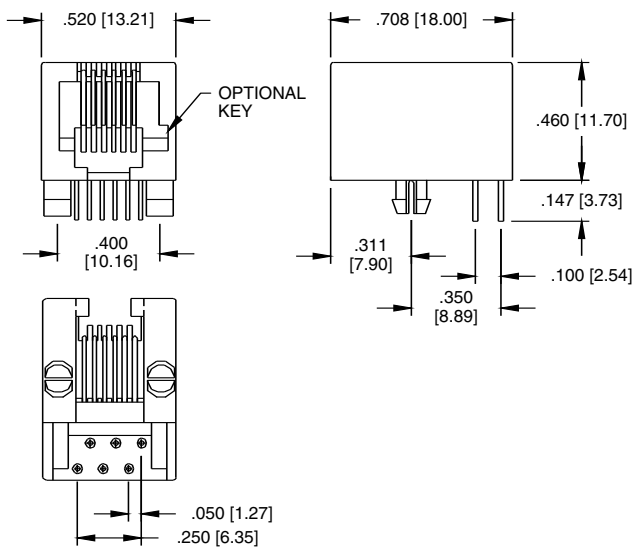
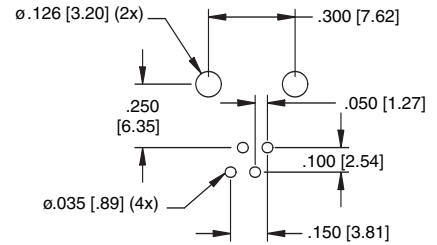
Ordering Information pg. 9

TYPE 5
4P4C



MTJ-445X1

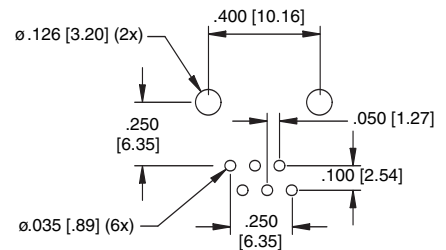
Recommended PCB Layout



MTJ-665X1

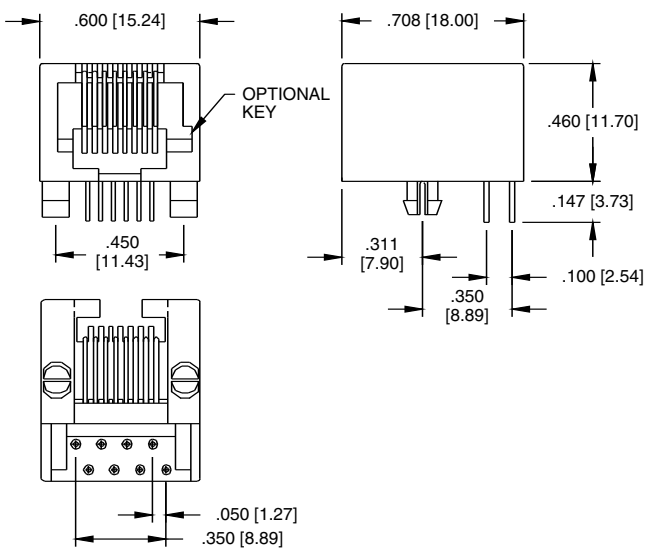
TYPE 5
6P4C
6P6C

Recommended PCB Layout



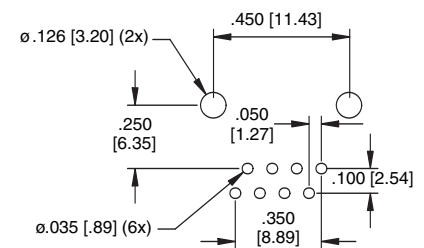
TYPE 5
8P8C

SMT Option



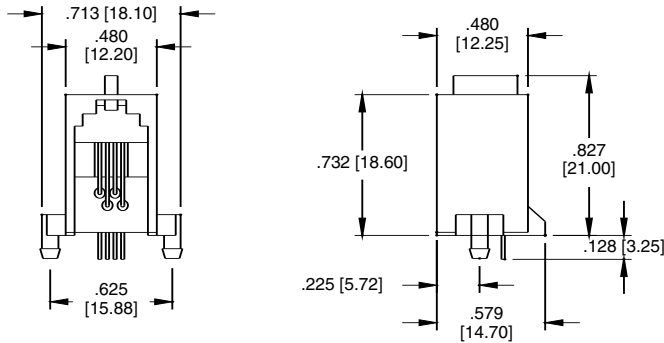
MTJ-885X1

Recommended PCB Layout



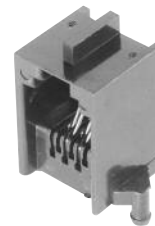
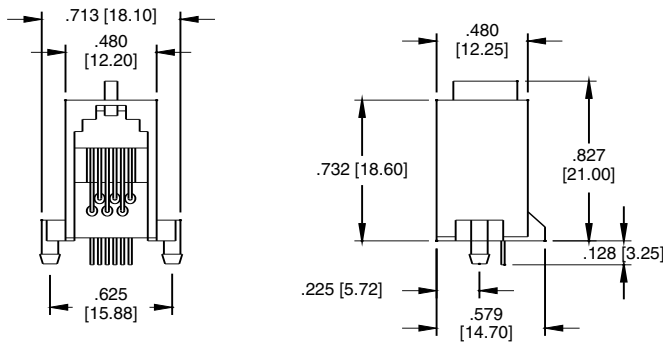
Ordering Information pg. 9

TYPE 7
4P4C



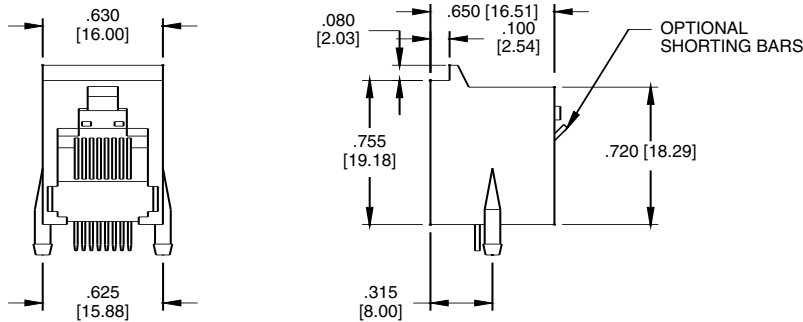
MTJ-447X2

TYPE 7
6P4C
6P6C



MTJ-647X2

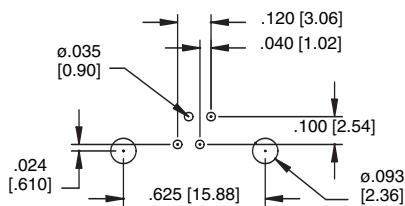
TYPE 7
8P8C



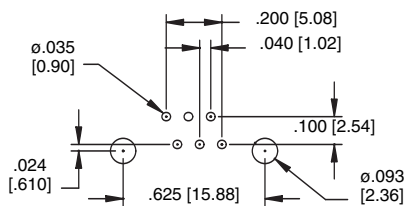
MTJ-887X2

Recommended PCB Layout

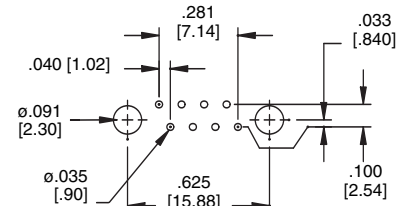
4p4c



6p4c
6p6c



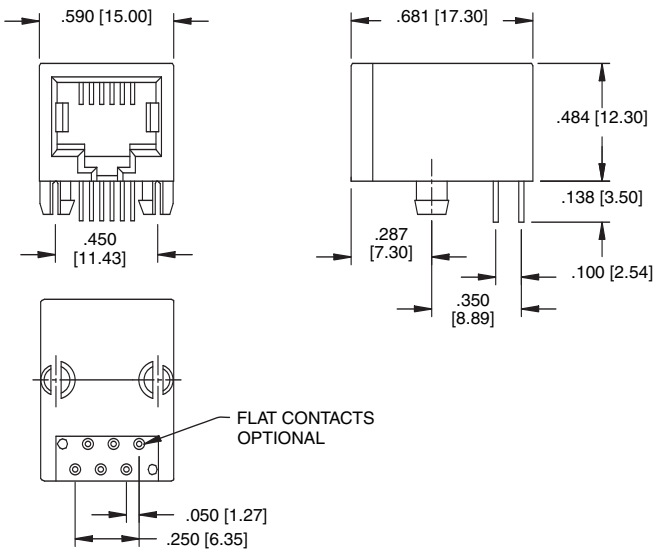
8p8c



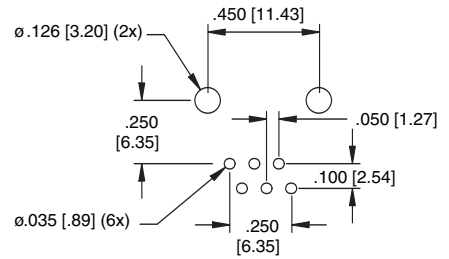
Ordering Information pg. 9

TYPE 9

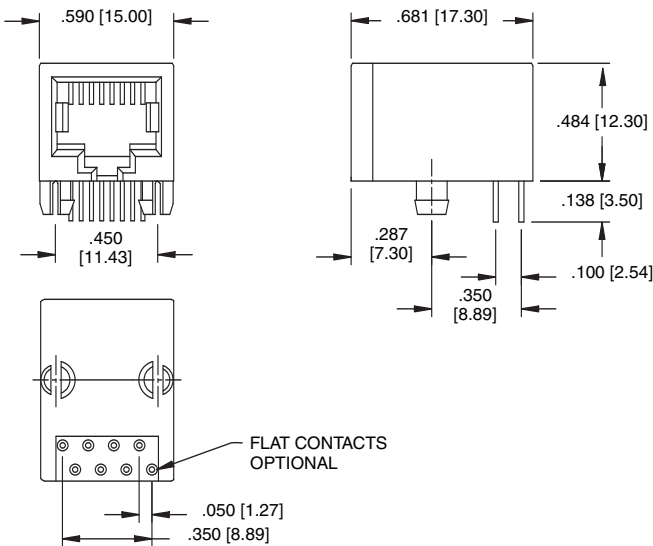
6P4C
6P6C



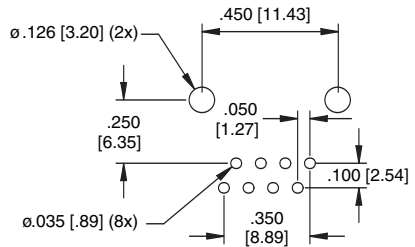
MTJ-669X1



Recommended PCB Layout

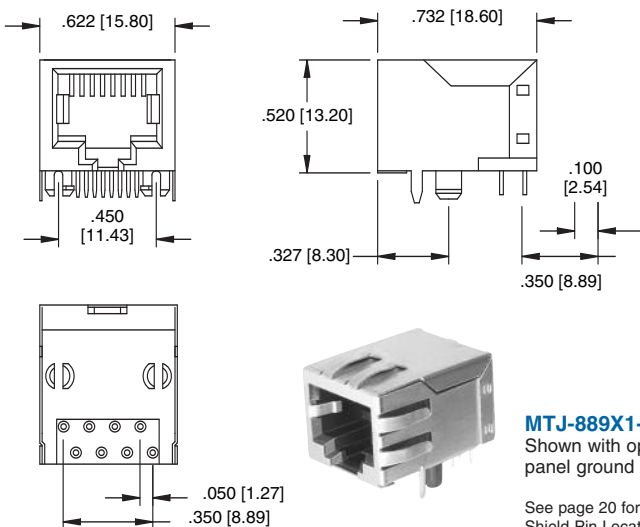


MTJ-889X1



Recommended PCB Layout

TYPE 9
8P8C
SHIELDED



MTJ-889X1-FSE

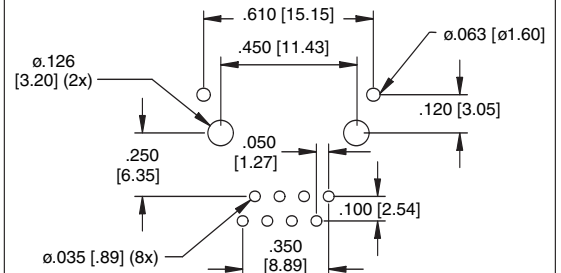
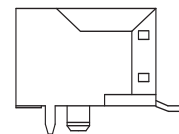


MTJ-889X1-FSE-PG

Shown with optional panel ground tabs

See page 20 for other Shield Pin Location Options

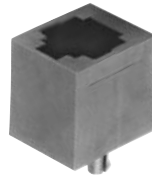
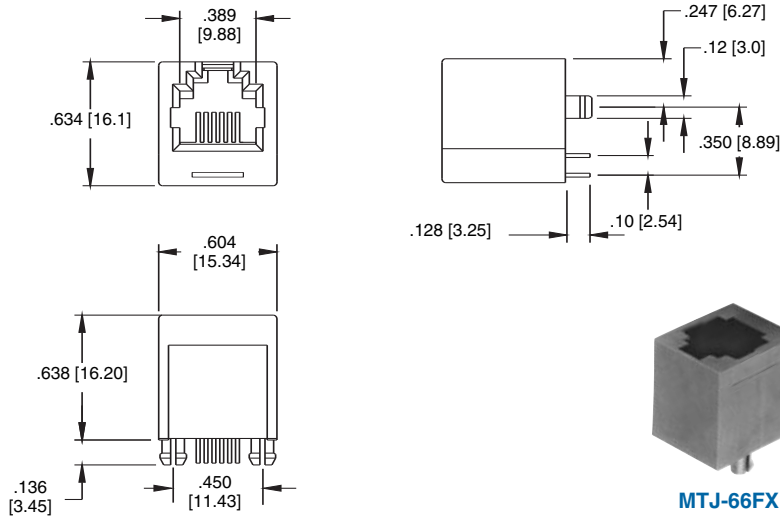
SMT Option



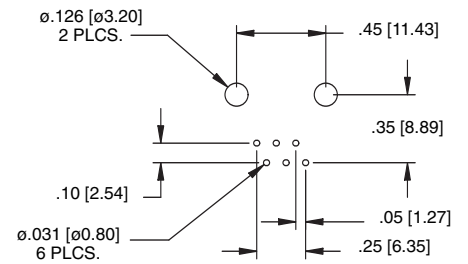
Recommended PCB Layout

Ordering Information pg. 9

**TYPE F
6P6C**

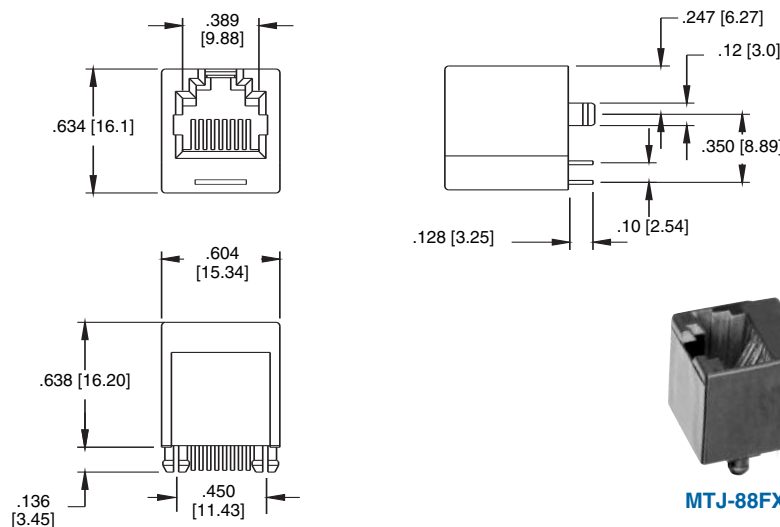


MTJ-66FX1

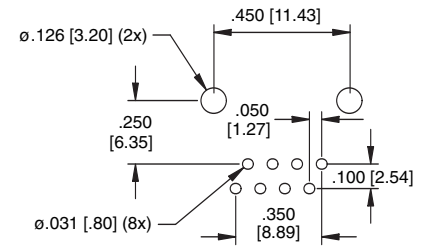


Recommended PCB Layout

**TYPE F
8P8C**

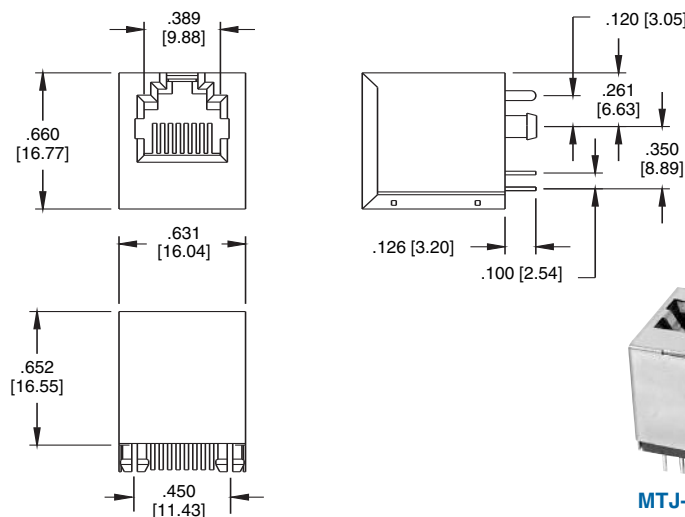


MTJ-88FX1

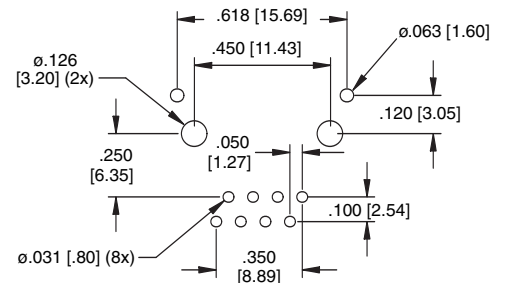


Recommended PCB Layout

**TYPE F
SHIELDED
8P8C**



MTJ-88FX1-FS



Recommended PCB Layout

Ordering Information pg. 9

MTJ-64GX1

TYPE G
6P6C

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

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

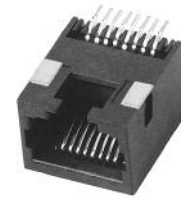
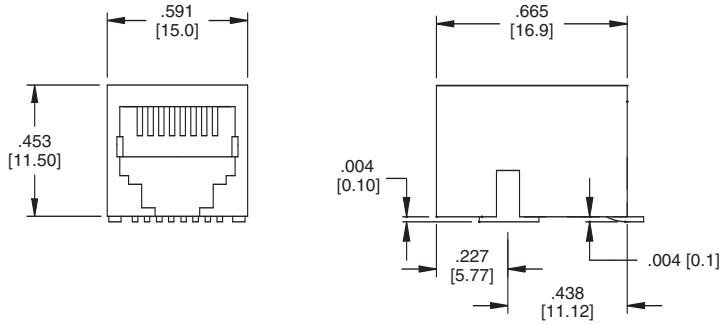
MTJ-88GX1-FSD
Shown with Full Metal Shield option

Recommended PCB Layout (FSD)

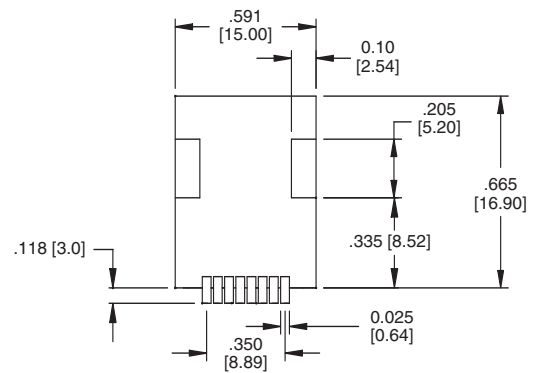
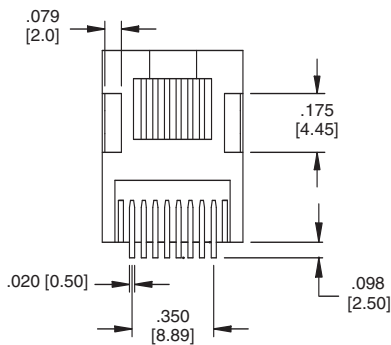
PCB Layout (FSA, FSB, & FSE)

Ordering Information pg. 9

TYPE WA
SMT TABS IN
8P8C

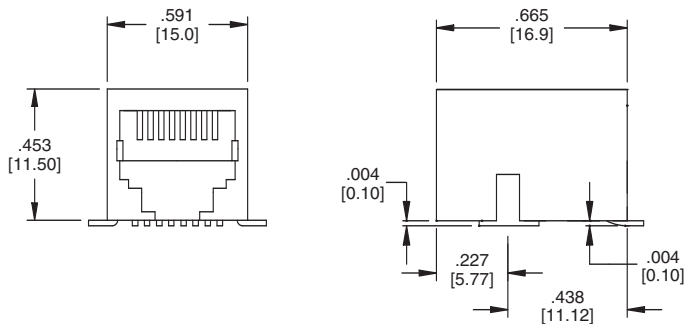


MTJ-88WAX1

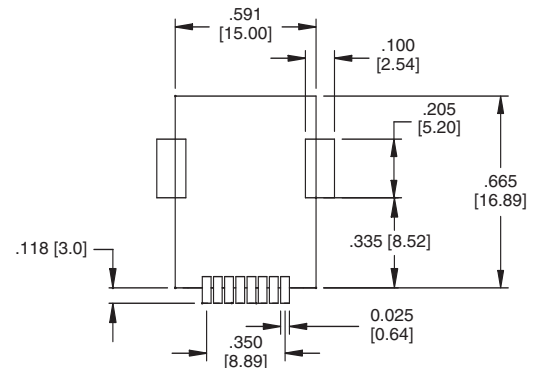
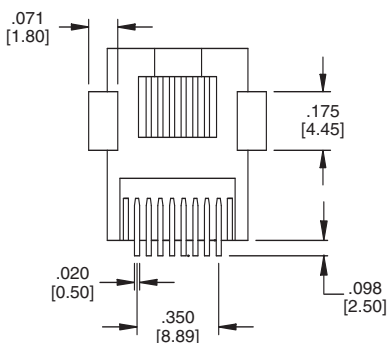


Recommended Solder Pad Layout

TYPE WB
SMT TABS OUT
8P8C



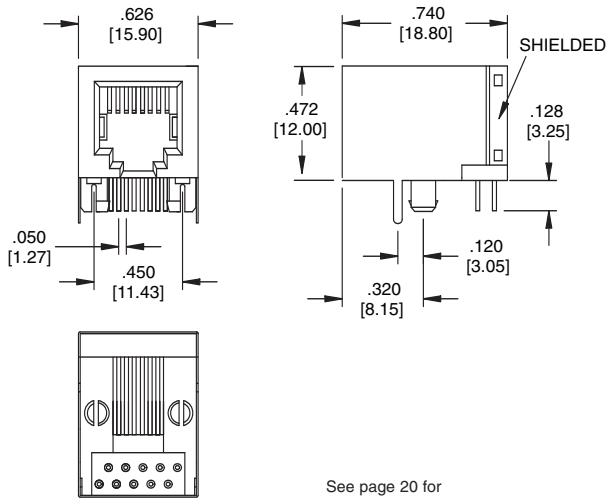
MTJ-88WBX1



Recommended Solder Pad Layout

Ordering Information pg. 9

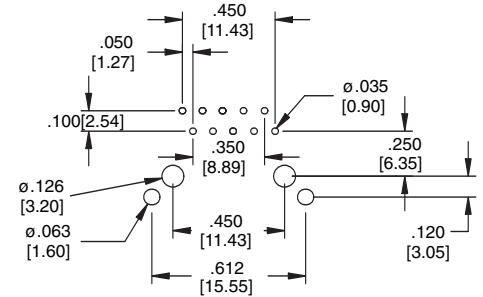
TYPE W
SHIELDED, THRU HOLE
8P8C
10P10C



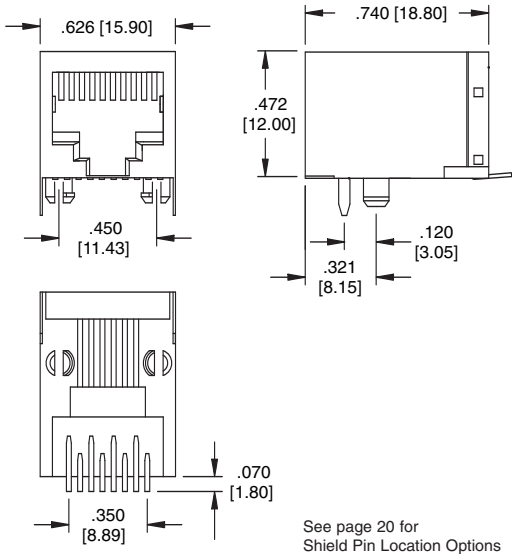
MTJ-88WX1-FSE



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



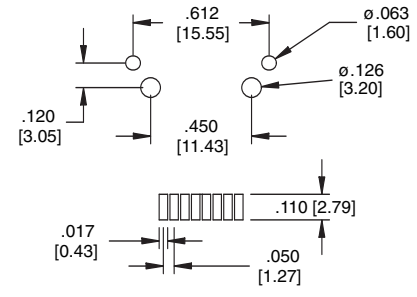
Recommended PCB Layout



MTJ-88WX1-FSE-SMT

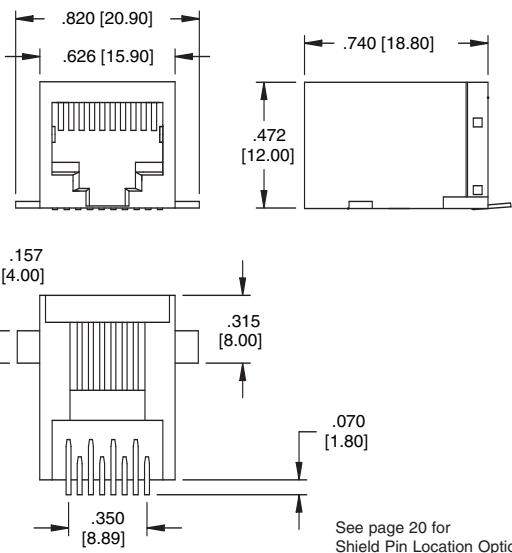


MTJ-88WX1-FSE-SMT-PG
Shown with optional panel ground tabs



Recommended Solder Pad Layout

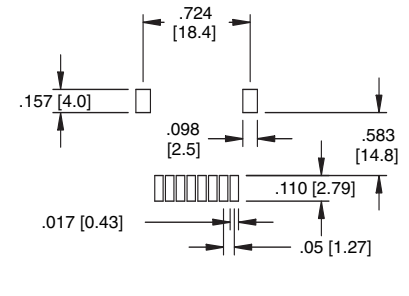
TYPE W
SHIELDED SMT WITH PLASTIC PEG
8P8C



MTJ-88WX1-FS-TSMT



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

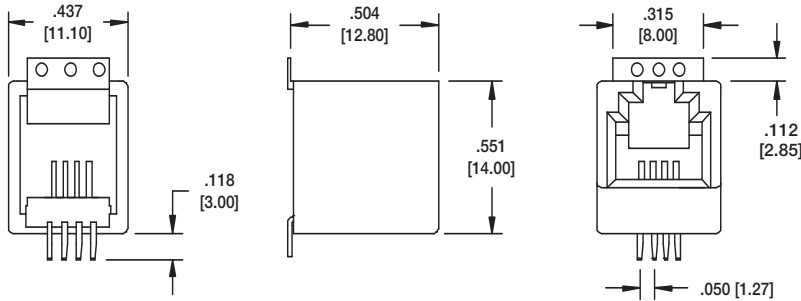


Recommended Solder Pad Layout

TYPE W
SHIELDED TRUE SMT
8P8C

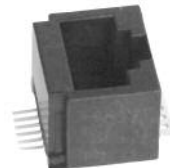
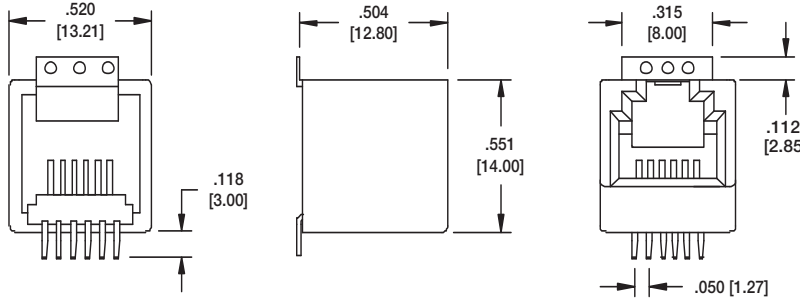
Ordering Information pg. 9

TYPE H
4P4C



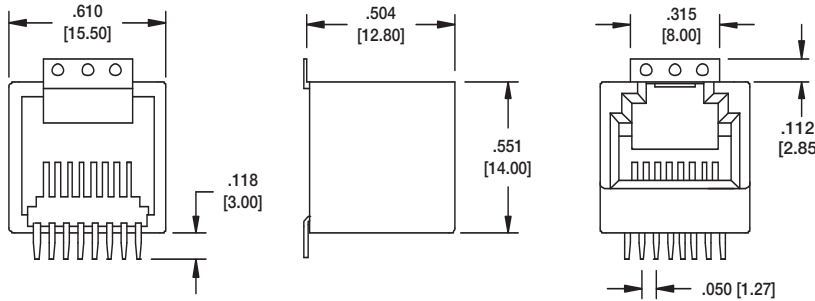
MTJ-44HX1

TYPE H
6P6C



MTJ-66HX1

TYPE H
8P8C



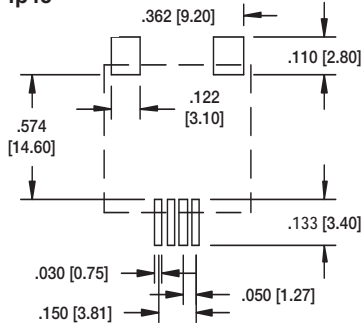
MTJ-88HX1



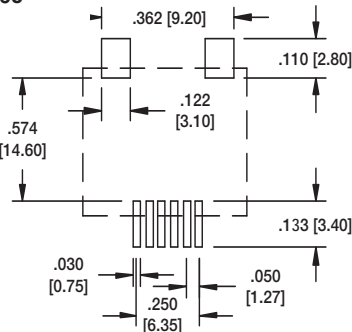
MTJ-88HX1-FS

Recommended PCB Layout

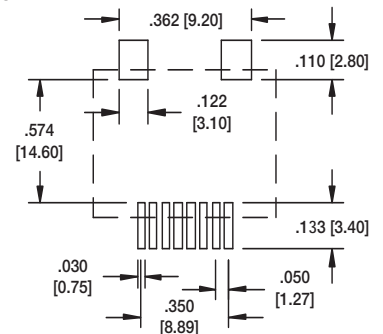
4p4c



6p6c

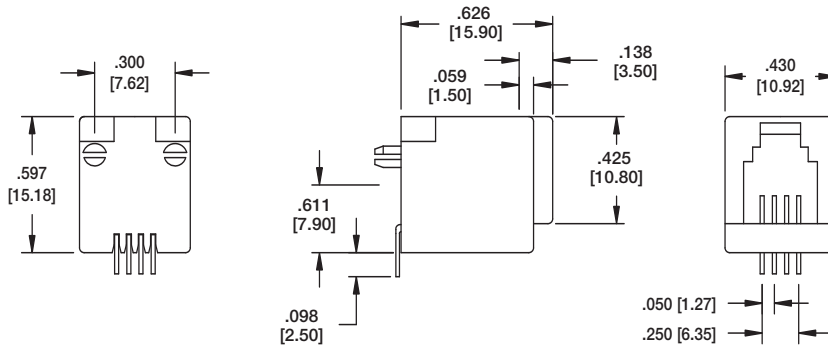


8p8c



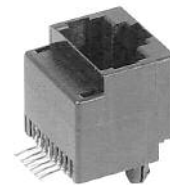
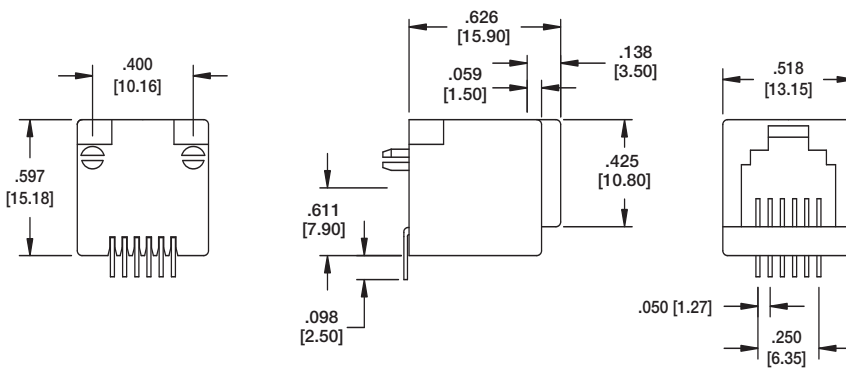
Ordering Information pg. 9

TYPE K
4P4C



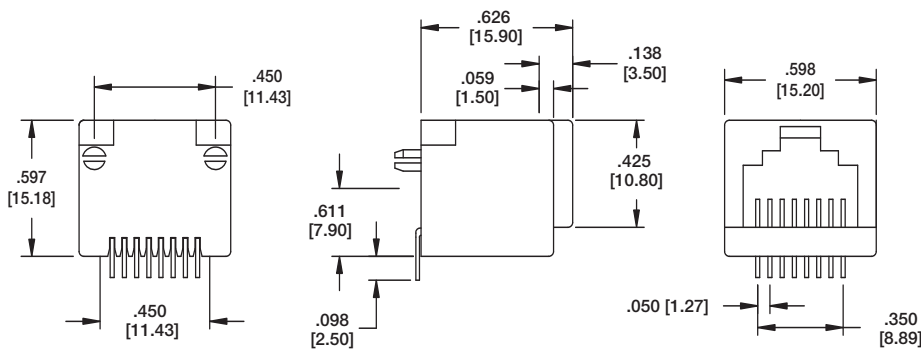
MTJ-44KX1

TYPE K
6P4C
6P6C



MTJ-66KX1

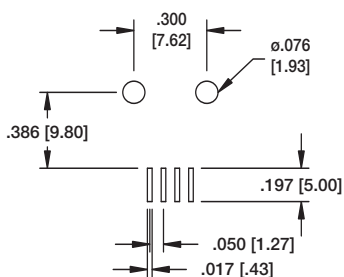
TYPE K
8P8C



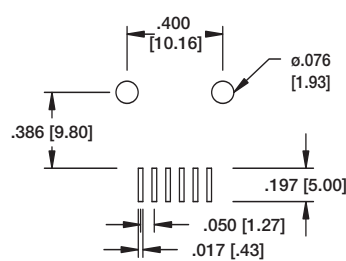
MTJ-88KX1

Recommended PCB Layout

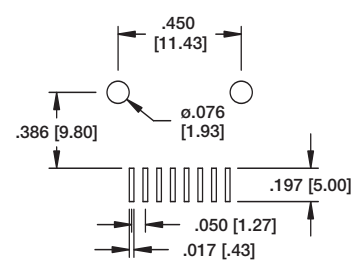
4p4c



6p6c

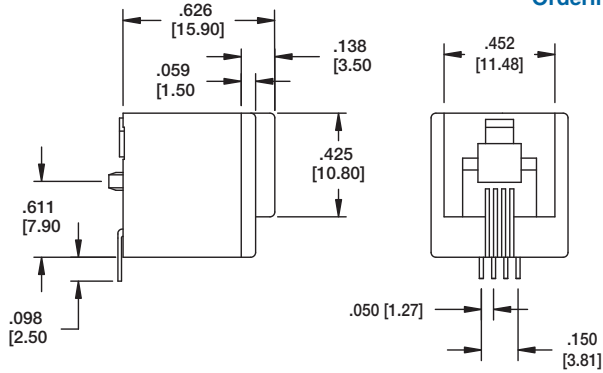
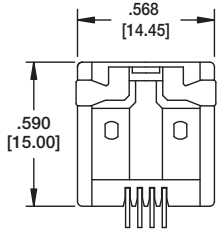


8p8c



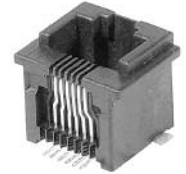
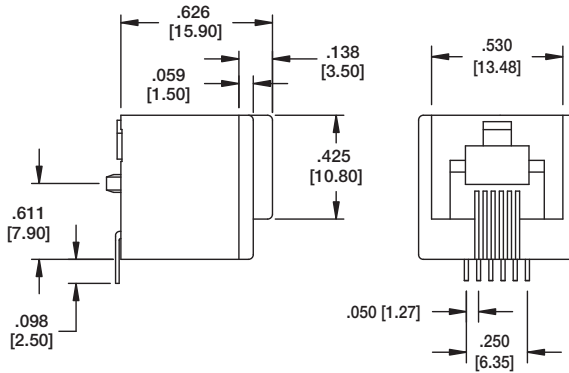
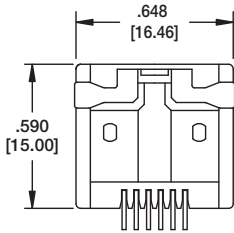
Ordering Information pg. 9

TYPE V
4P4C



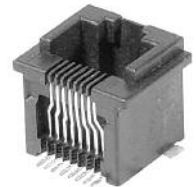
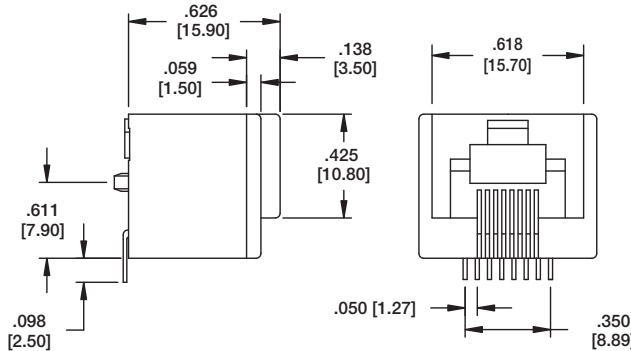
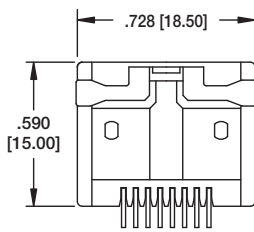
MTJ-44VX1

TYPE V
6P6C
6P4C



MTJ-66VX1

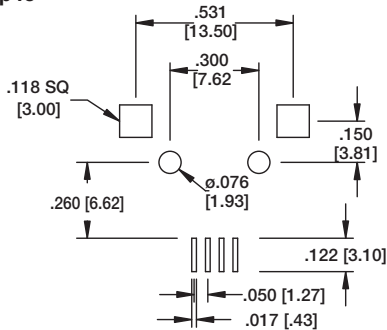
TYPE V
8P8C



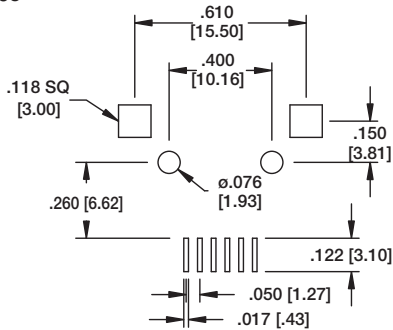
MTJ-88VX1

Recommended PCB Layout

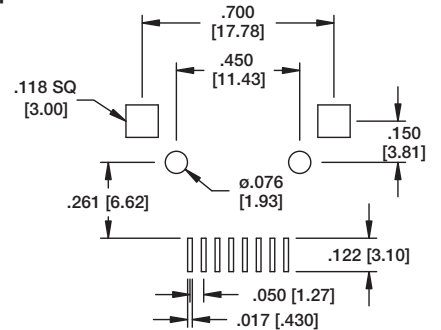
4p4c



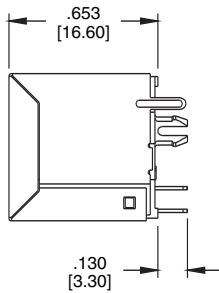
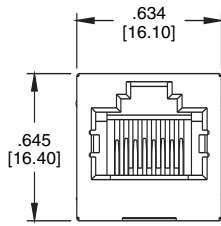
6p6c



8p8c



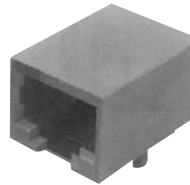
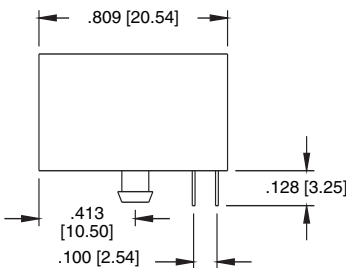
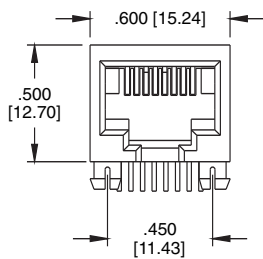
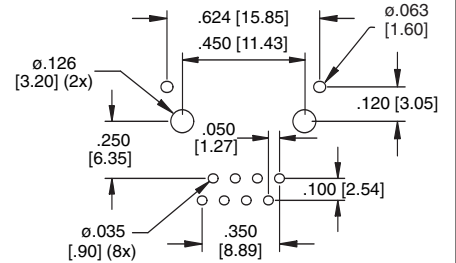
Ordering Information pg. 9



MTJ-88AX1-FSE

TYPE A
CATEGORY 5, TOP ENTRY
8P8C

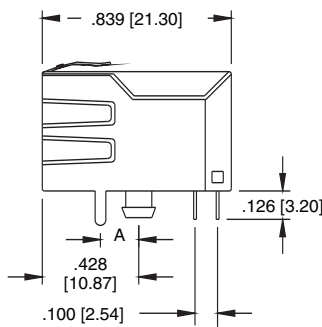
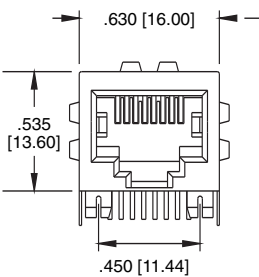
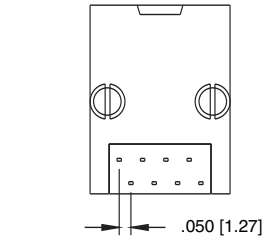
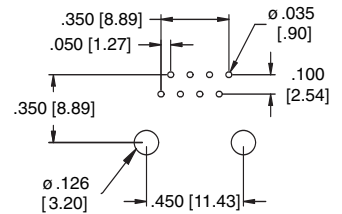
Recommended PCB Layout



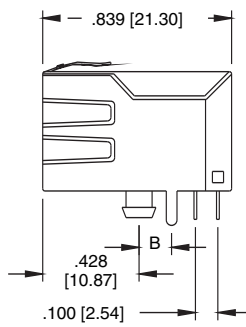
MTJ-88TX1

TYPE T
CATEGORY 5, SIDE ENTRY
8P8C

Recommended PCB Layout



FSA, FSB & FSE

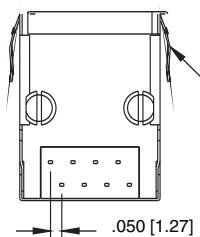


FSD = .120 [3.05]



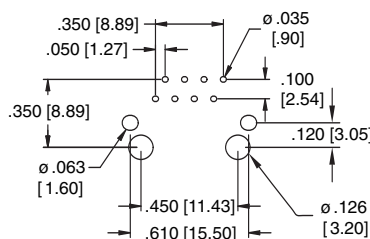
MTJ-88TX1-FSE-PG
Available with or without panel ground tabs

TYPE T
CATEGORY 5, SHIELDED
8P8C

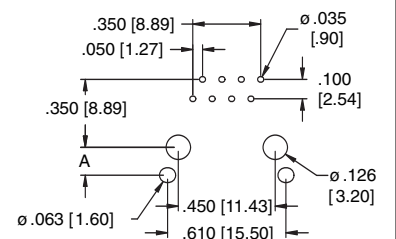


OPTIONAL
PANEL GROUND TABS
SHIELD PIN LOCATION OPTIONS
FSA OPTION: A = .170 [4.32]
FSB OPTION: A = .144 [3.66]
FSE OPTION: A = .120 [3.05]

PCB Layout (FSD)

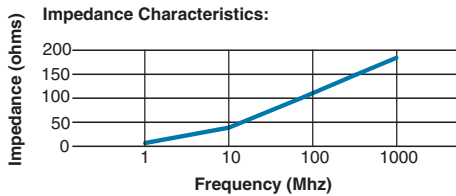


PCB Layout (FSA, FSB & FSE)



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

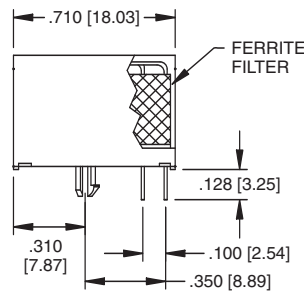
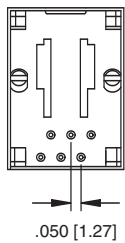
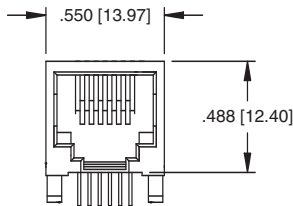


MTJ-88MX1-FSE
Metal Shielded

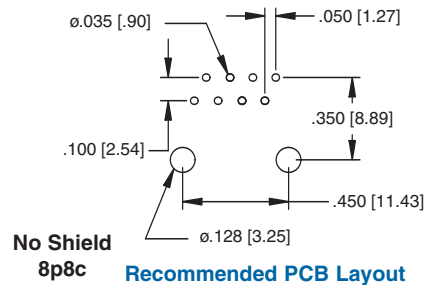
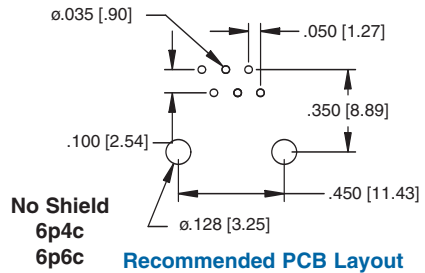


MTJ-88MX1-FSE-PG
Metal Shielded with
panel ground tabs

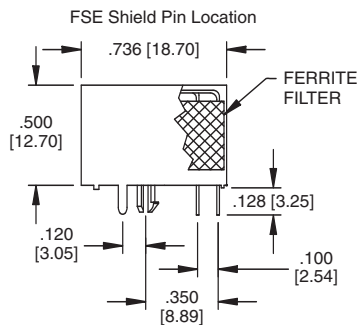
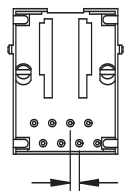
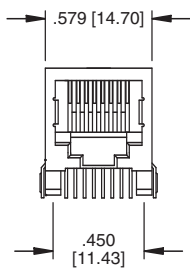
EMI FERRITE FILTERED JACK



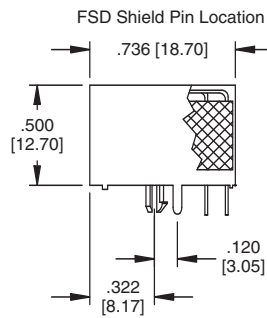
Type M 6P6C 6P4C



EMI FERRITE FILTERED & SHIELDED JACK

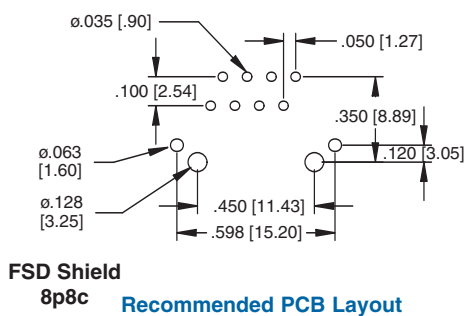
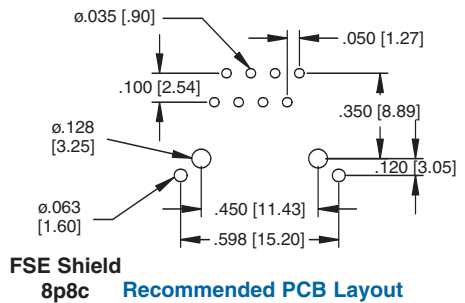


MTJ-88MX1-FSE



MTJ-88MX1-FSD

Type M 8P8C




LED 1 OPTION LED 2 OPTION

SHIELD

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

TYPE AR
LED JACK .531" HEIGHT
TOP TAB & TOP LEDs, THRU HOLE
8P8C




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], .630 [16.00], .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], .171 [4.35], .057 [1.45], .281 [7.14], .031 [0.80], .630 [16.00]

TYPE AA
LED JACK .441" HEIGHT
BOTTOM TAB & BOTTOM LEDs
THRU HOLE
8P8C




MTJ-88AAX1-FS-LG-PG

LED 1 OPTION LED 2 OPTION

SHIELD

Dimensions: .720 [18.30], .620 [15.75], .500 [12.70], .505 [12.83], .610 [15.50], .195 [4.95], .085 [2.16], .230 [5.84], .135 [3.43], .540 [13.72], .020 [0.51], .090 [2.29], .035 [0.90] 12 PLCS, .100 [2.54], .500 [12.70], .230 [5.84], .040 [1.02], .281 [7.14], .128 [3.25]

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



MTJ-88DX1-LG

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

Recommended PCB Layout

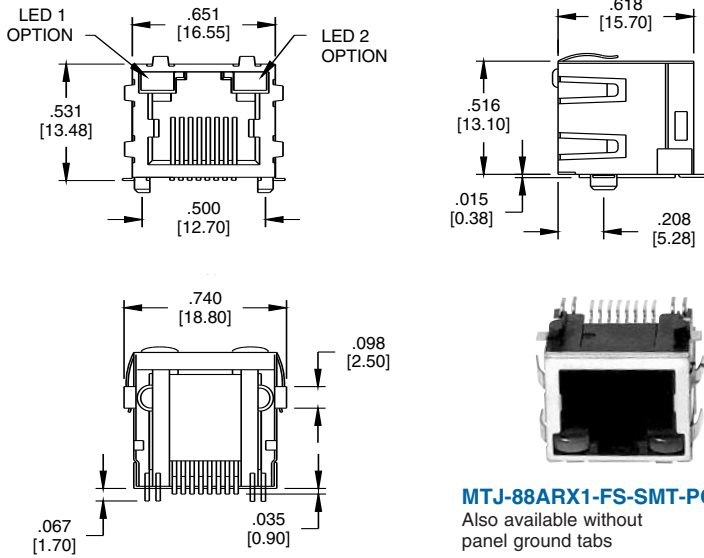
JACKS WITH LEDs ORDERING INFORMATION

| | | | | | | |
|---|-------------------------------------|--|----------------------------------|---|--|---|
| MTJ | 8 | 4 | AR | 2 | 1 | LD |
| SERIES INDICATOR MTJ = Modular telephone jack | HOUSING PLUG SIZE 8 or 10 | NO. OF CONTACT POSITIONS FILLED 2, 4, 6, 8 or 10 | HOUSING TYPE AR, AA, D | 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 <i>Leave blank for no LEDs</i> |

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

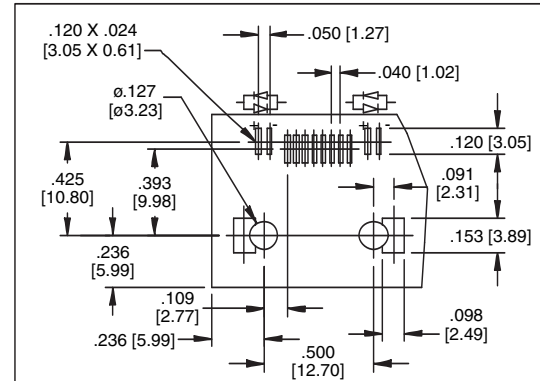
Ordering Information pg. 29

TYPE AR
WITH SMT OPTION
8P8C

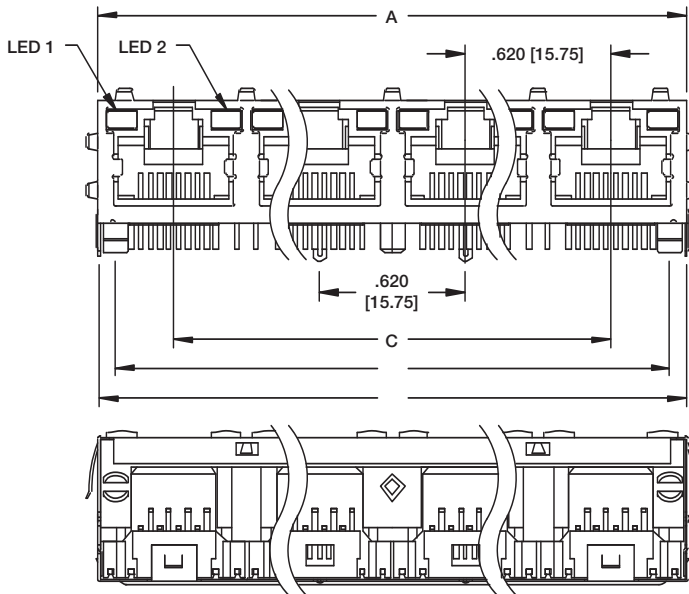


MTJ-88ARX1-FS-SMT-PG-LG

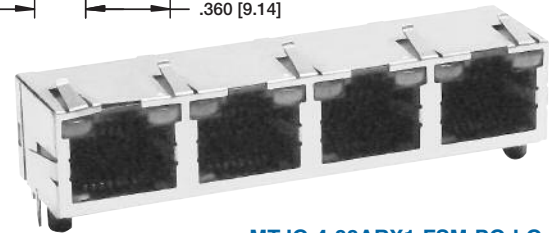
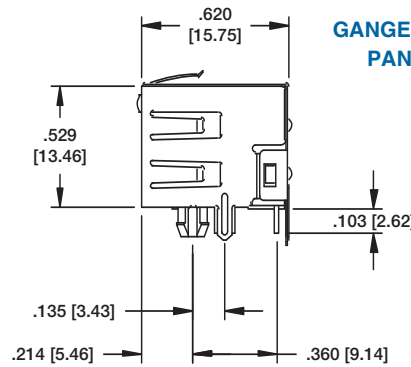
Also available without panel ground tabs



Recommended PCB Layout



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



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

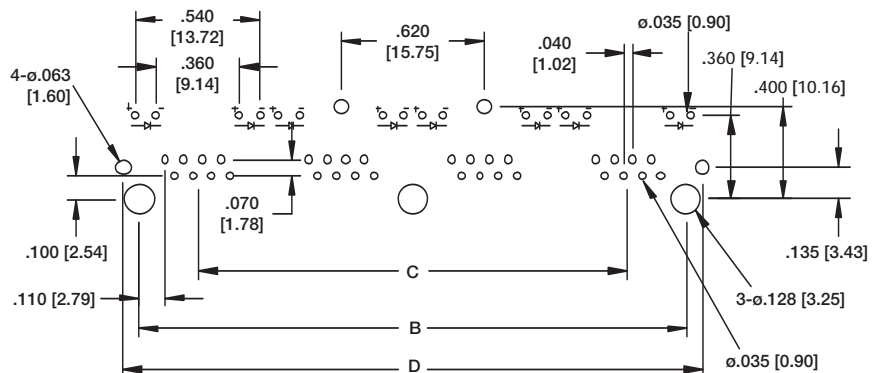
Shown with metal shield, panel ground tabs and LED options

Add suffix to end of P/N:

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

2, 4 & 8 PORTS AVAILABLE

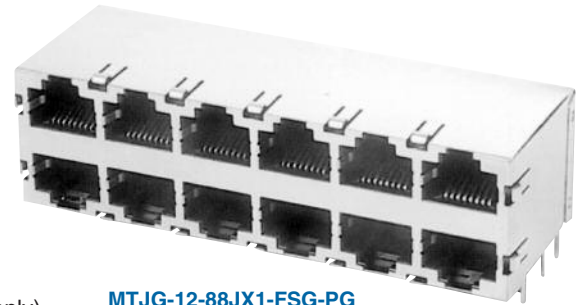
- A = .620 [15.75] x No. of Ports + .029 [0.75]
- B = .620 [15.75] x No. of Ports - 1 + .500 [12.70]
- C = .620 [15.75] x No. of Ports - 1
- D = .620 [15.75] x No. of Ports + .019 [0.50]



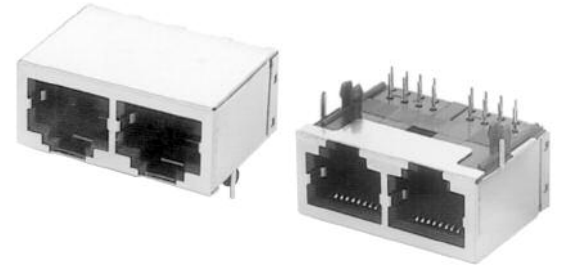
Recommended PCB Layout

ORDERING INFORMATION GANG JACK WITHOUT LEDs

| | | | | | |
|--|--|---|---|---|---|
| MTJG | 2 | 64 | 2 | 2 | 1 |
| <p>SERIES INDICATOR MTJG = Ganged Telephone Jacks</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> |



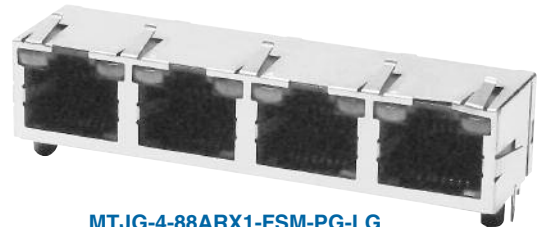
MTJG-12-88JX1-FSG-PG



MTJG-2-88GX1-FSG

ORDERING INFORMATION GANG JACK WITH LEDs

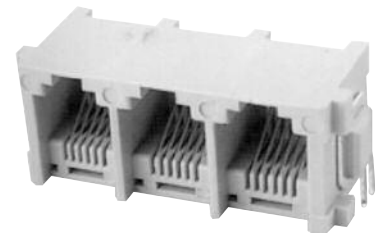
| | | | | | | |
|--|---|--|-----------------------------------|---|---|---|
| MTJG | 2 | 64 | AR | 2 | 1 | LD |
| <p>SERIES INDICATOR MTJG = Ganged Telephone Jacks</p> | <p>NO. OF PORTS 2, 4, 6, 8, 12 or 16</p> | <p>PORT SIZE / POSITIONS FILLED 62 = 6 position, 2 contacts (6P2C) 64 = 6 position, 4 contacts (6P4C) 66 = 6 position, 6 contacts (6P6C) 88 = 8 position, 8 contacts (8P8C)</p> | <p>HOUSING TYPE AR</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

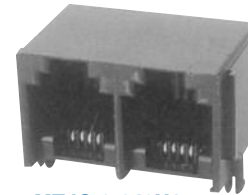
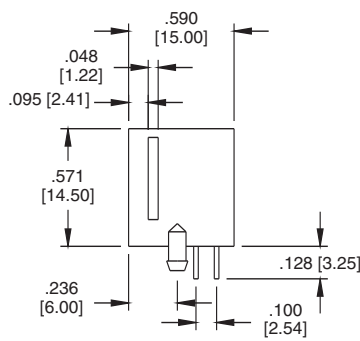
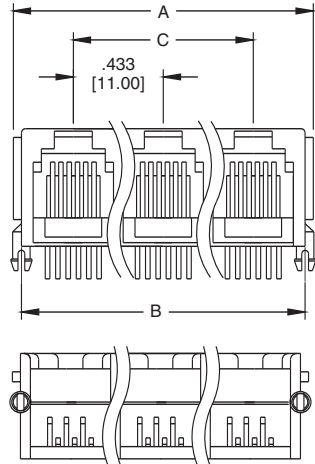
Add suffix to end of P/N:

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

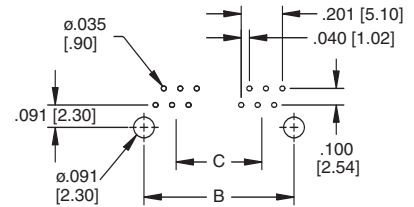


Ordering Information pg. 31

TYPE 2
6P4C
6P6C

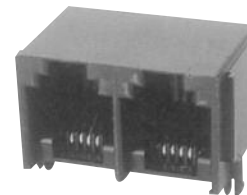
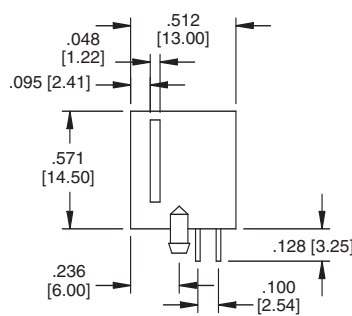
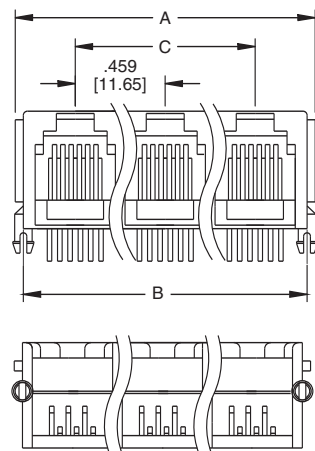


MTJG-2-642X1

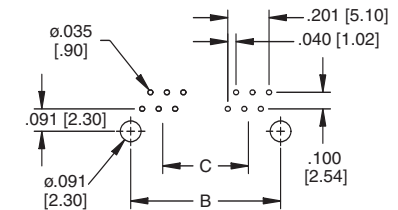


Recommended PCB Layout

A = .433 [11.00] x No. of Ports + .100 [2.54]
 B = .433 [11.00] X No of Ports + .020 [0.50]
 C = .433 [11.00] x No of Ports - 1

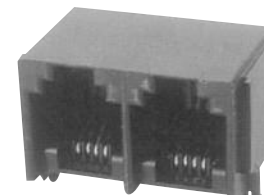
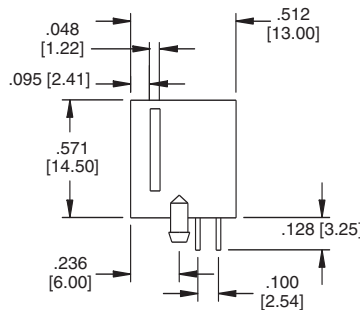
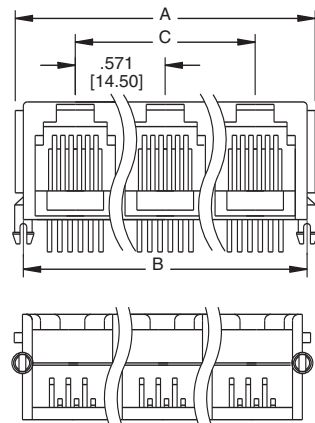


MTJG-2-642BX1

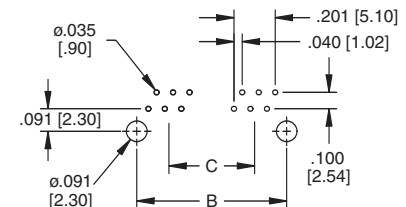


Recommended PCB Layout

A = .459 [11.65] x No. of Ports + .100 [2.54]
 B = .459 [11.65] X No of Ports + .020 [0.50]
 C = .459 [11.65] x No of Ports - 1



MTJG-2-642CX1

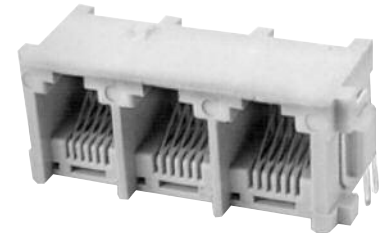
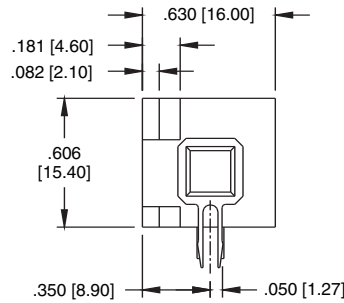
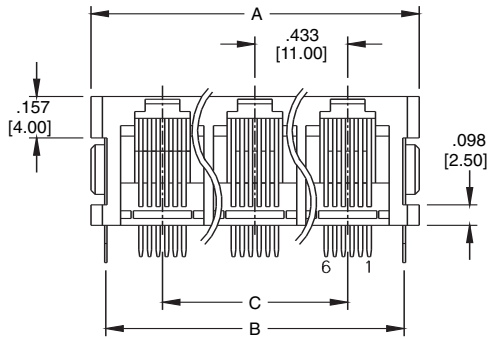


Recommended PCB Layout

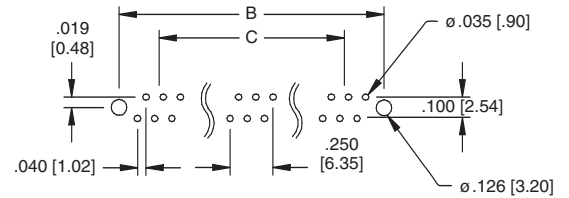
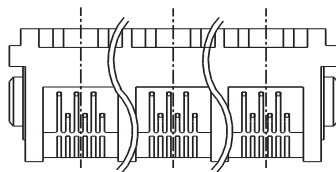
A = .571 [14.50] x No. of Ports + .100 [2.54]
 B = .571 [14.50] X No of Ports + .020 [0.50]
 C = .571 [14.50] x No of Ports - 1

Ordering Information pg. 31

TYPE 7H
RIGHT ANGLE ENTRY
6P4C
6P6C

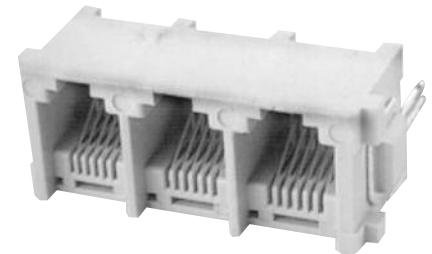
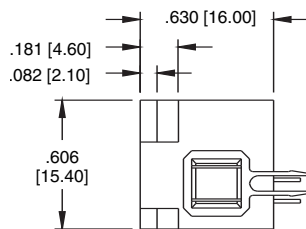
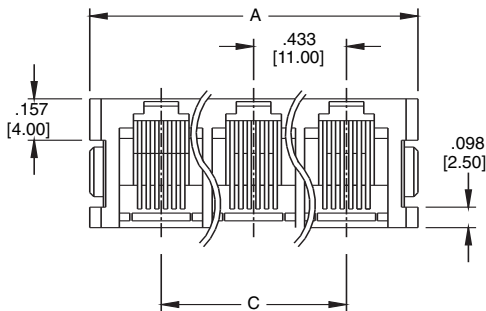


MTJG-3-667HX2

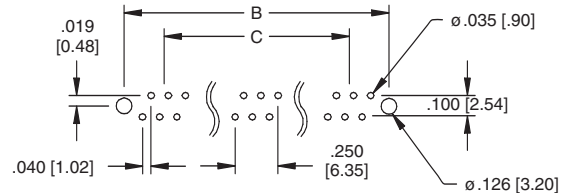
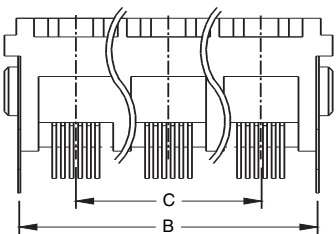


Recommended PCB Layout

TYPE 7V
TOP ENTRY
6P4C
6P6C

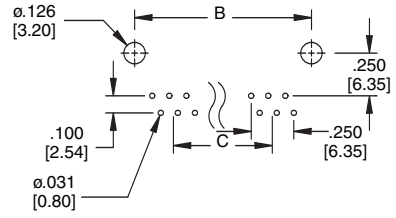
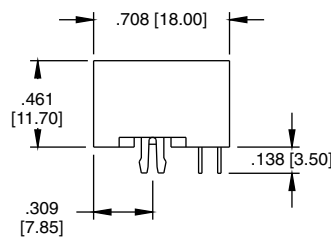
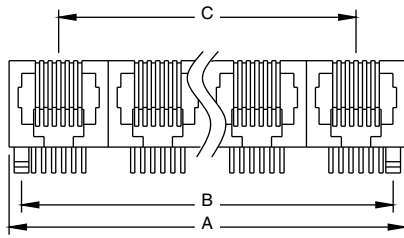


MTJG-3-667VX2

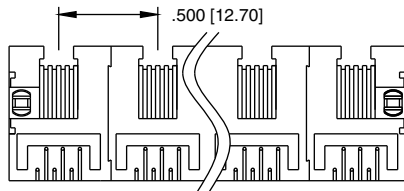


Recommended PCB Layout

| 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] |



Recommended PCB Layout



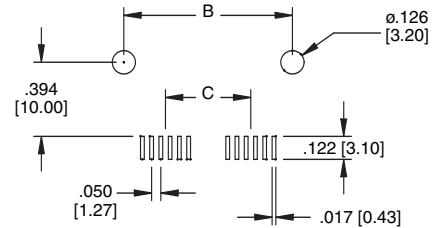
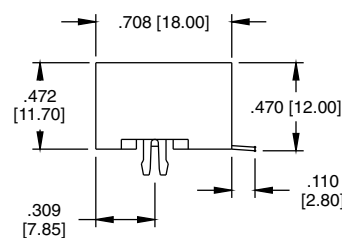
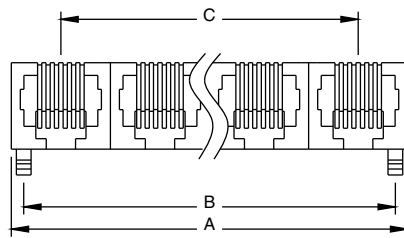
$A = .500 [12.70] \times (\text{NO. OF PORTS} - 1) + .519 [13.20]$
 $B = .500 [12.70] \times (\text{NO. OF PORTS} - 1) + .400 [10.16]$
 $C = .500 [12.70] \times \text{NO. OF PORTS} - 1$

TYPE 5
THRU HOLE
6P4C
6P6C

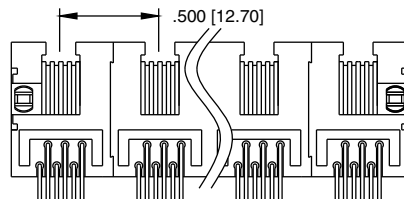


MTJG-3-665X1

Ordering Information pg. 31

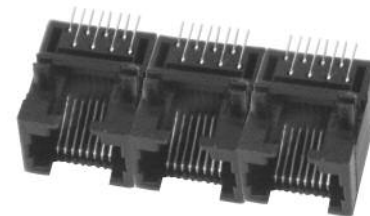


Recommended PCB Layout



$A = .500 [12.70] \times (\text{NO. OF PORTS} - 1) + .519 [13.20]$
 $B = .500 [12.70] \times (\text{NO. OF PORTS} - 1) + .400 [10.16]$
 $C = .500 [12.70] \times \text{NO. OF PORTS} - 1$

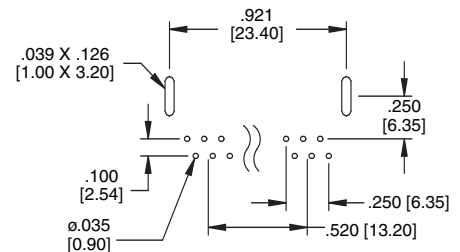
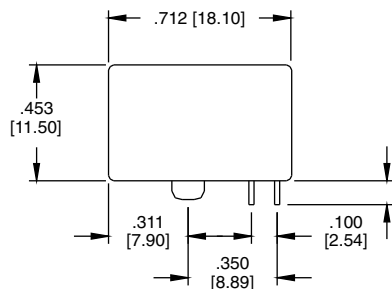
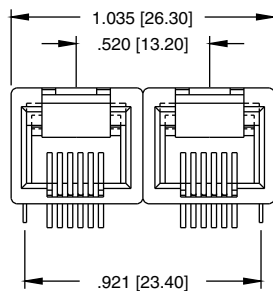
TYPE 5
SMT
8P8C



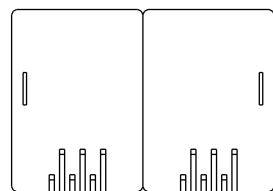
MTJG-3-885X1-SMT

Available in 6P6C or 8P8C Types

Ordering Information pg. 31

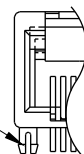


Recommended PCB Layout

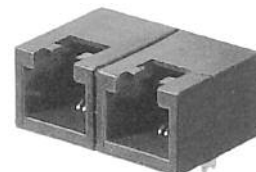


OPTIONAL SPLIT ROUND PEG

ADD -SP TO END OF PART NO. FOR SPLIT ROUND PEG OPTION



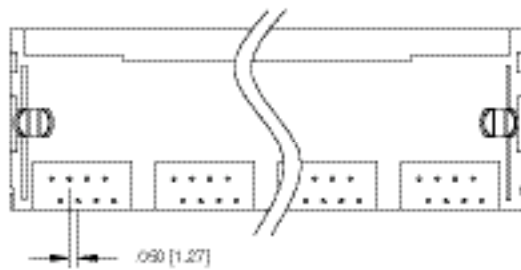
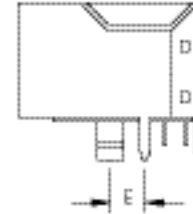
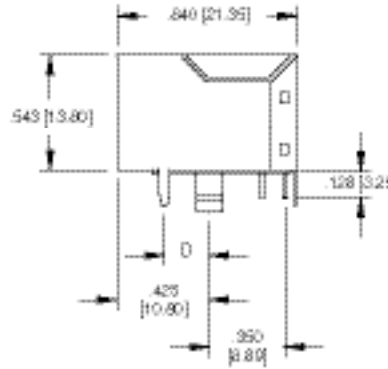
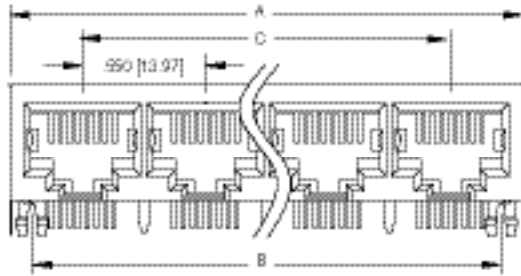
TYPE N
METAL PEG
6P4C
6P6C



MTJG-2-66NX1

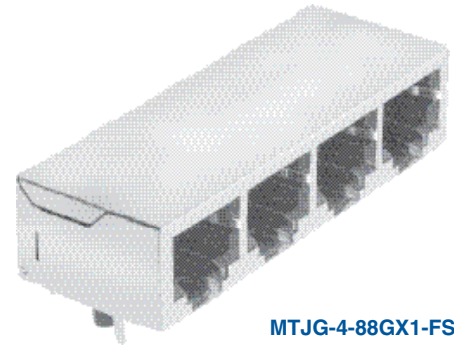
Ordering Information pg. 31

TYPE G
GANGED
8P8C



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

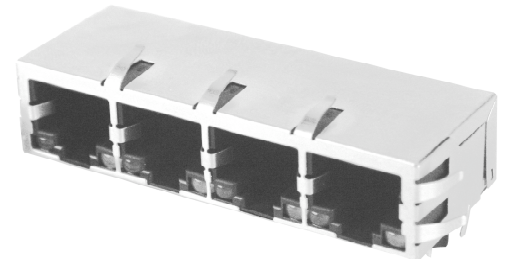
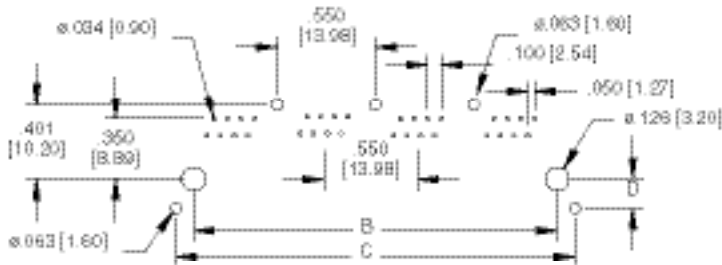
"D" DIM.
FSD = .170 [4.32]
FSB = .144 [3.65]
FSG = .180 [4.57]
FSE = .120 [3.05]



MTJG-4-88GX1-FSB

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

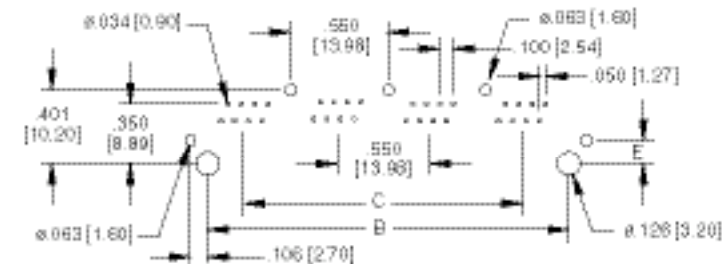
"D" DIM.
FSA = .170 [4.32] FSE = .120 [3.05]
FSB = .144 [3.65] FSG = .180 [4.57]



MTJG-4-88GX1-FSB-PG

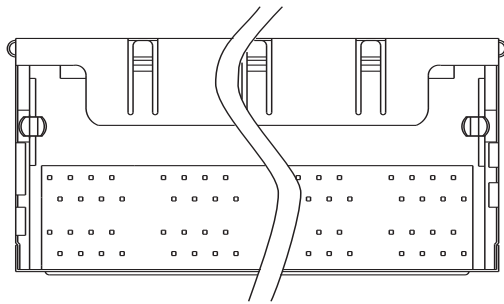
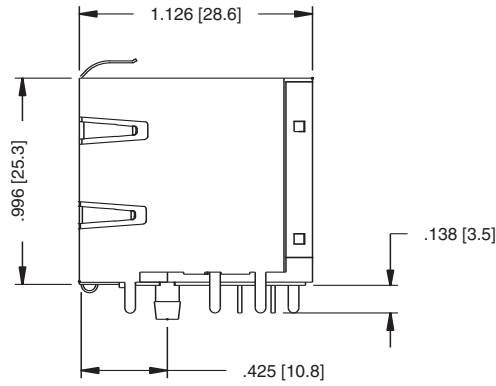
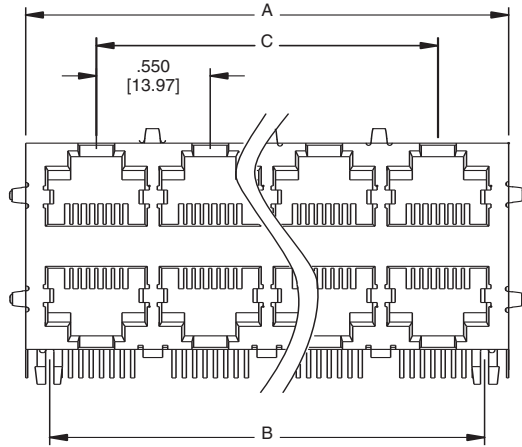
Recommended PCB Layout for shield ground pin locations specified as FSD & FSR

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

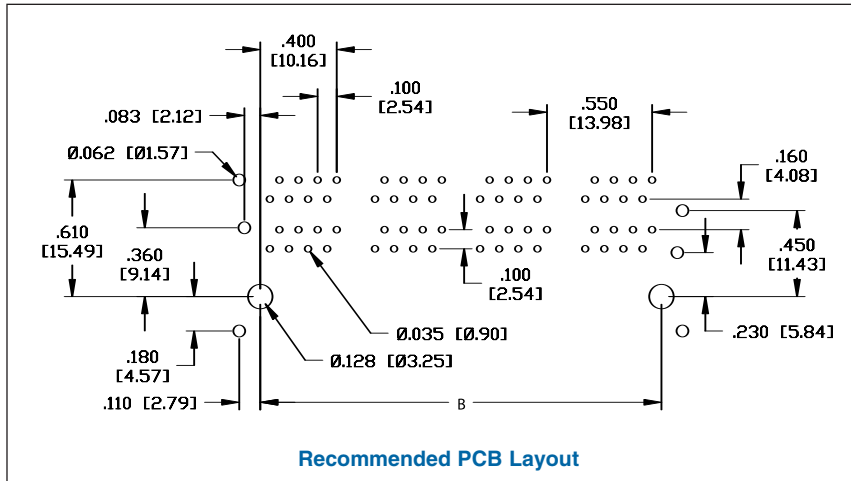


Ordering Information pg. 31

TYPE J
8P8C



MTJG-8-88JX1-FSG-PG



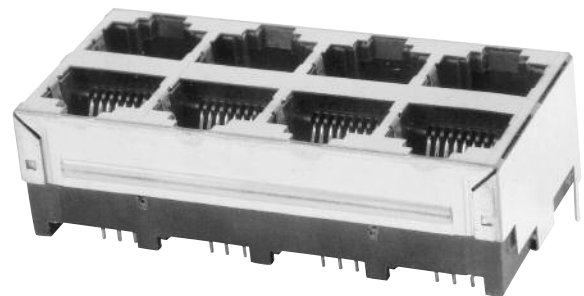
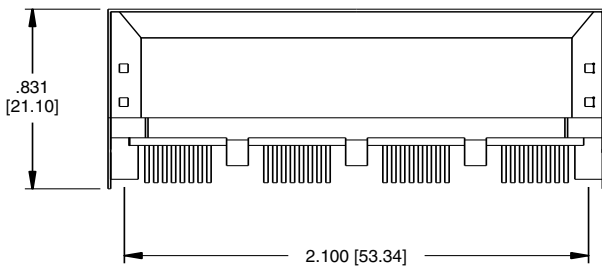
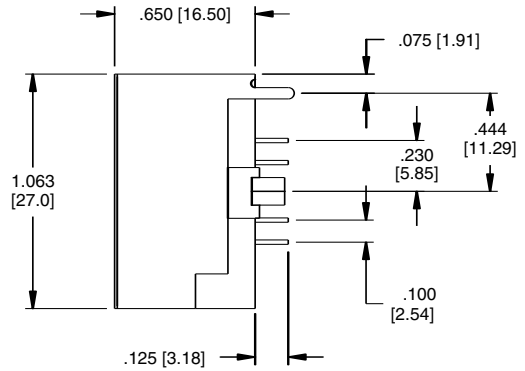
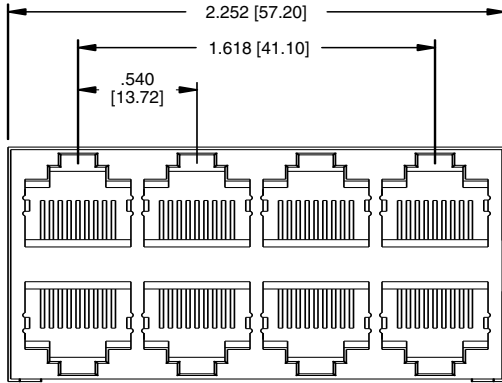
Recommended PCB Layout

| 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] |

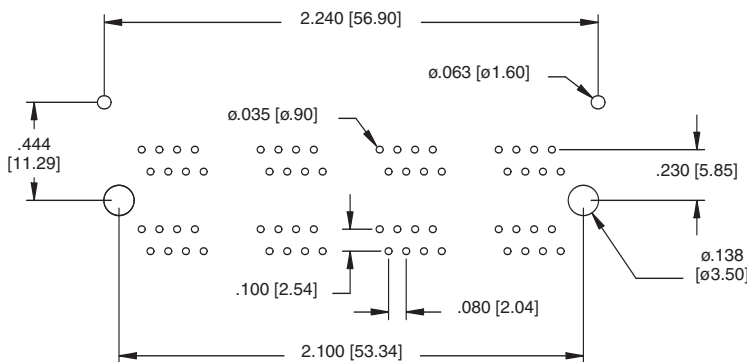
Ordering Information pg. 31

TYPE C
8P8C



MTJG-8-88CX1-S

| PART NUMBER | PORTS | DIMENSIONS | | |
|----------------|-------|---------------|---------------|---------------|
| | | A | B | C |
| MTJG-4-88CX1-S | 2 X 2 | 1.172 [29.76] | 1.020 [25.91] | .540 [13.72] |
| MTJG-8-88CX1-S | 2 X 4 | 2.252 [57.20] | 2.100 [53.34] | 1.620 [41.15] |



Recommended PCB Layout

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 ~ +70°C

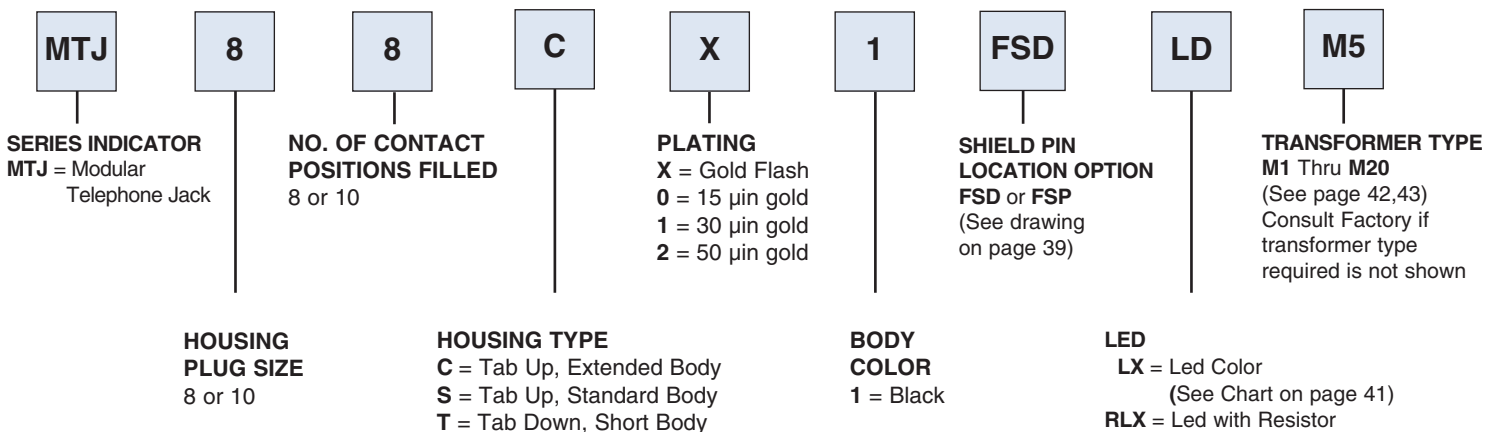
PACKAGING:

Anti-ESD plastic trays or tubes

SAFETY AGENCY APPROVALS:

UL Recognized E224049

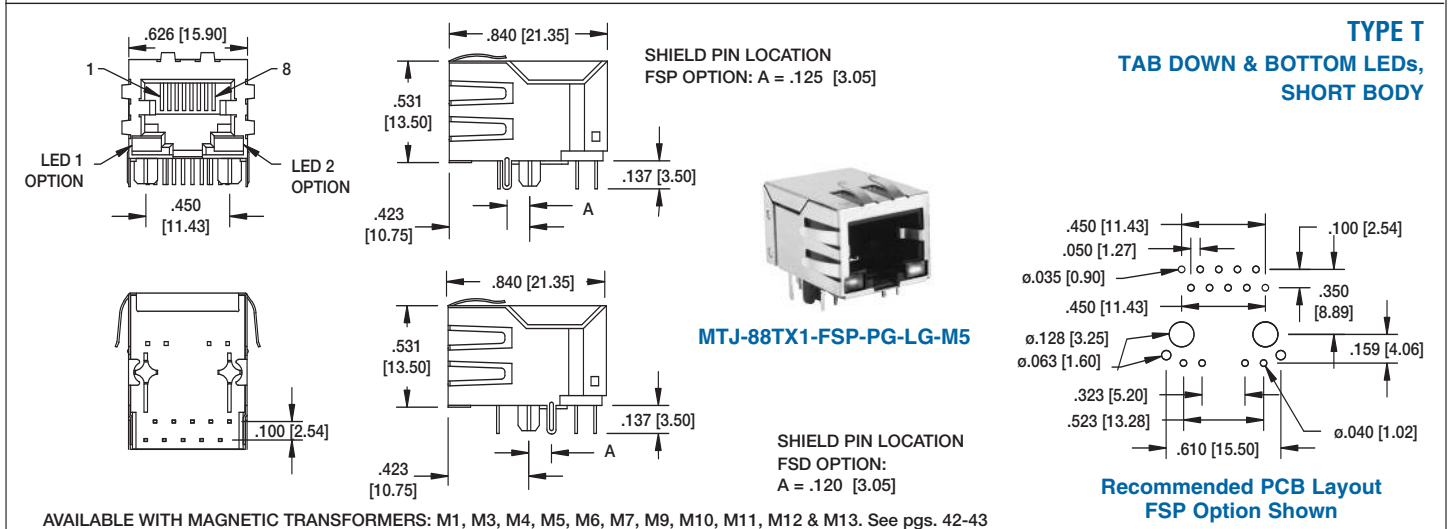
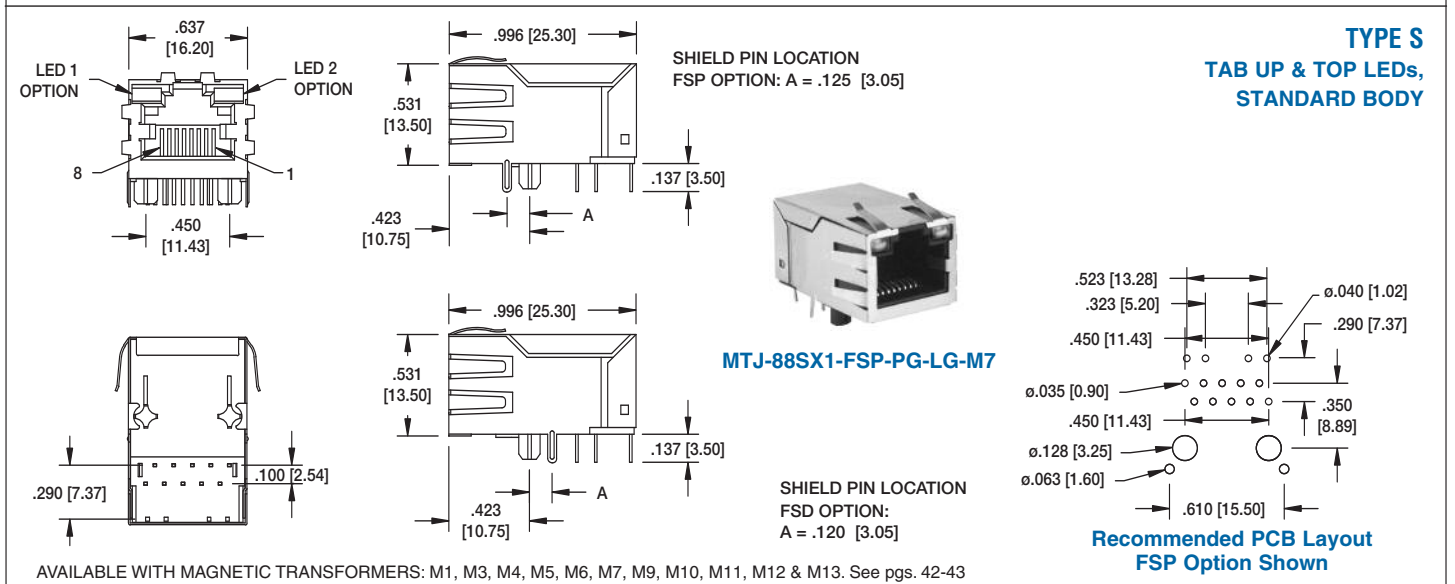
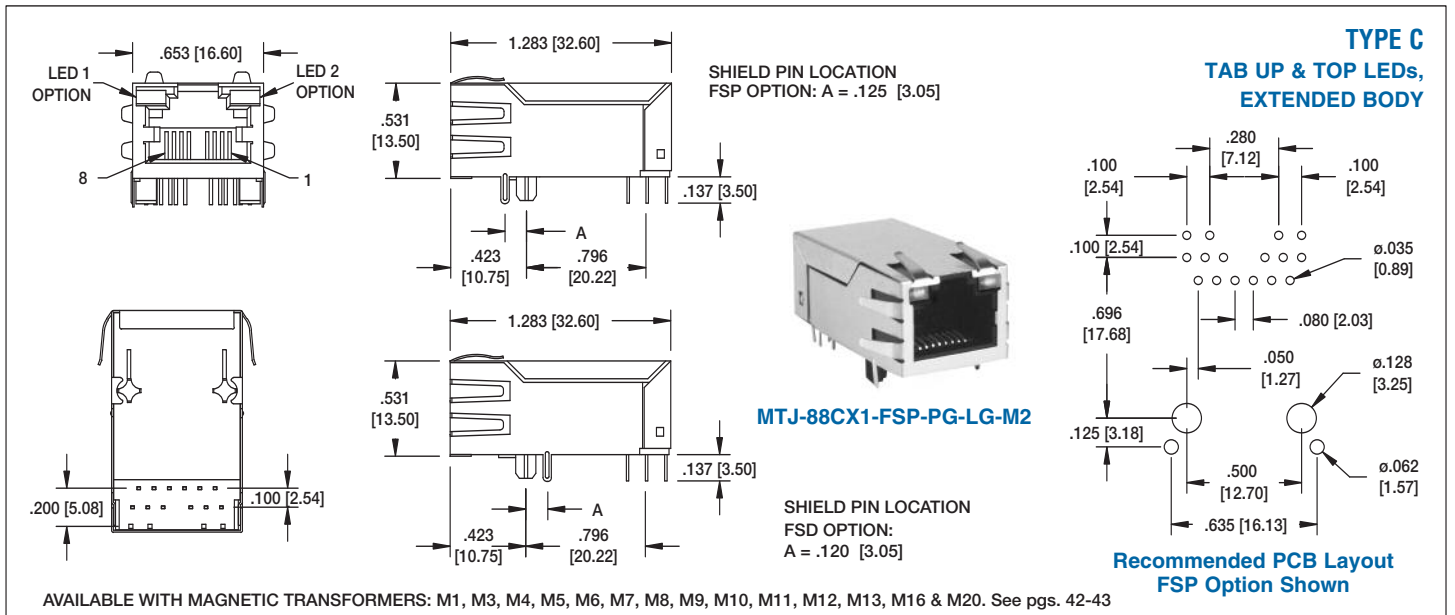
MAGNETICS TELEPHONE JACK ORDERING INFORMATION

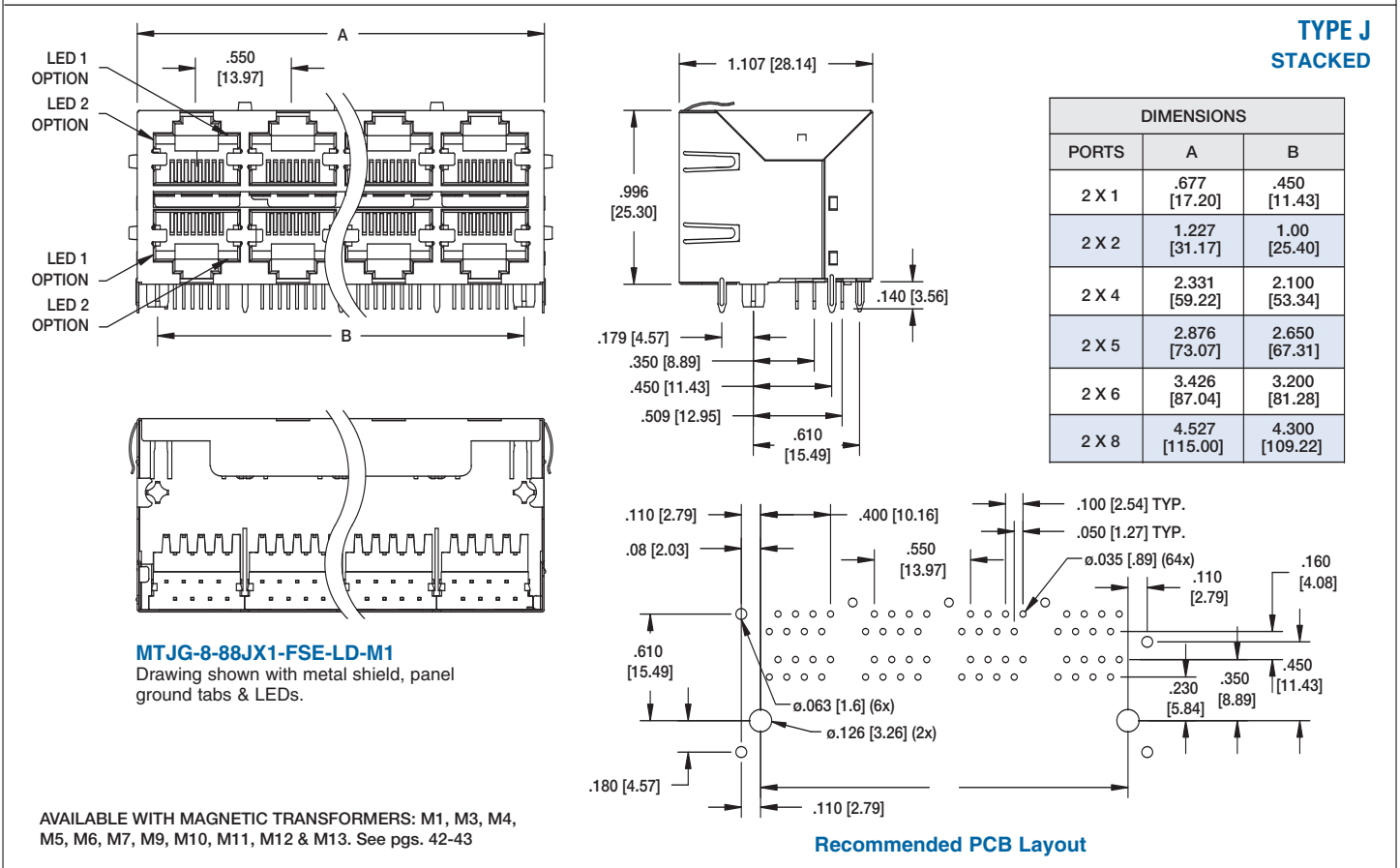
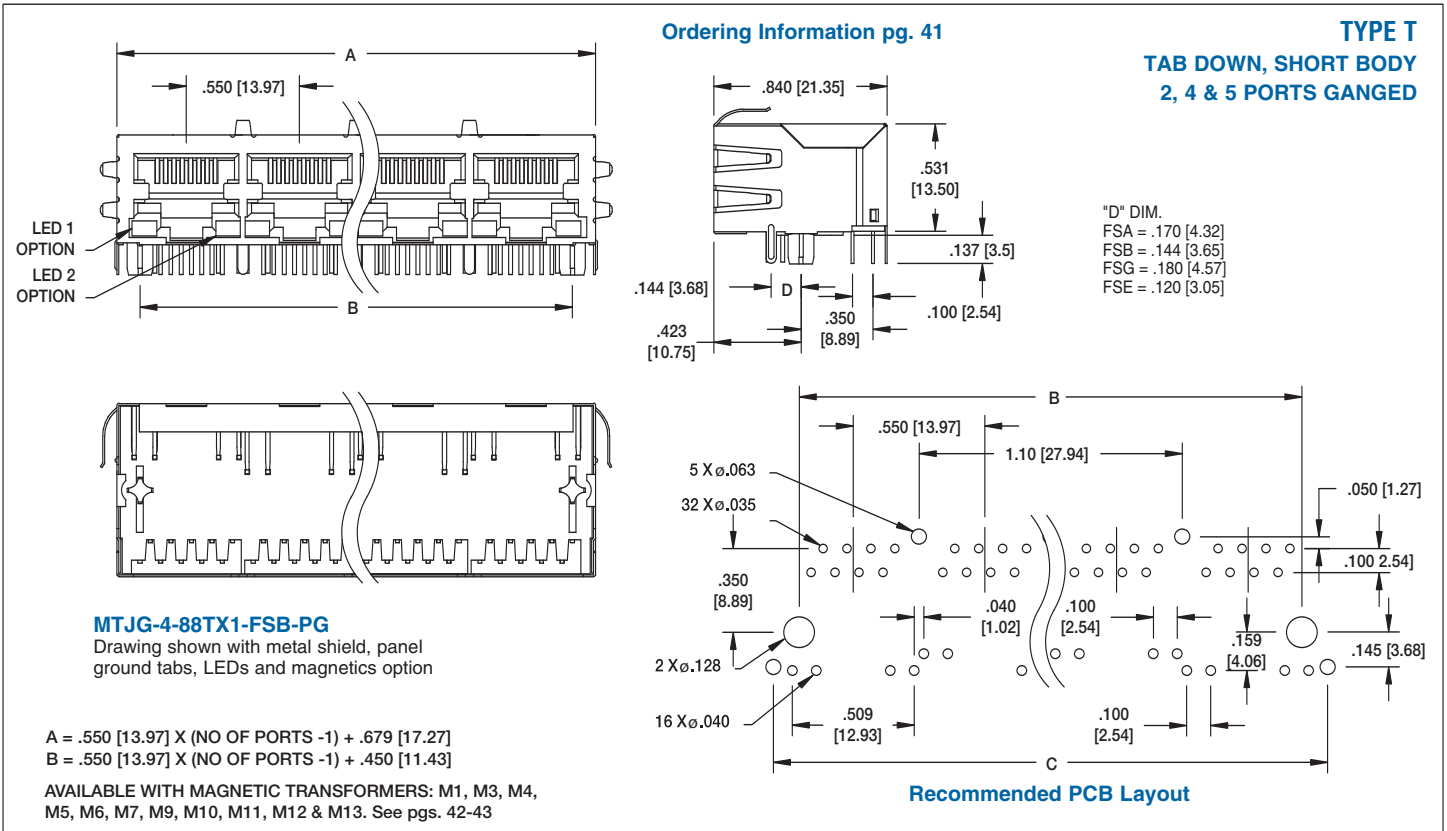


OPTIONS:

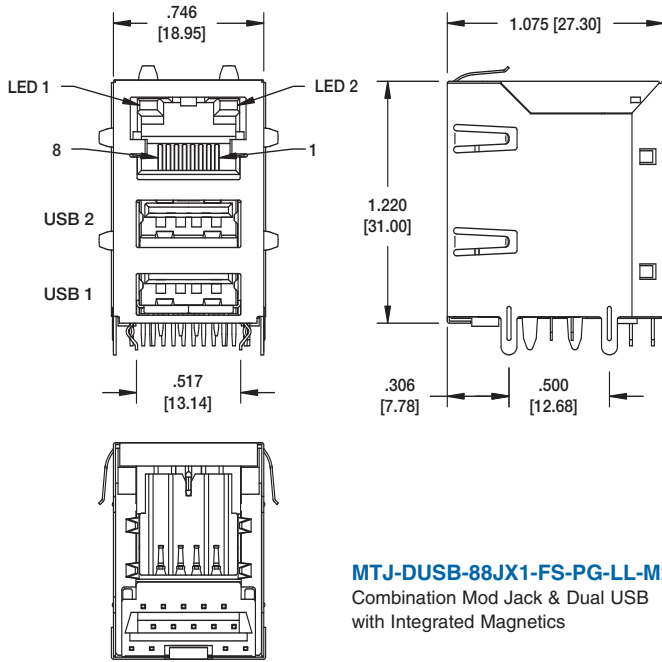
Add designator(s) to end of part number
HT = Hi-Temp insulator for Hi-Temp soldering processes up to 260°C



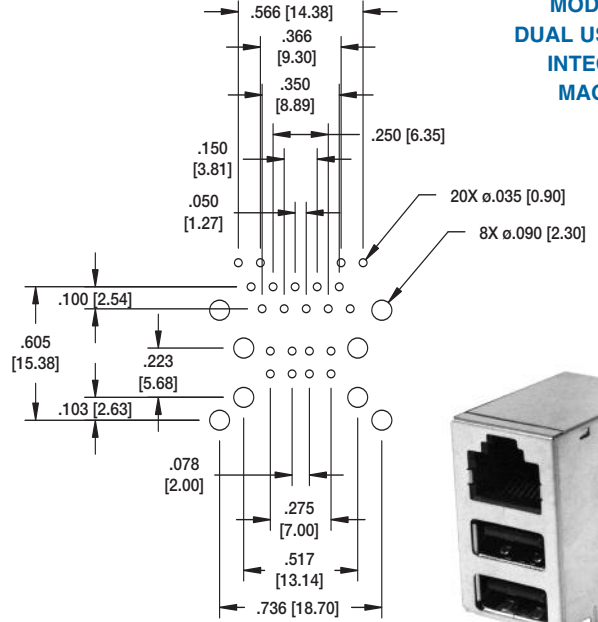




**COMBINATION
MOD JACK &
DUAL USB WITH
INTEGRATED
MAGNETICS**



MTJ-DUSB-88JX1-FS-PG-LL-M22
Combination Mod Jack & Dual USB
with Integrated Magnetics



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 |

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 GANG JACKS WITH MAGNETICS & LEDs

