

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:

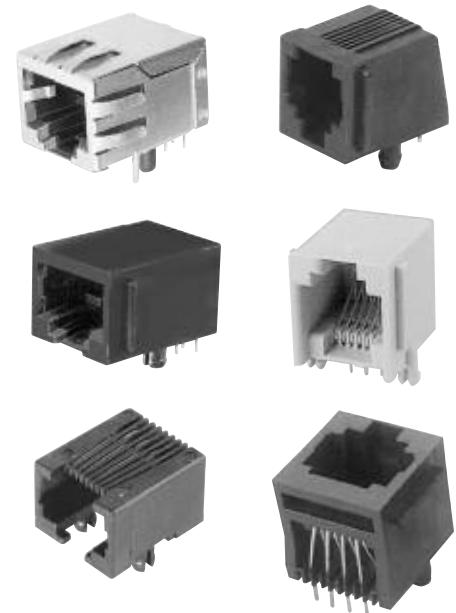
Operating temperature: -40°C to +85°C
 Soldering process temperature:
 Standard insulator: 235°C
 Hi-Temp insulator: 260°C

PACKAGING:

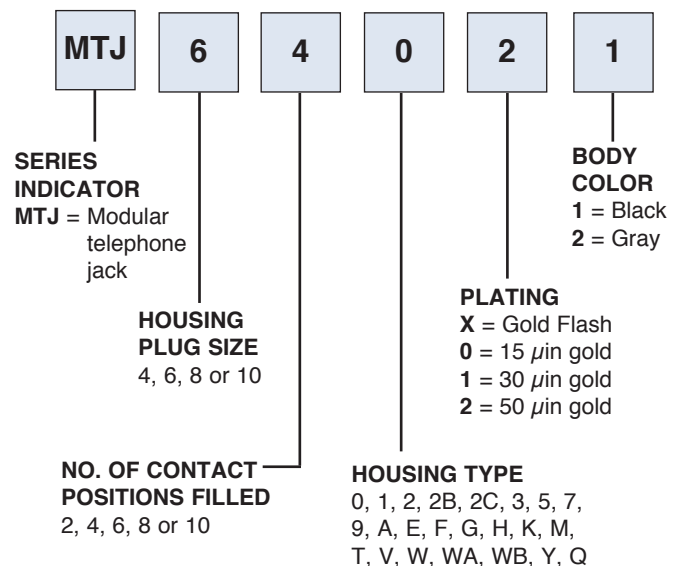
Anti-ESD plastic trays

SAFETY AGENCY APPROVALS:

UL Recognized & CSA Certified,
 File no. E224049



ORDERING INFORMATION



OPTIONS:

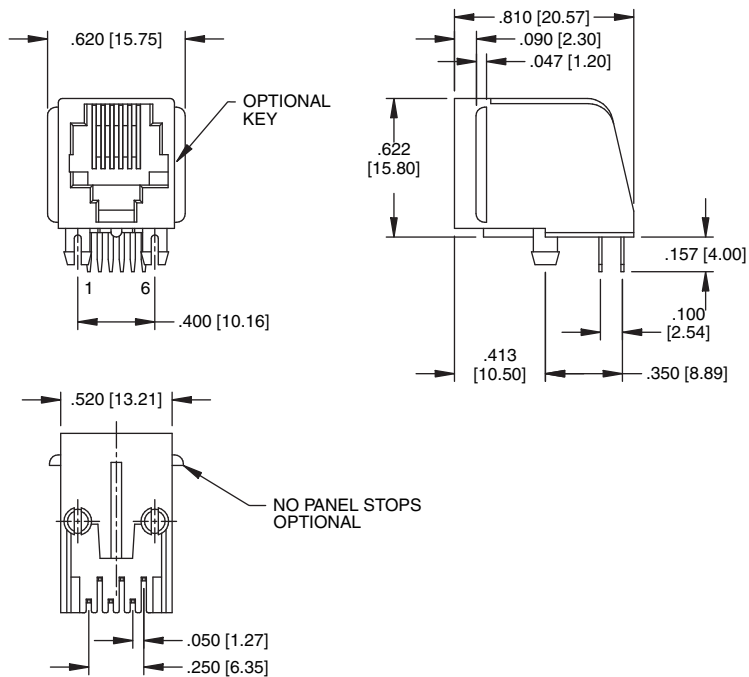
Add designator(s) to end of part number

- 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

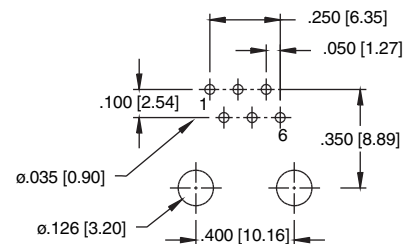
6P6C

6P4C



MTJ-661X1

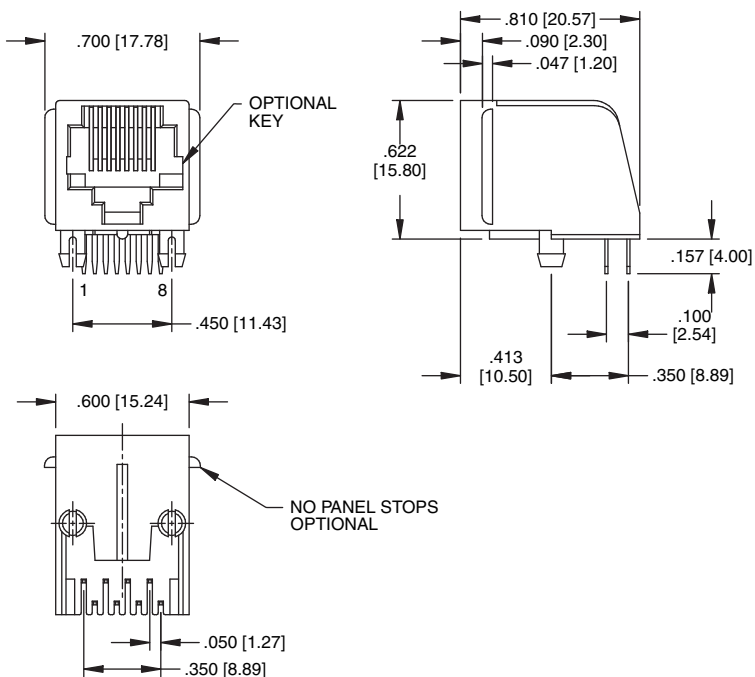
Ordering Information pg. 9



Recommended PCB Layout

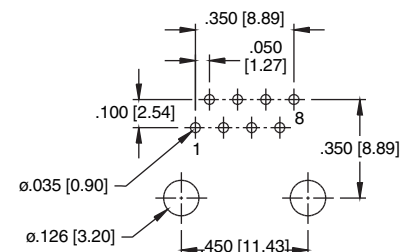
TYPE 1

8P8C



MTJ-881X1

Ordering Information pg. 9

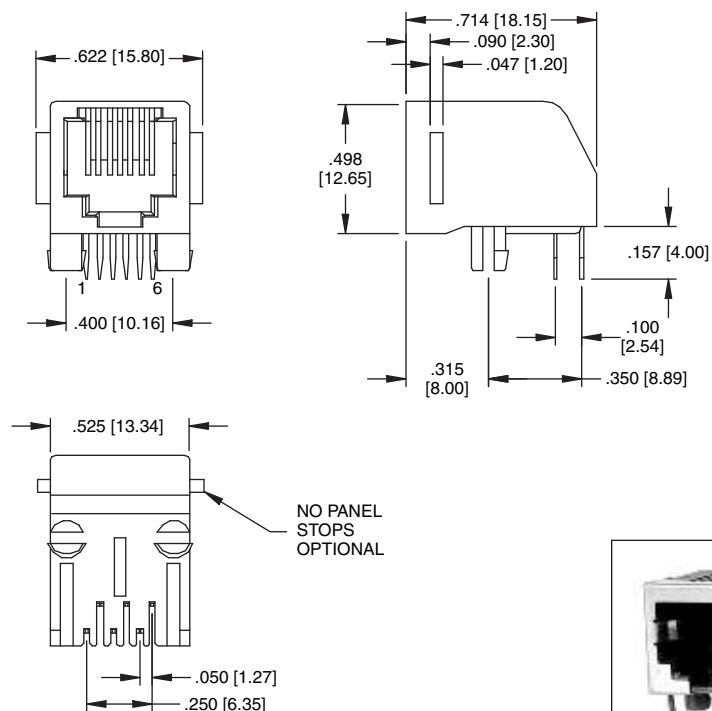


Recommended PCB Layout

TYPE 0

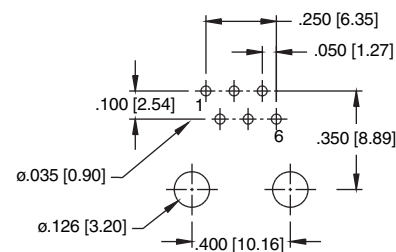
6P6C

6P4C



MTJ-660X1

Ordering Information pg. 9



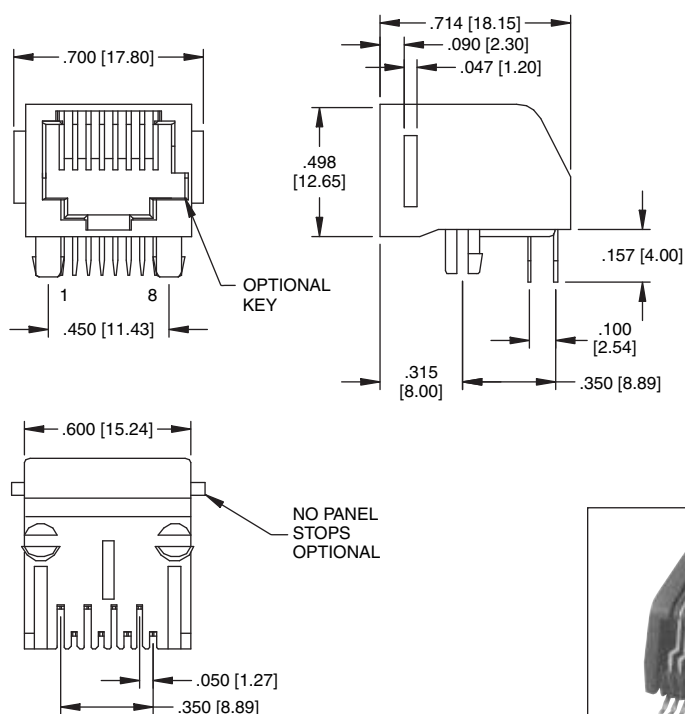
Recommended PCB Layout



Face Shield Option

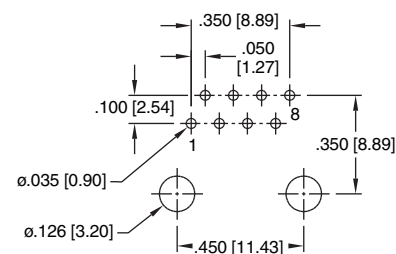
TYPE 0

8P8C

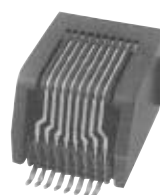


MTJ-880X1

Ordering Information pg. 9



Recommended PCB Layout



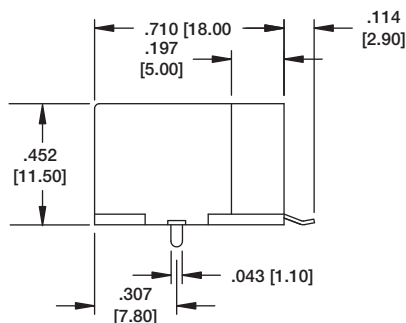
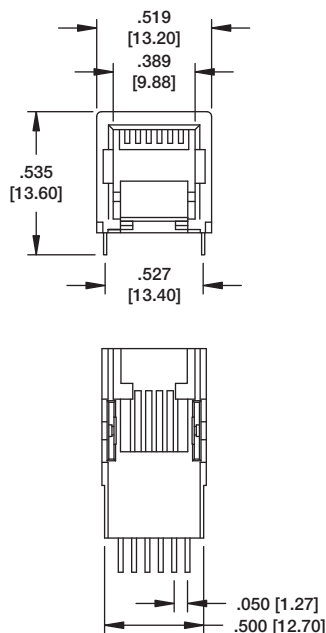
SMT Option

Ordering Information pg. 9

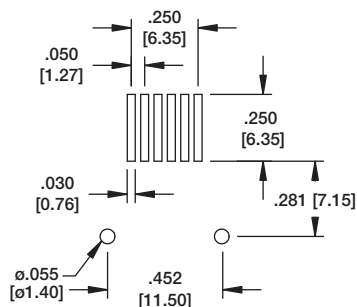
TYPE Y

6P6C

6P4C



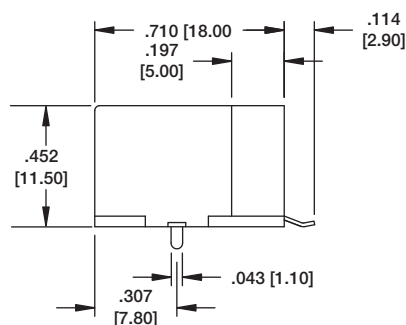
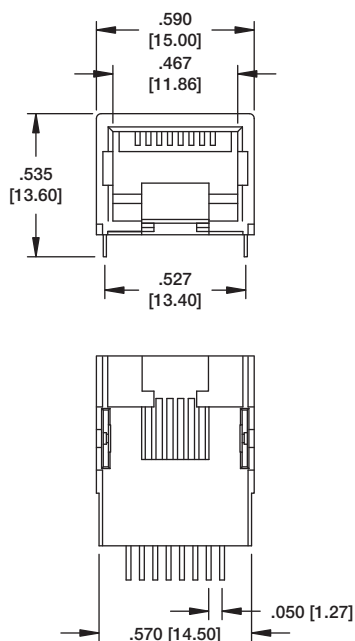
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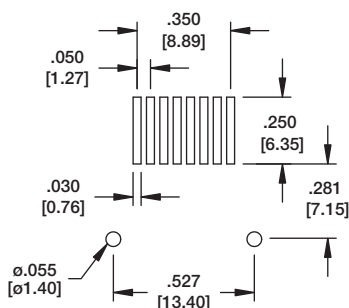
Recommended PCB Layout

TYPE Y

8P8C

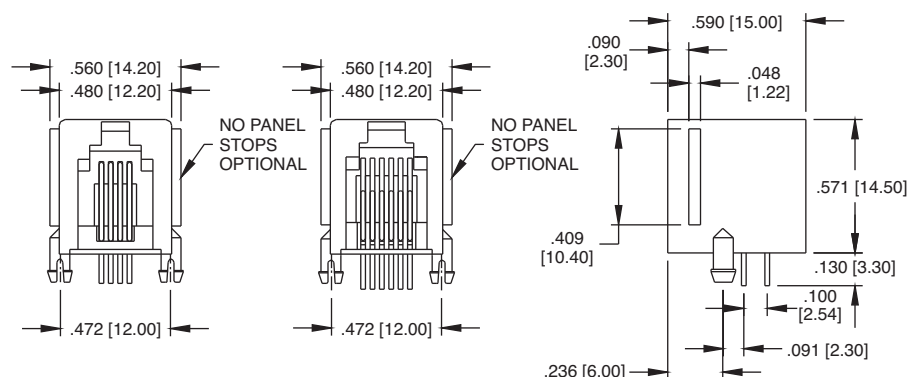


MTJ-88YX1



Recommended PCB Layout

Ordering Information pg. 9



MTJ-662X2



MTJ-442X2

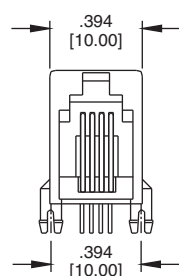
TYPE 2

4P4C

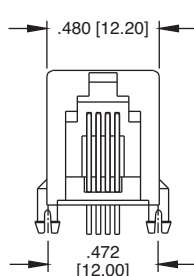
6P6C

6P4C

TYPE 2B 4 POS



TYPE 2C 4 POS



MTJ-442BX2



MTJ-642BX2

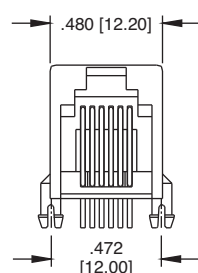
TYPE 2B & 2C

4P4C

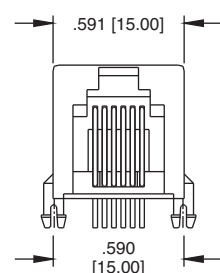
6P6C

6P4C

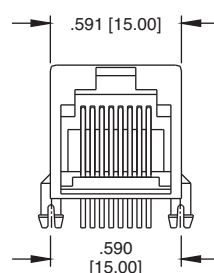
8P8C



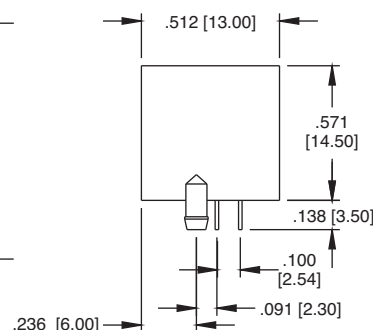
TYPE 2B 6 POS



TYPE 2C 6 POS

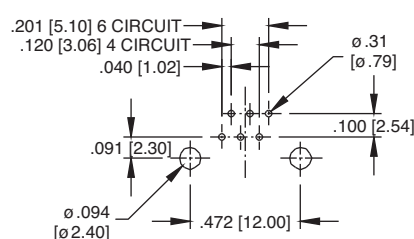


TYPE 2B 8 POS

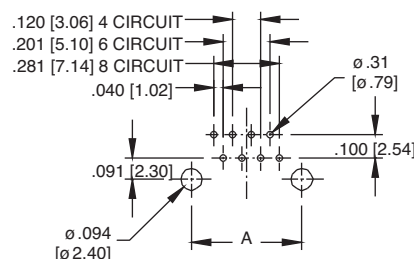


MTJ-882BX1

TYPE 2



TYPE 2B & 2C



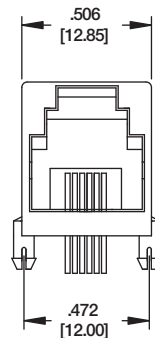
Recommended PCB Layout

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

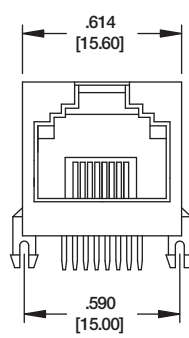
**TYPE 2B
SHIELDED**
6P6C
6P4C
8P8C

MTJ-662BX1-FS

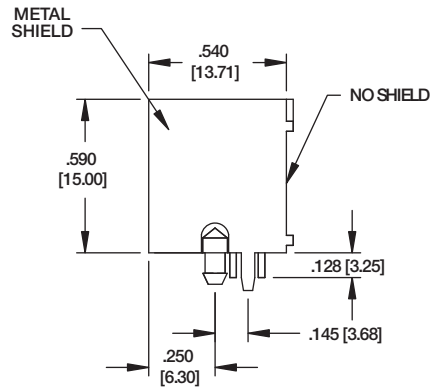


**6 POS
2B SHIELDED**

MTJ-882BX1-FS



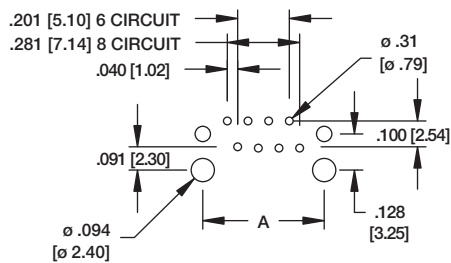
**8 POS
2B SHIELDED**



MTJ-662BX1-FS



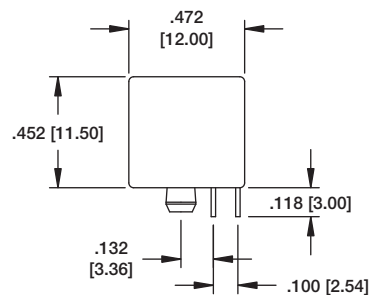
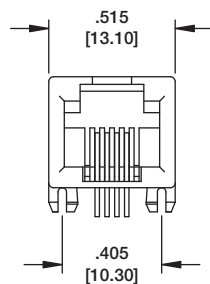
MTJ-882BX1-FS



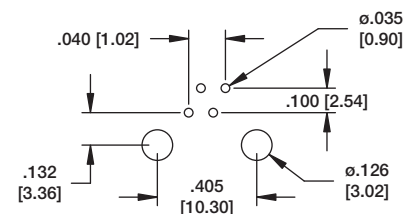
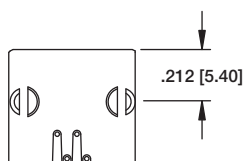
Recommended PCB Layout

DIM. "A"	
TYPE 2B 6P6C	.472 [12.00]
TYPE 2B 8P8C	.590 [15.00]

**TYPE Q
COMPACT JACK
4P4C**



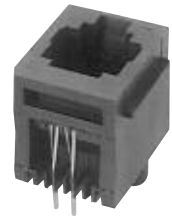
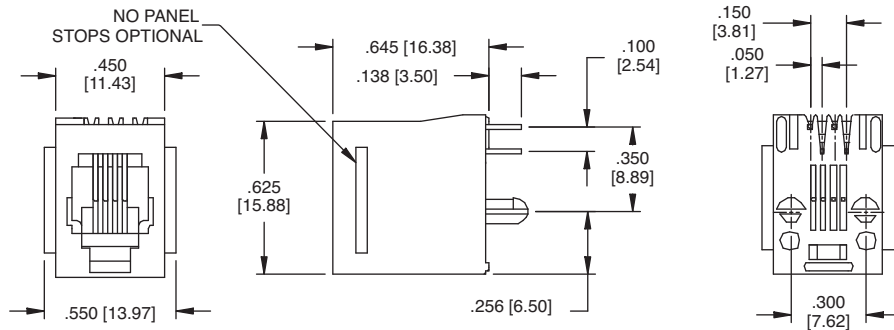
MTJ-44QX1



Recommended PCB Layout

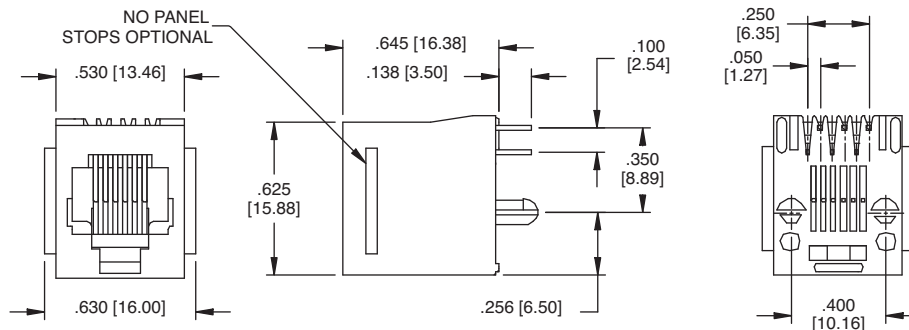
Ordering Information pg. 9

TYPE 3
4P4C



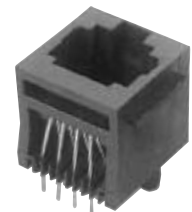
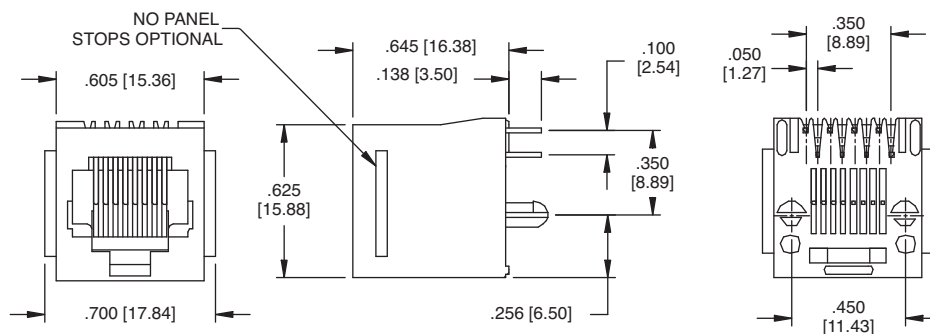
MTJ-443X1

TYPE 3
6P4C



MTJ-663X1

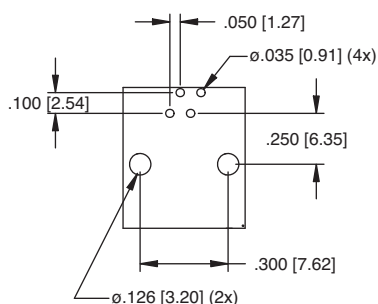
TYPE 3
8P8C



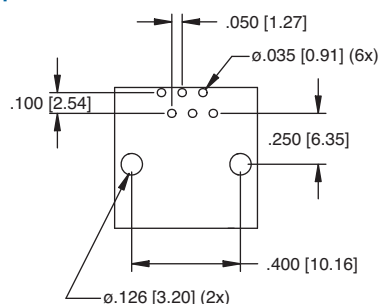
MTJ-883X1

Recommended PCB Layout

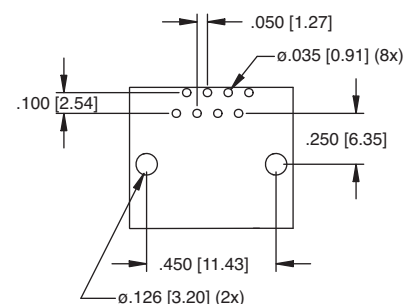
4p4c



6p4c
6p6c



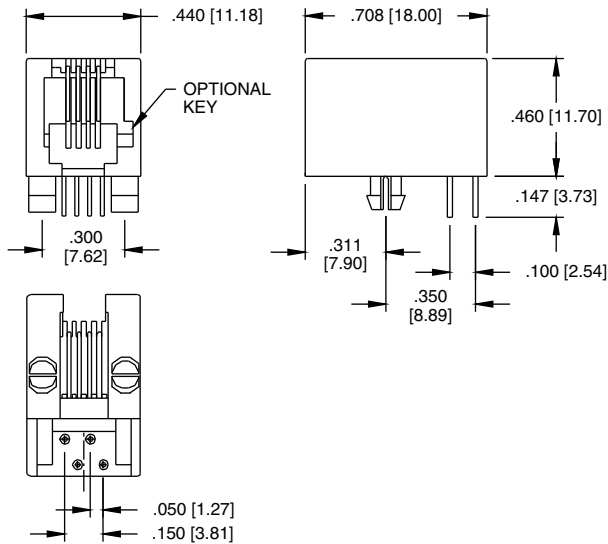
8p8c



Ordering Information pg. 9

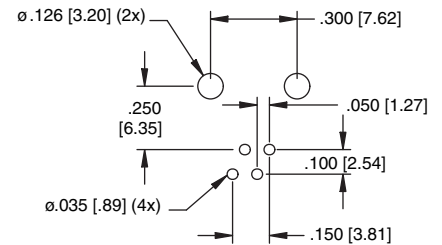
TYPE 5

4P4C



MTJ-445X1

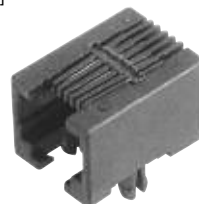
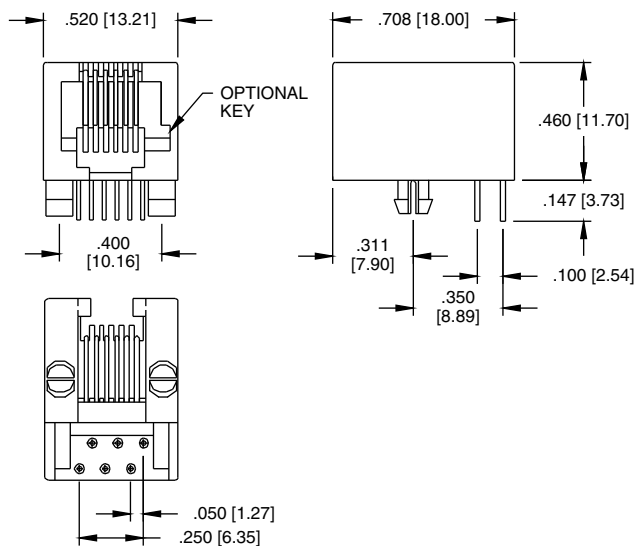
Recommended PCB Layout



TYPE 5

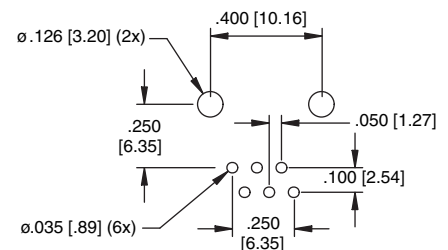
6P4C

6P6C



MTJ-665X1

Recommended PCB Layout



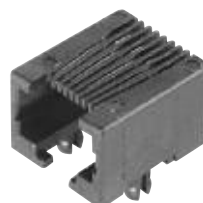
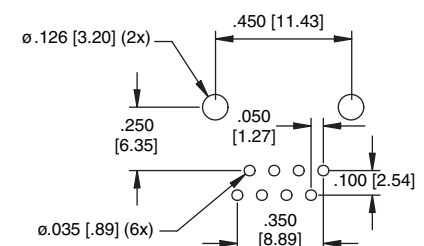
TYPE 5

8P8C

SMT Option



Recommended PCB Layout

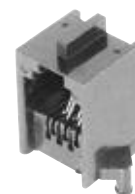
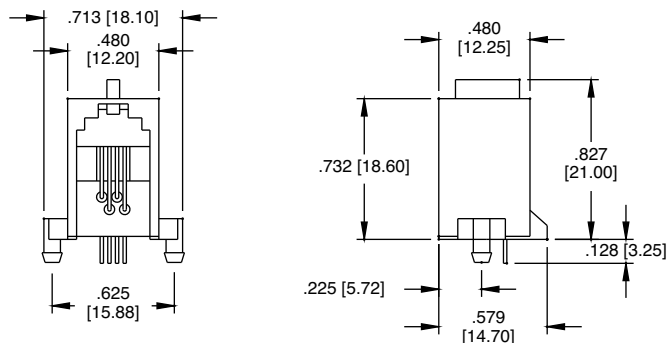


MTJ-885X1

Ordering Information pg. 9

TYPE 7

4P4C

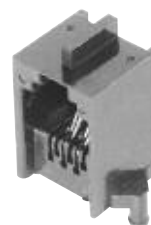
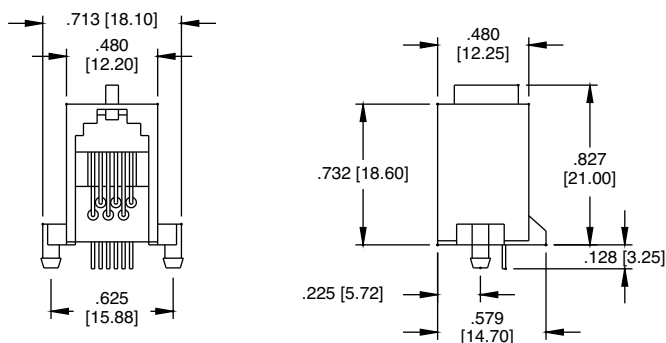


MTJ-447X1

TYPE 7

6P4C

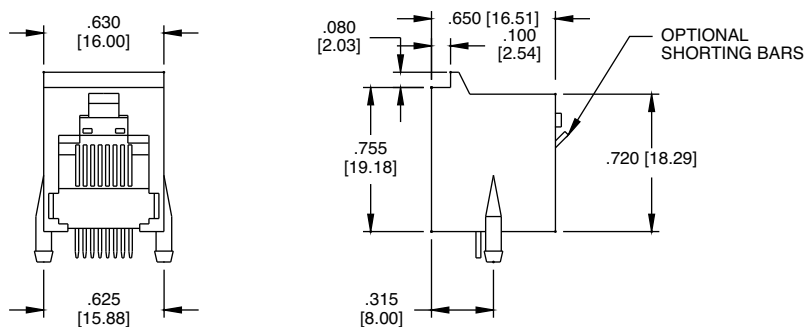
6P6C



MTJ-647X1

TYPE 7

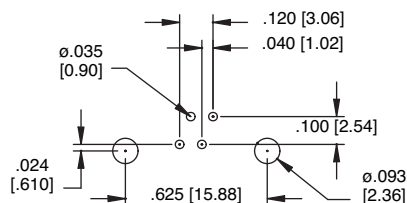
8P8C



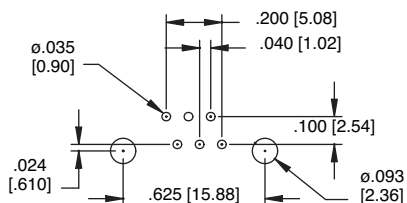
MTJ-887X1

Recommended PCB Layout

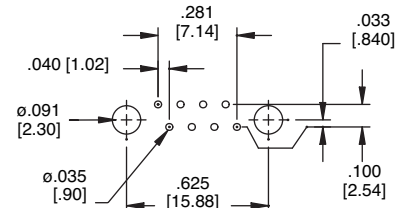
4p4c



6p4c
6p6c



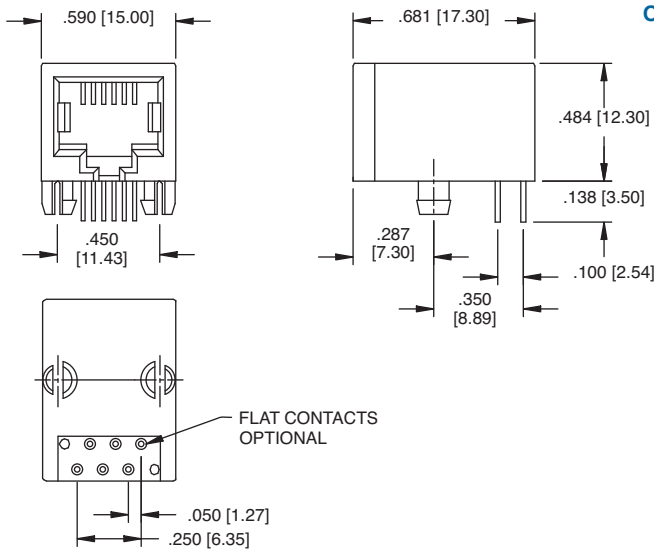
8p8c



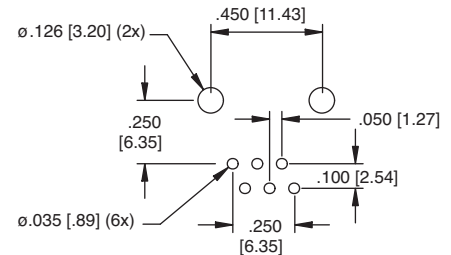
Ordering Information pg. 9

TYPE 9

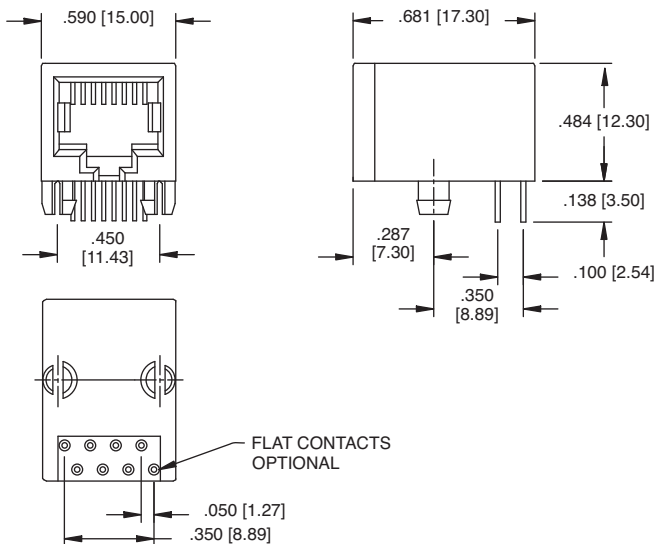
**6P4C
6P6C**



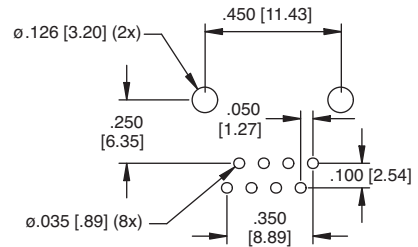
MTJ-669X1



Recommended PCB Layout

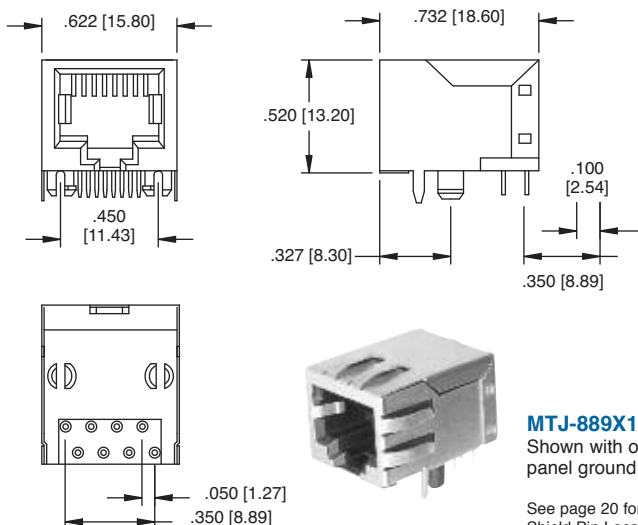


MTJ-889X1



Recommended PCB Layout

**TYPE 9
8P8C
SHIELDED**



MTJ-889X1-FSE

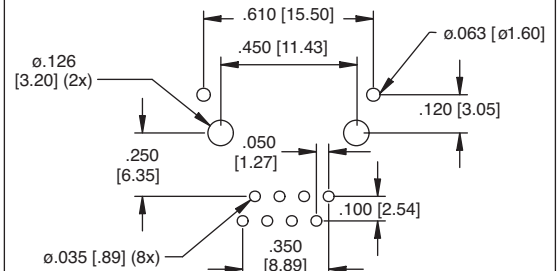
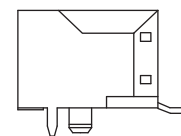


MTJ-889X1-FSE-PG

Shown with optional panel ground tabs

See page 20 for other Shield Pin Location Options

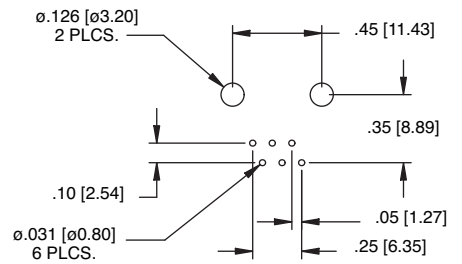
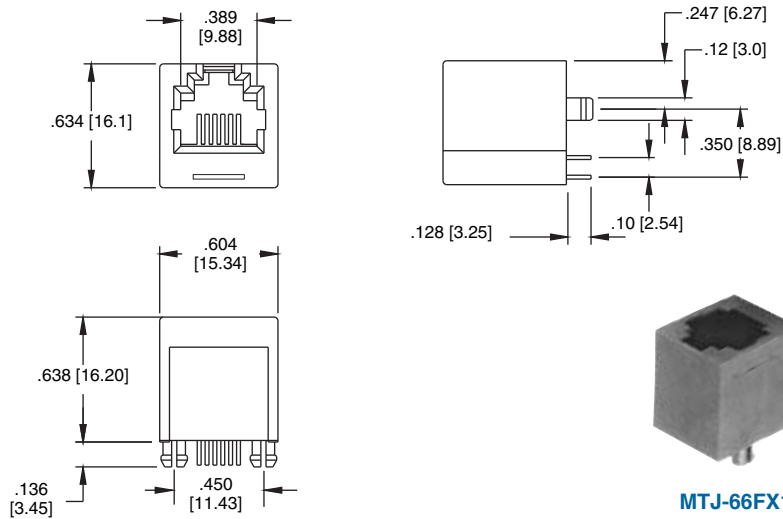
SMT Option



Recommended PCB Layout

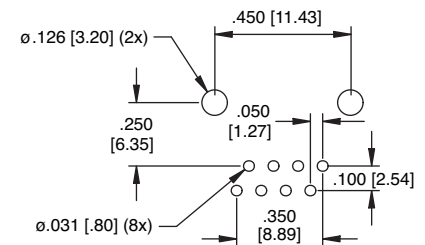
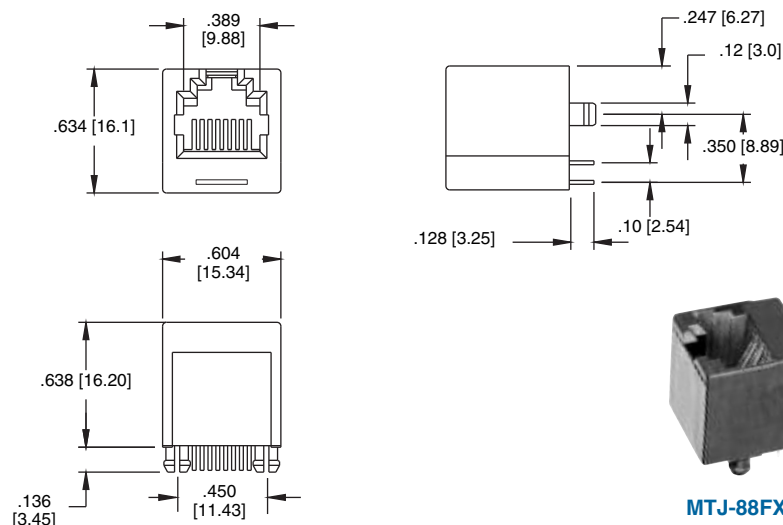
Ordering Information pg. 9

TYPE F
6P6C



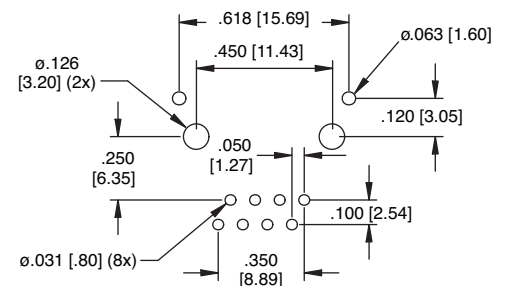
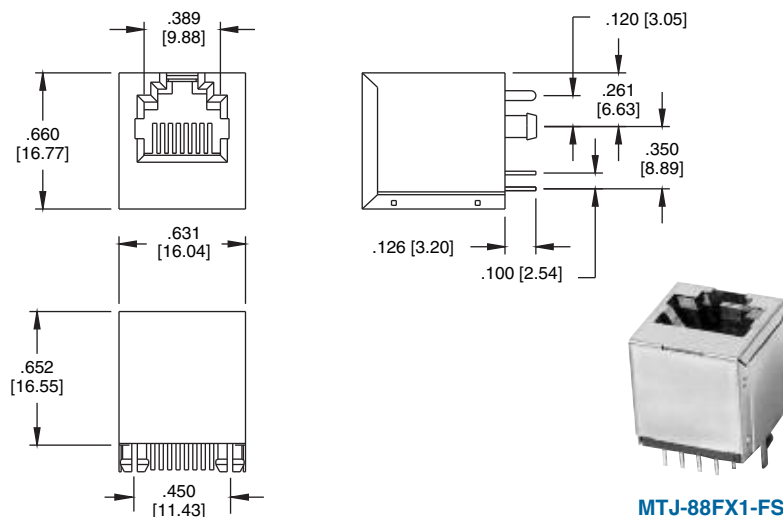
Recommended PCB Layout

TYPE F
8P8C



Recommended PCB Layout

TYPE F
SHIELDED
8P8C

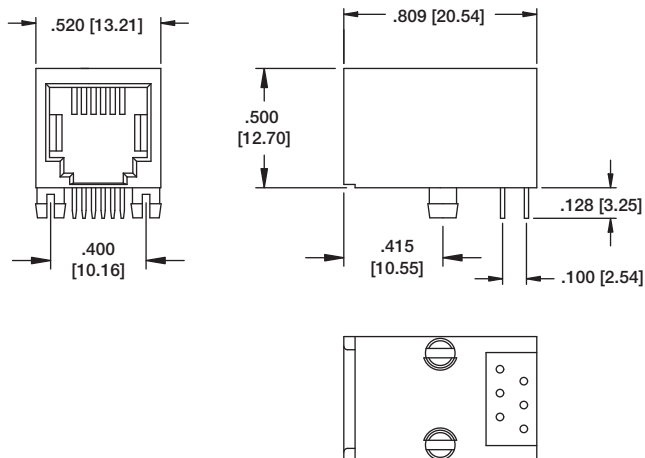


Recommended PCB Layout

Ordering Information pg. 9

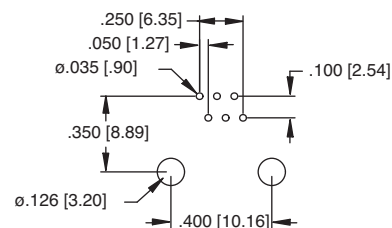
TYPE G

6P6C



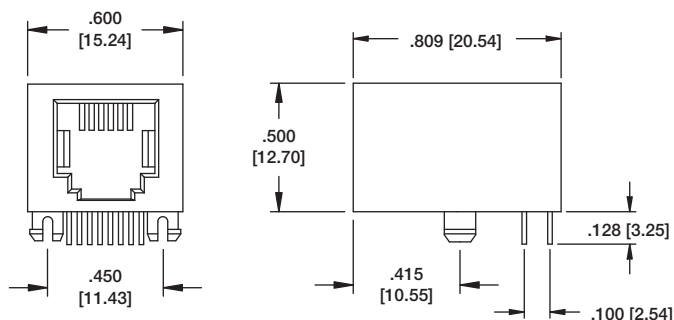
MTJ-64GX1

Recommended PCB Layout



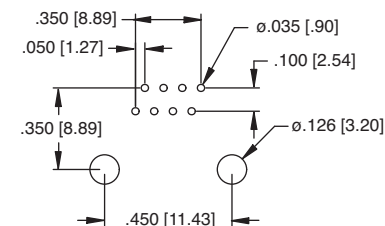
TYPE G

8P8C



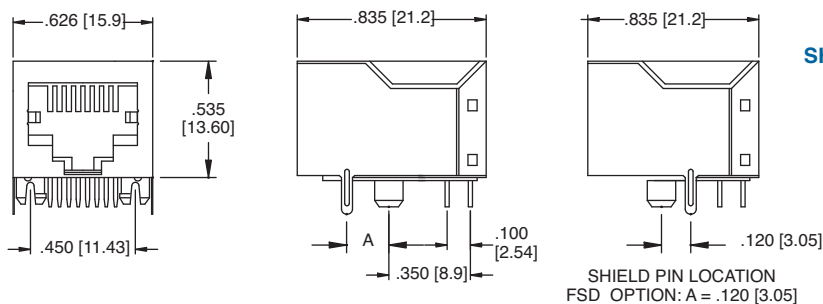
MTJ-88GX1

Recommended PCB Layout



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

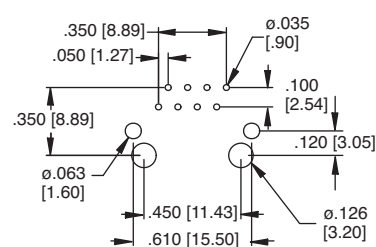
**TYPE G
SHIELDED
8P8C**



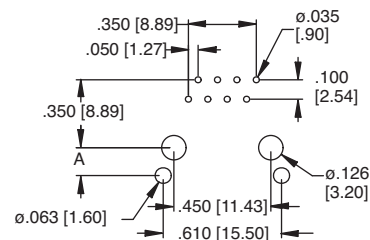
SHIELD PIN LOCATION OPTIONS
FSA OPTION: A = .170 [4.32]
FSB OPTION: A = .144 [3.66]
FSE OPTION: A = .120 [3.05]

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

Recommended PCB Layout (FSD)



PCB Layout (FSA, FSB, & FSE)



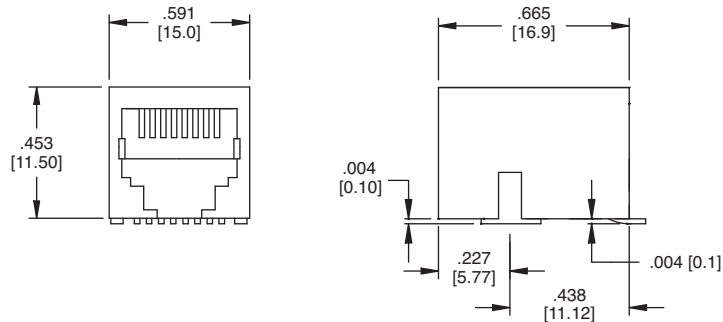
MTJ-88GX1-FSB-PG
Shown with Full Metal Shield
& Panel Ground Tab options



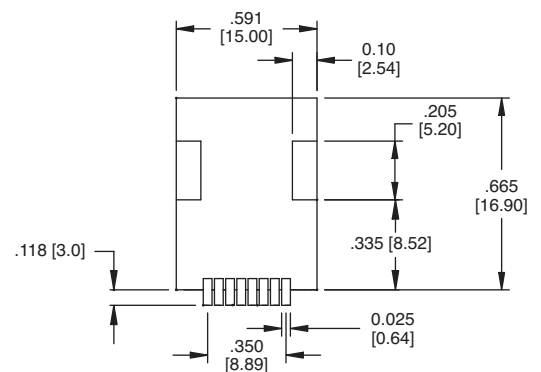
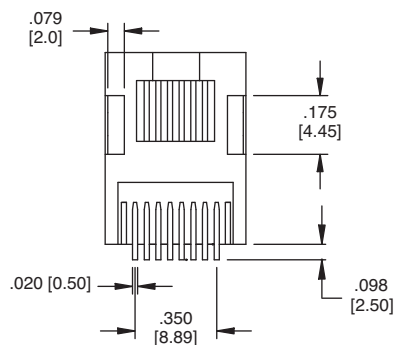
MTJ-88GX1-FSD
Shown with Full
Metal Shield option

Ordering Information pg. 9

TYPE WA
SMT TABS IN
8P8C

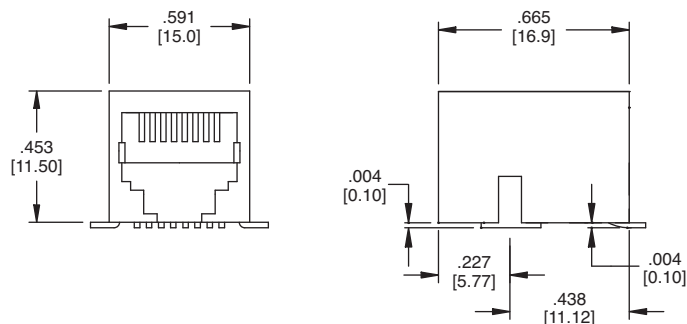


MTJ-88WAX1

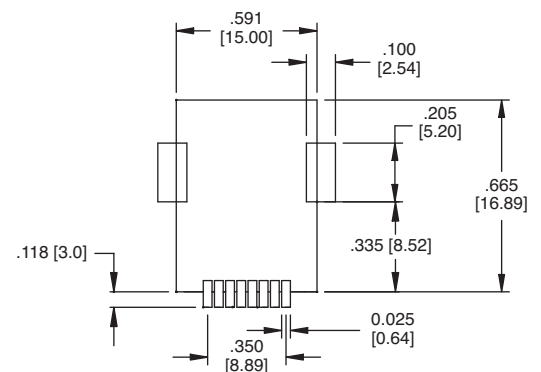
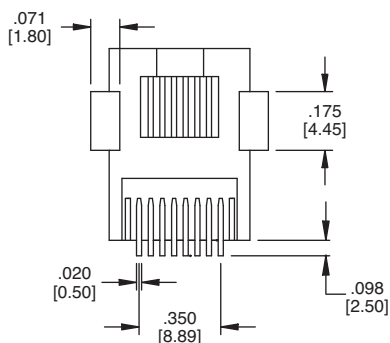


Recommended Solder Pad Layout

TYPE WB
SMT TABS OUT
8P8C



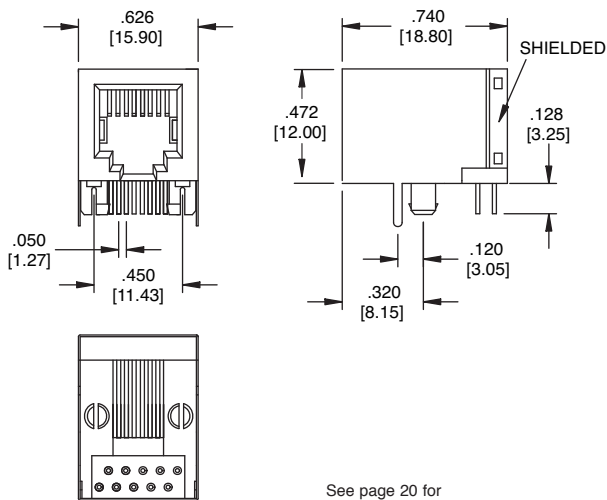
MTJ-88WBX1



Recommended Solder Pad Layout

Ordering Information pg. 9

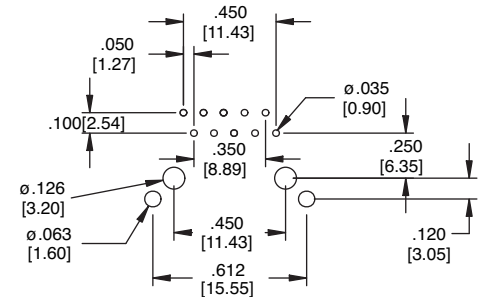
TYPE W
SHIELDED, THRU HOLE
8P8C
10P10C



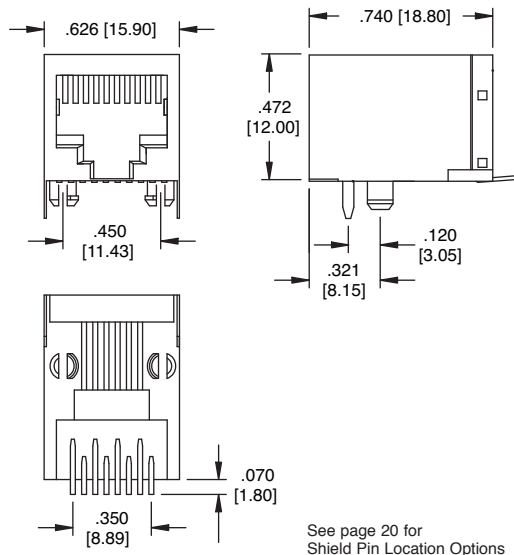
MTJ-88WX1-FSE



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



Recommended PCB Layout

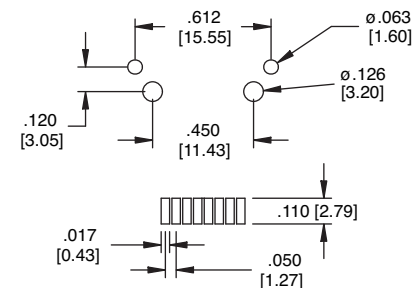


MTJ-88WX1-FSE-SMT

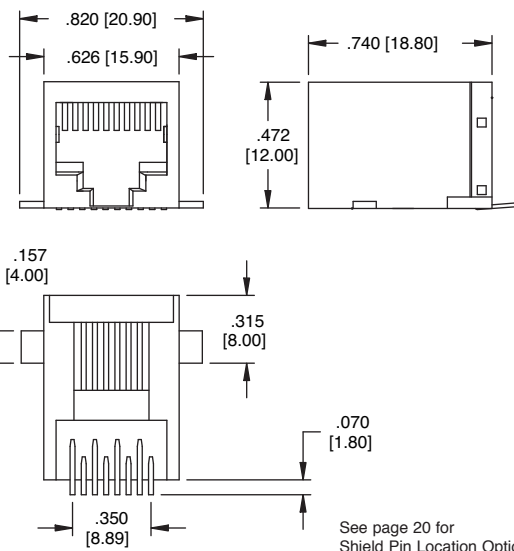


MTJ-88WX1-FSE-SMT-PG
Shown with optional
panel ground tabs

TYPE W
SHIELDED SMT WITH PLASTIC PEG
8P8C



Recommended Solder Pad Layout

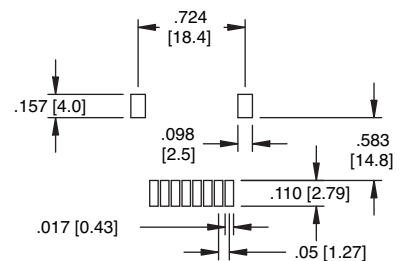


MTJ-88WX1-FS-TSMT



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

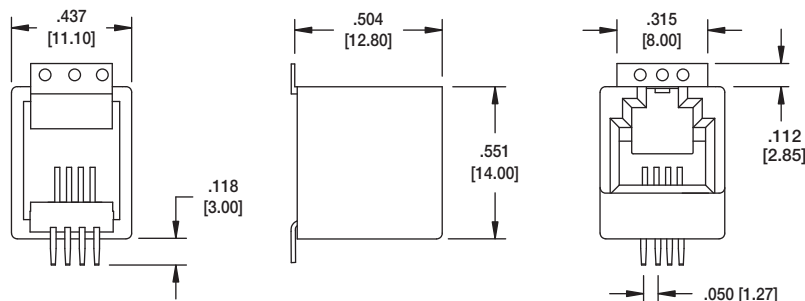
TYPE W
SHIELDED TRUE SMT
8P8C



Recommended Solder Pad Layout

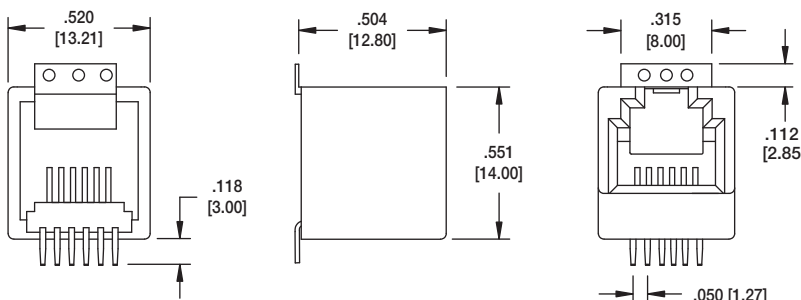
Ordering Information pg. 9

TYPE H
4P4C



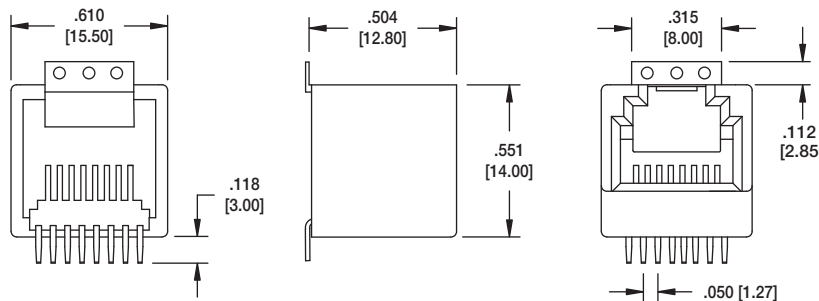
MTJ-44HX1

TYPE H
6P6C

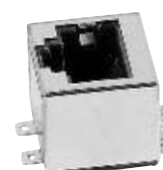


MTJ-66HX1

TYPE H
8P8C



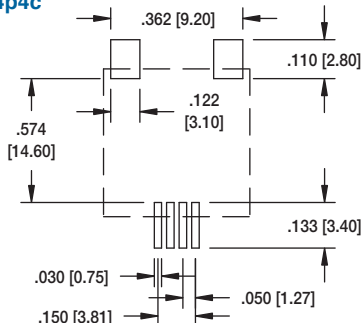
MTJ-88HX1



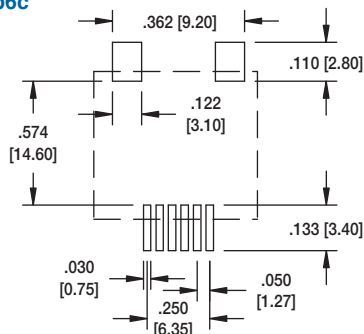
MTJ-88HX1-FS

Recommended PCB Layout

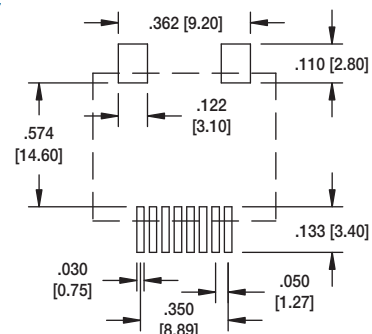
4p4c



6p6c

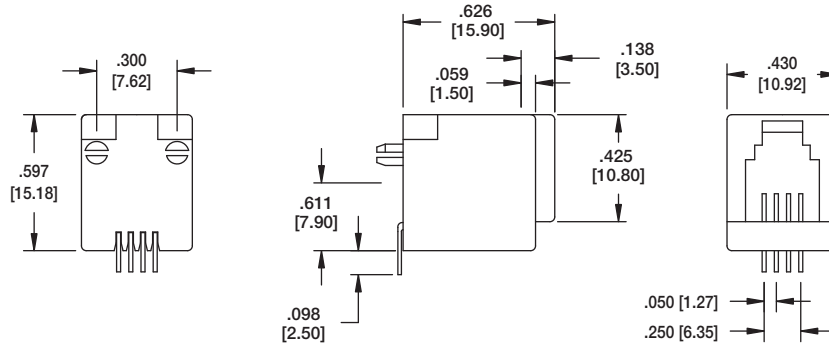


8p8c



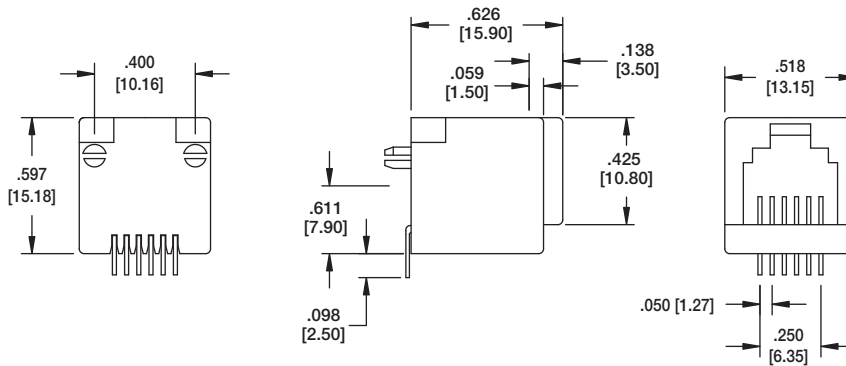
Ordering Information pg. 9

TYPE K
4P4C



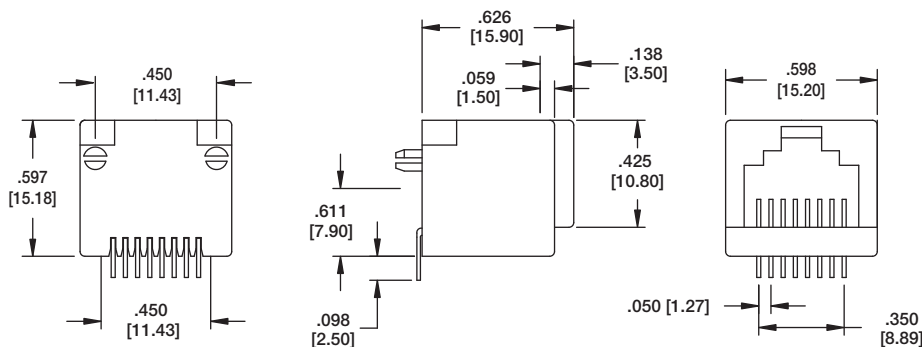
MTJ-44KX1

TYPE K
6P4C
6P6C



MTJ-66KX1

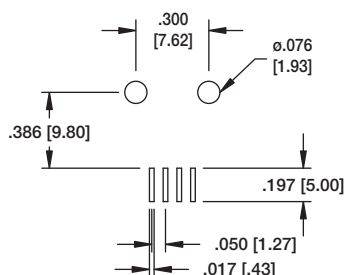
TYPE K
8P8C



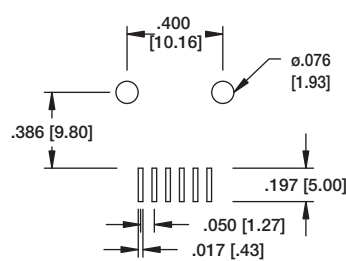
MTJ-88KX1

Recommended PCB Layout

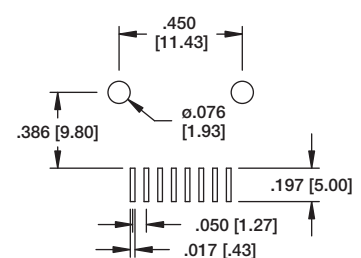
4p4c



6p6c

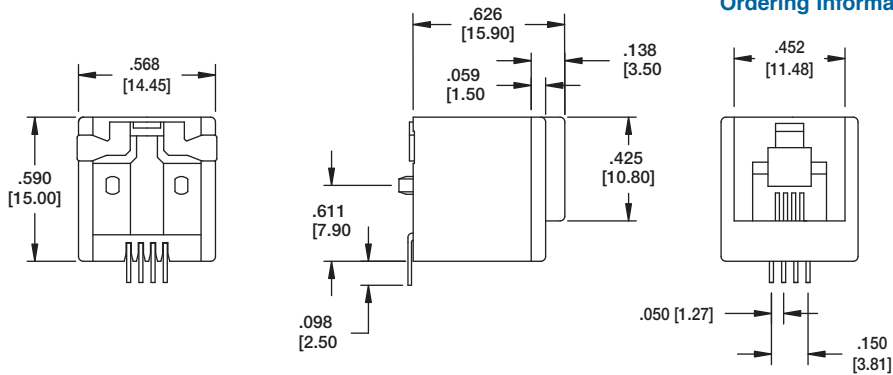


8p8c



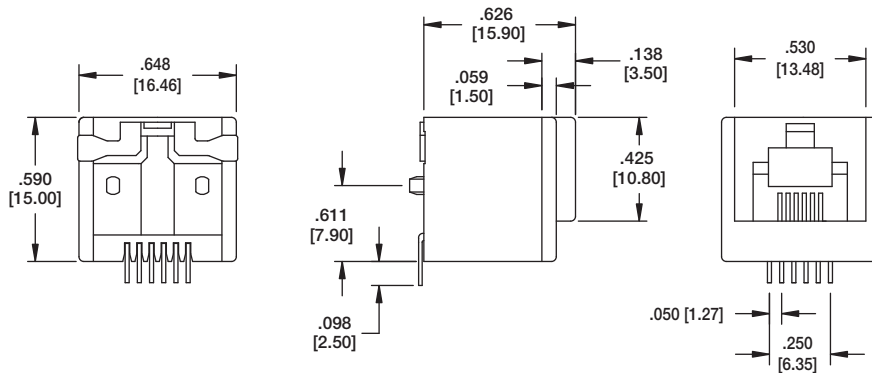
Ordering Information pg. 9

TYPE V
4P4C



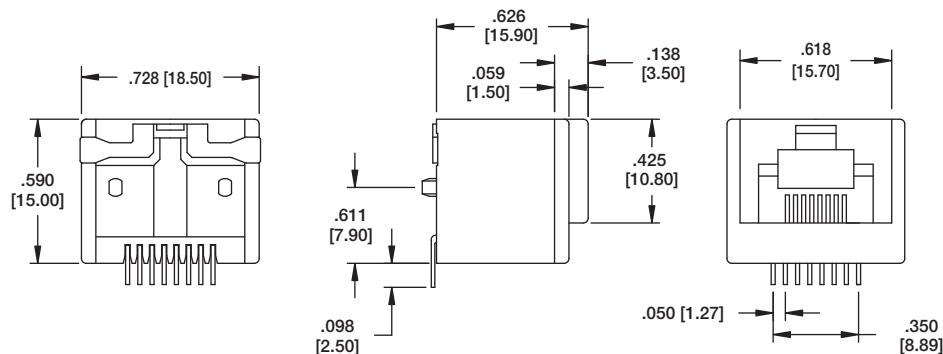
MTJ-44VX1

TYPE V
6P6C
6P4C



MTJ-66VX1

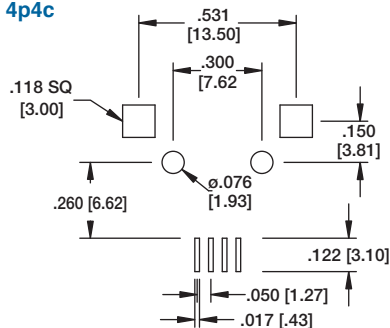
TYPE V
8P8C



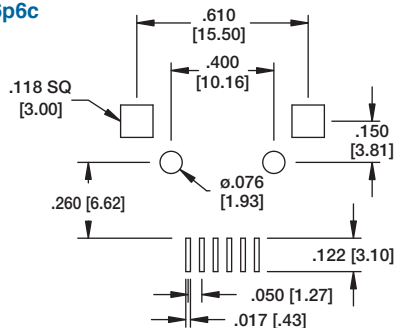
MTJ-88VX1

Recommended PCB Layout

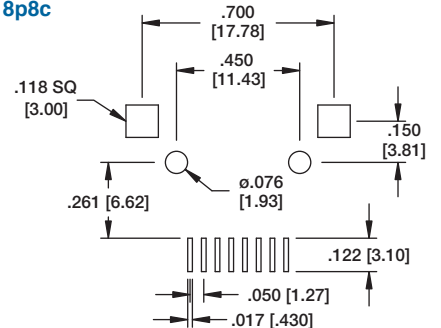
4p4c



6p6c



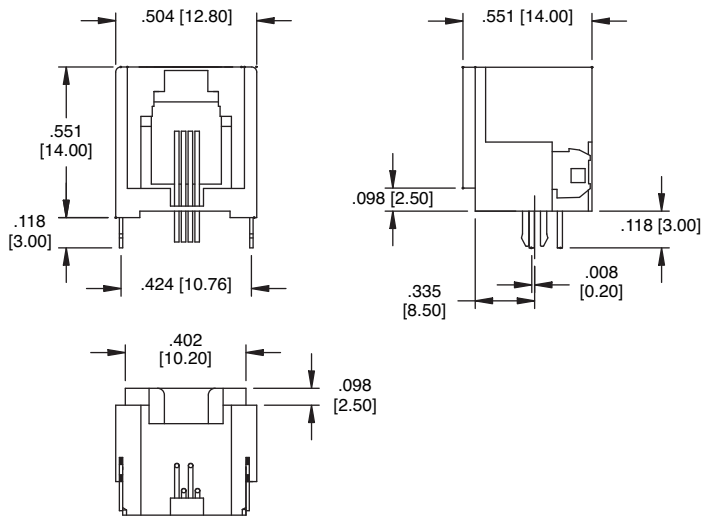
8p8c



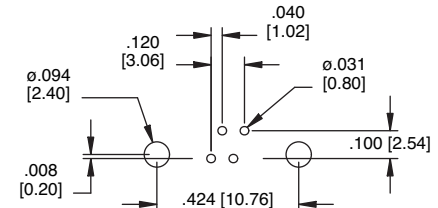
Ordering Information pg. 9

TYPE E

4P4C



MTJ-44EX1

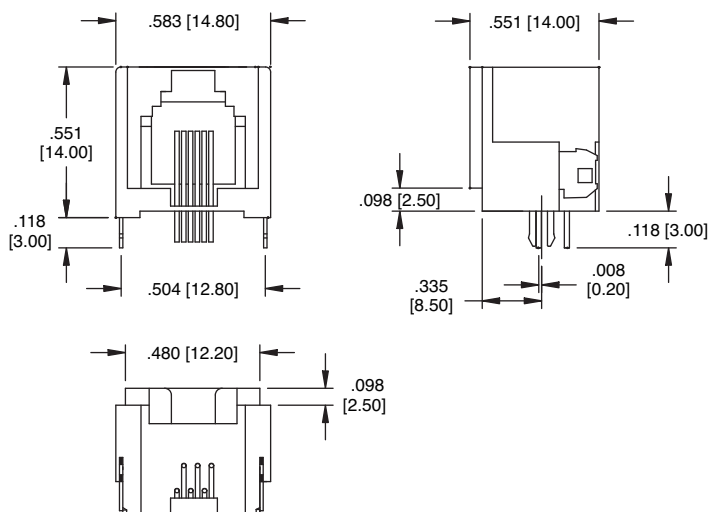


Recommended PCB Layout

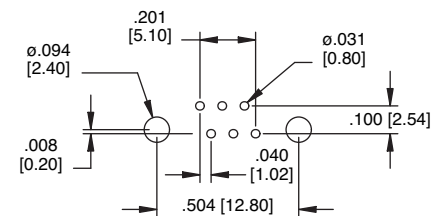
TYPE E

6P4C

6P6C



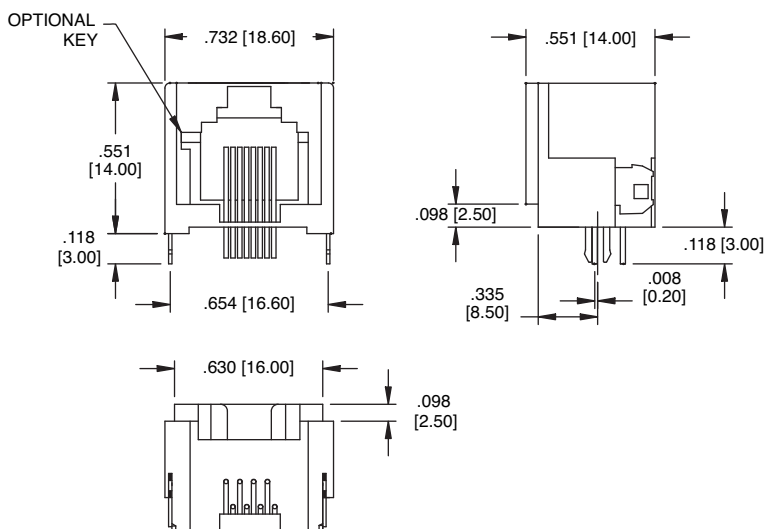
MTJ-66EX1



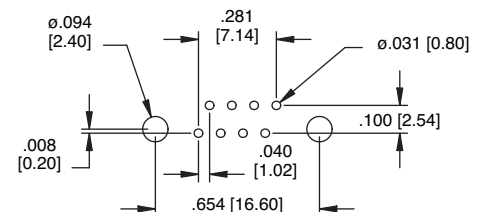
Recommended PCB Layout

TYPE E

8P8C



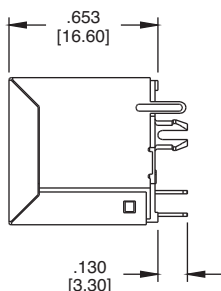
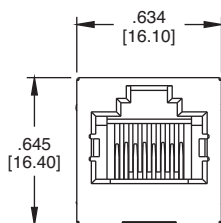
MTJ-88EX1



Recommended PCB Layout

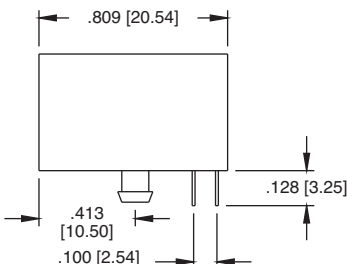
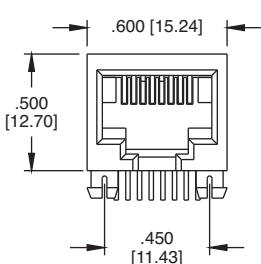
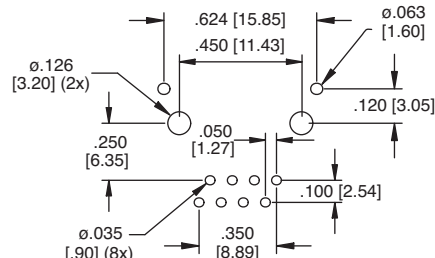
Ordering Information pg. 9

TYPE A
CAT. 5, TOP ENTRY
8P8C



MTJ-88AX1-FSE

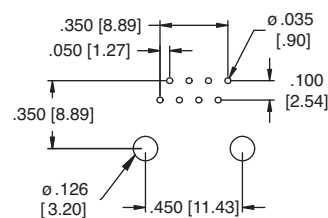
Recommended PCB Layout



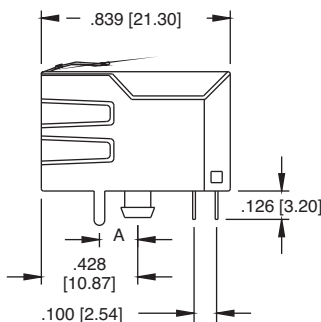
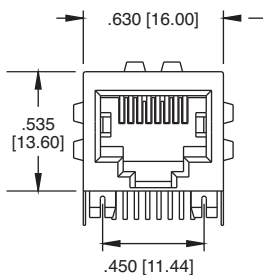
MTJ-88TX1

TYPE T
CAT. 5e, SIDE ENTRY
8P8C

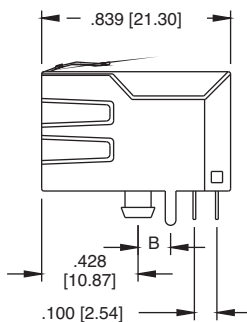
Recommended PCB Layout



TYPE T
CAT. 5e, SHIELDED
8P8C



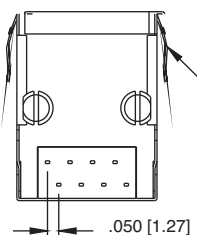
FSA, FSB & FSE



FSD = .120 [3.05]



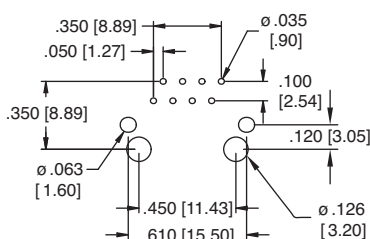
MTJ-88TX1-FSE-PG
Available with or without
panel ground tabs



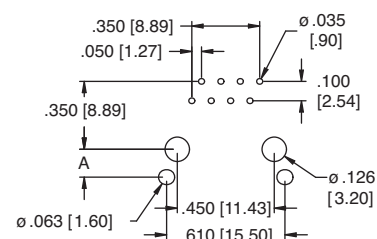
OPTIONAL
PANEL GROUND TABS

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

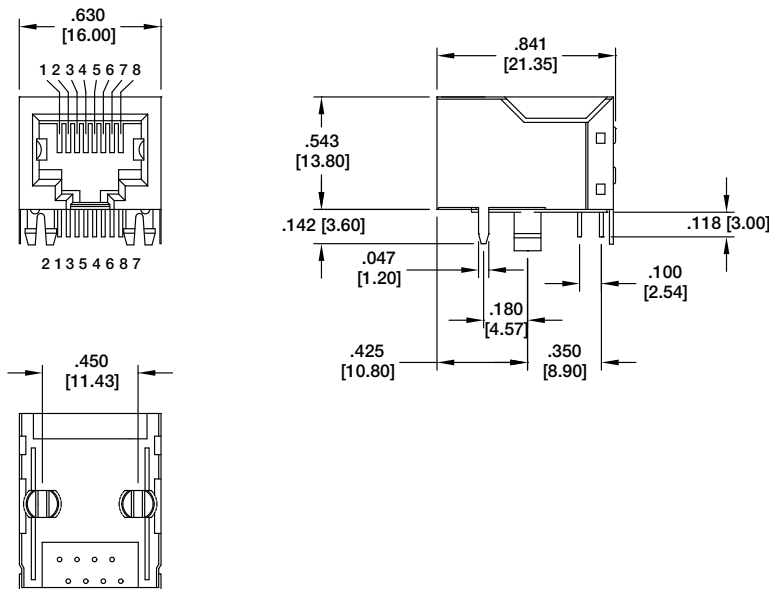
PCB Layout (FSD)



PCB Layout (FSA, FSB & FSE)



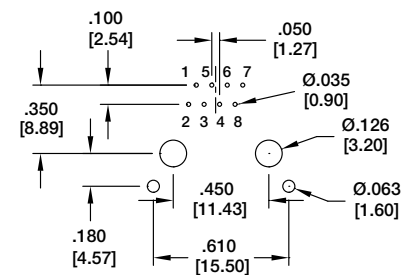
TYPE T
CAT. 5e, SHIELDED



MTJ-88TX1-FSG

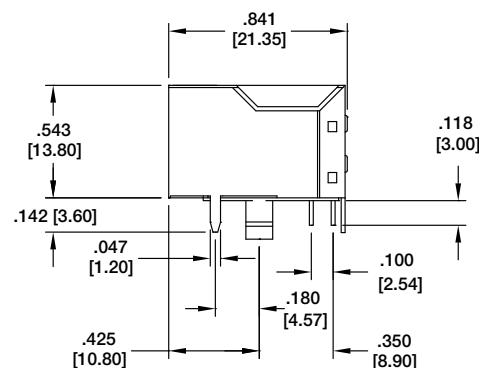
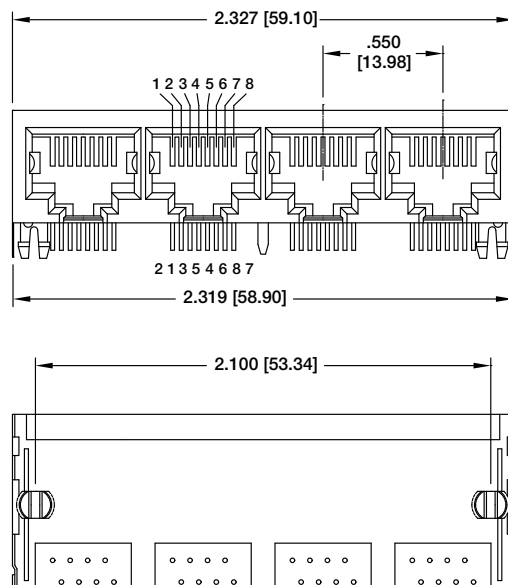


MTJ-88TX1-FSG-PG

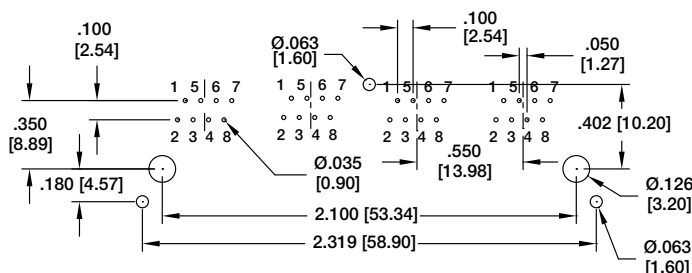


Recommended PCB Layout

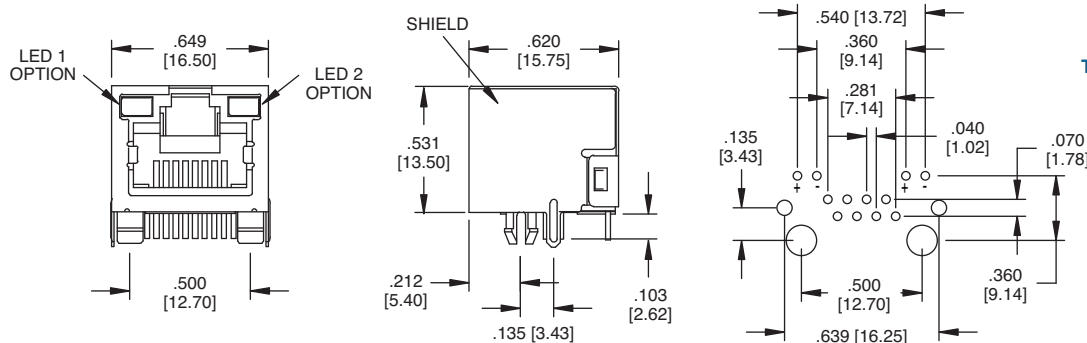
TYPE T
GANGED
CAT. 5e, SHIELDED



MTJG-4-88TX1-FSG



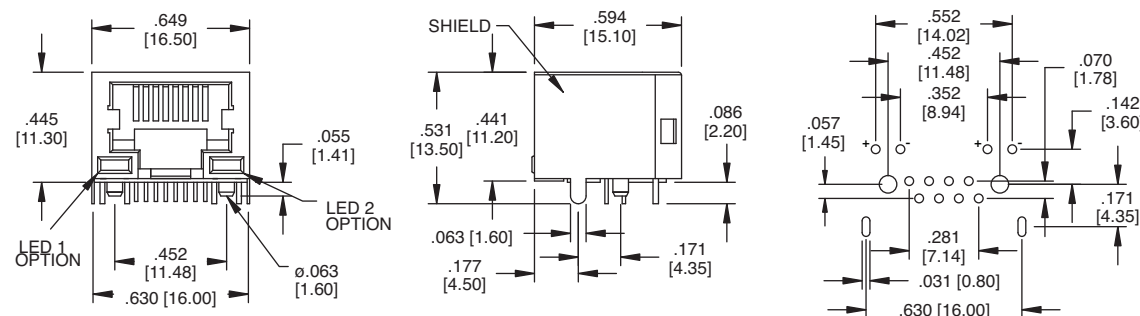
Recommended PCB Layout



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



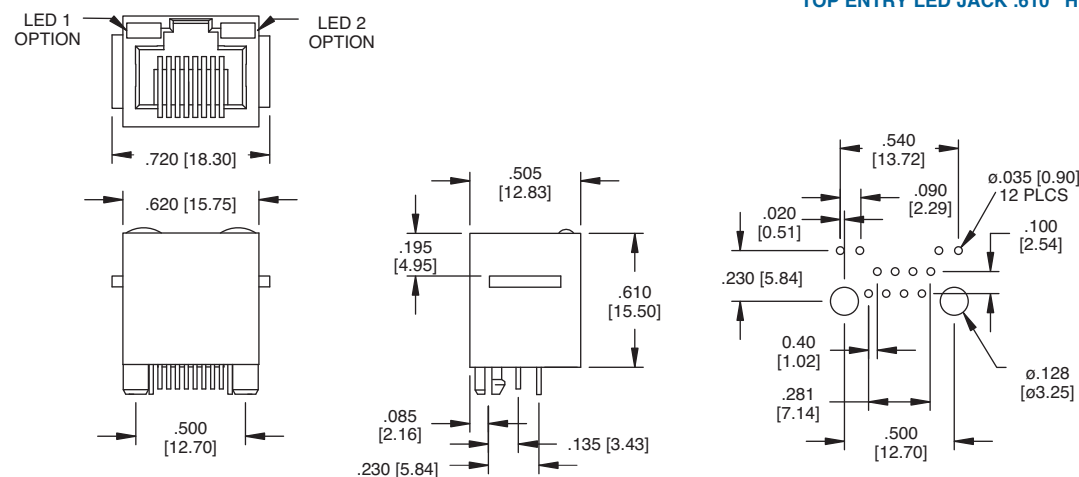
MTJ-88ARX1-FS-LG
Also available with
panel ground tabs



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



MTJ-88AAX1-FS-LG-PG



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



MTJ-88DX1-LG

Recommended PCB Layout

Add suffix to end of P/N:

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

JACKS WITH LEDs ORDERING INFORMATION



SERIES INDICATOR
MTJ = Modular
telephone jack

8

**HOUSING
PLUG SIZE**
8 or 10

8

**NO. OF CONTACT
POSITIONS FILLED**
6, 8 or 10

AR

HOUSING TYPE
AR, AA, D, G

2

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

1

**BODY
COLOR**
1 = Black
2 = Gray

LD

**LED
Configuration**
See Chart
above
Leave blank
for no LEDs

OPTIONS:

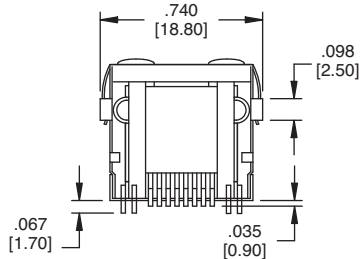
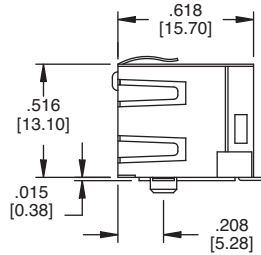
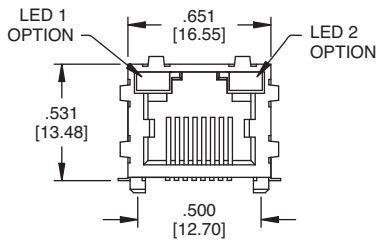
SMT = Surface mount tails with Hi-Temp insulator

PG = Panel Ground Tabs

LX = LED's, use LA, LD, LG, LH, LI, see LED Configuration Chart

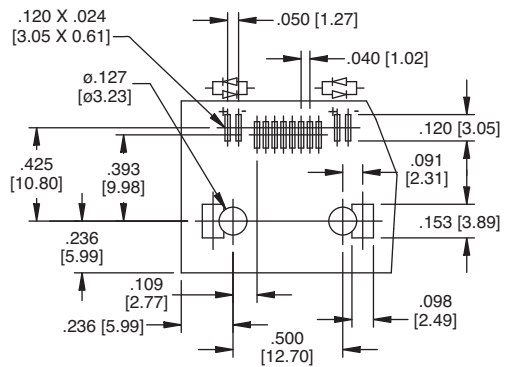
Ordering Information pg. 29

TYPE AR
WITH SMT OPTION
8P8C



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

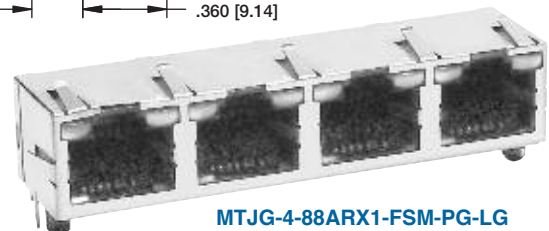
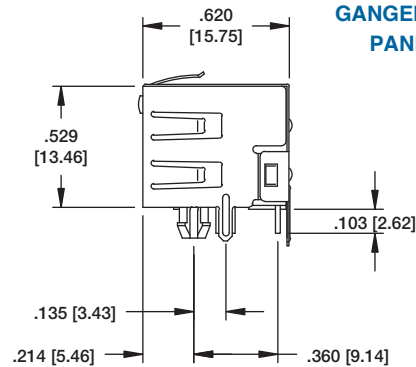
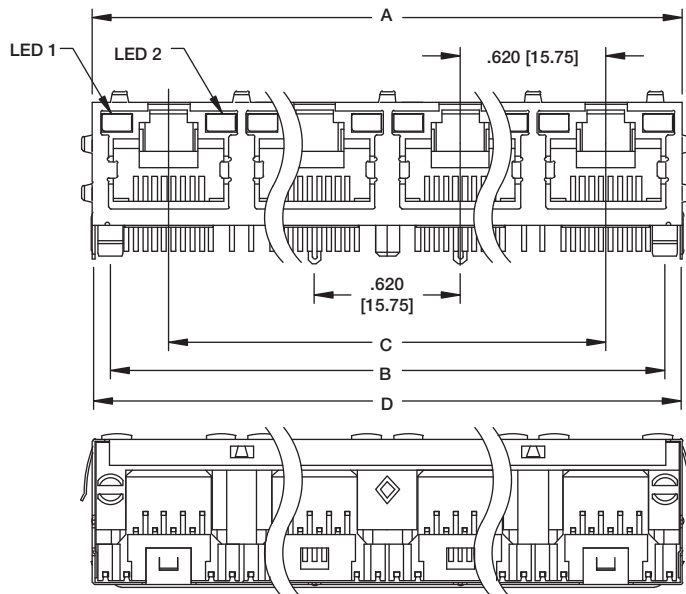
Also available without panel ground tabs



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

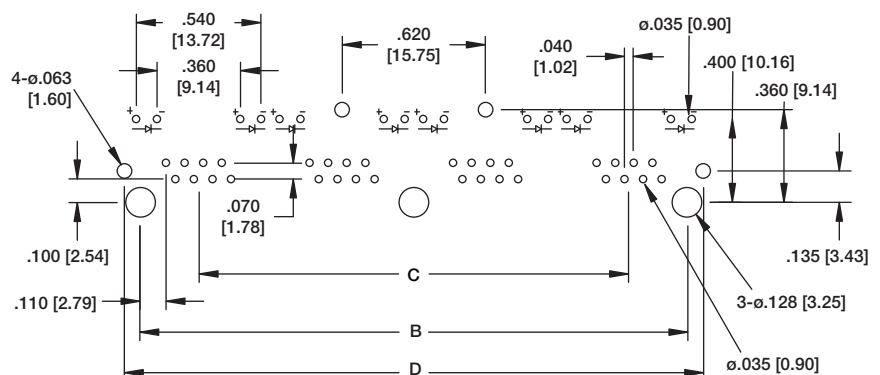
Shown with metal shield, panel ground tabs and LED options

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

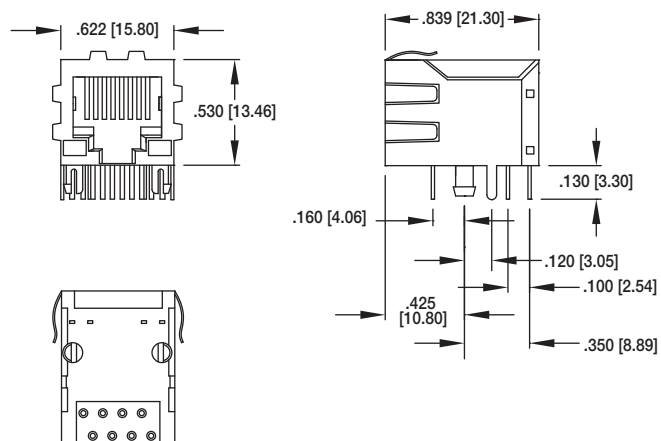
A = .620 [15.75] x No. of Ports + .029 [0.75]
B = .620 [15.75] x No. of Ports - 1 + .500 [12.70]
C = .620 [15.75] x No. of Ports - 1
D = .620 [15.75] x No. of Ports + .019 [0.50]



Recommended PCB Layout

Ordering Information pg. 29

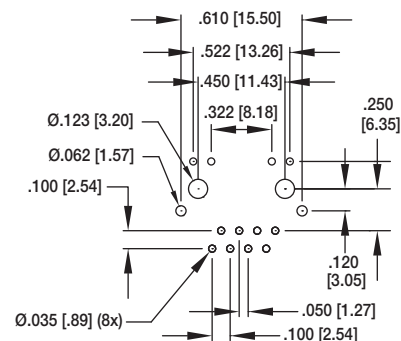
TYPE G WITH LED's



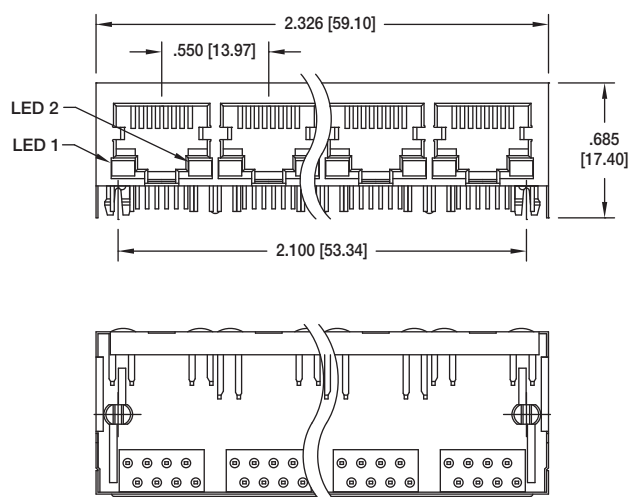
MTJ-88GX1-FSD-LH



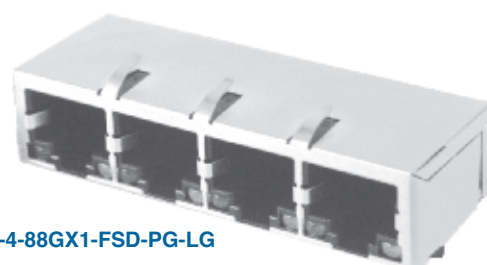
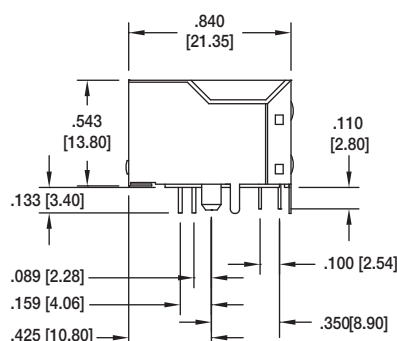
MTJ-88GX1-FSD-LH-PG



Recommended PCB Layout



2, 4 & 6 PORTS AVAILABLE

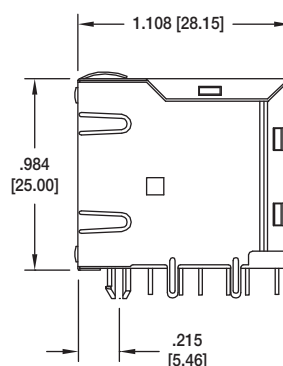
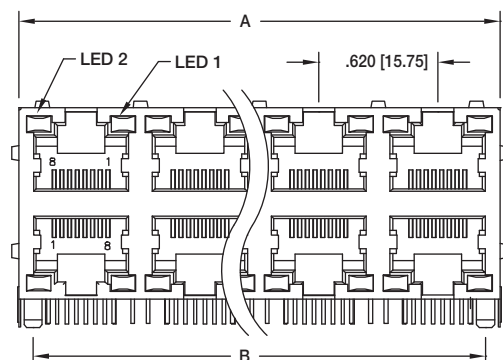


MTJG-4-88GX1-FSD-PG-LG

TYPE G GANGED WITH LED's

Ordering Information pg. 34

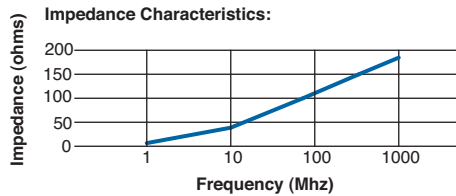
TYPE J STACKED WITH LED's



PART NUMBER	PORTS	DIMENSIONS	
		A	B
MTJG-2-88JX1-FSM-LXX	2 X 1	.650 [16.51]	.500 [12.70]
MTJG-4-88JX1-FSM-LXX	2 X 2	1.265 [32.15]	1.120 [28.45]
MTJG-8-88JX1-FSM-LXX	2 X 4	2.50 [63.65]	2.360 [59.95]
MTJG-12-88JX1-FSM-LXX	2 X 6	3.75 [95.15]	3.600 [91.45]

FILTERED MODULAR JACKS

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



Ordering Information pg. 9

TYPE M

EMI FERRITE FILTERED JACK



MTJ-88MX1
Non-Shielded

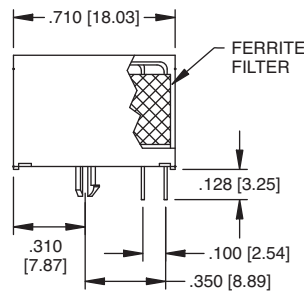
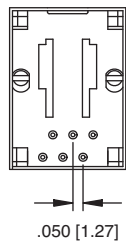
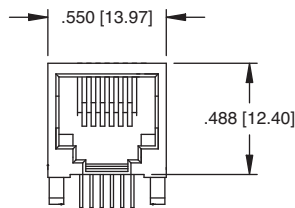


MTJ-88MX1-FSE
Metal Shielded

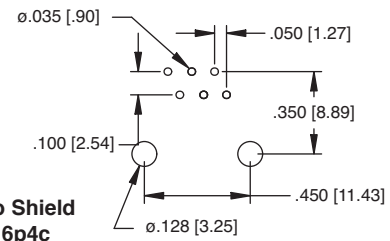


MTJ-88MX1-FSE-PG
Metal Shielded with
panel ground tabs

EMI FERRITE FILTERED JACK

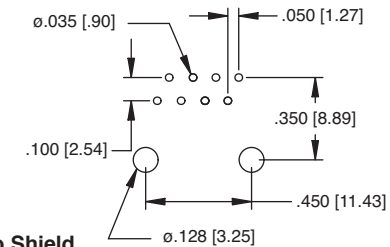


Type M
6P6C
6P4C



No Shield
6p4c
6p6c

Recommended PCB Layout

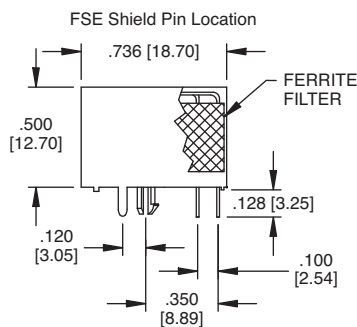
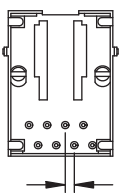
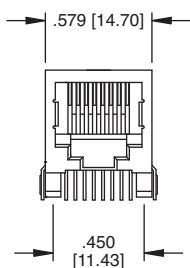


No Shield
8p8c

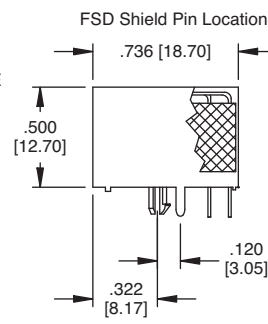
Recommended PCB Layout

EMI FERRITE FILTERED & SHIELDED JACK

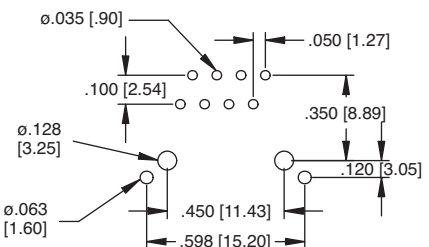
Type M
8P8C



MTJ-88MX1-FSE

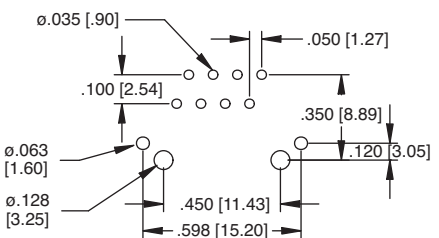


MTJ-88MX1-FSD



FSE Shield
8p8c

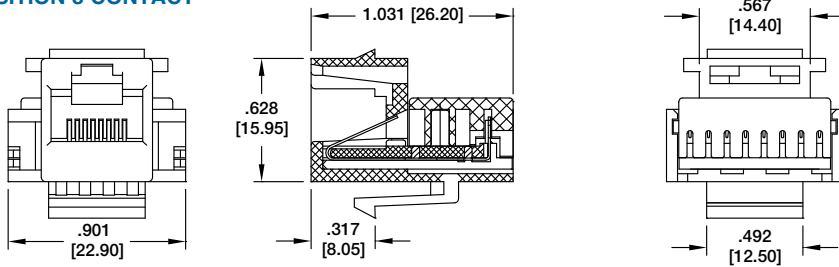
Recommended PCB Layout



FSD Shield
8p8c

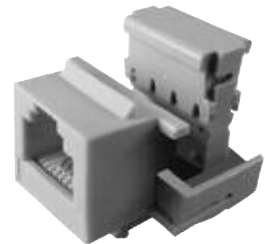
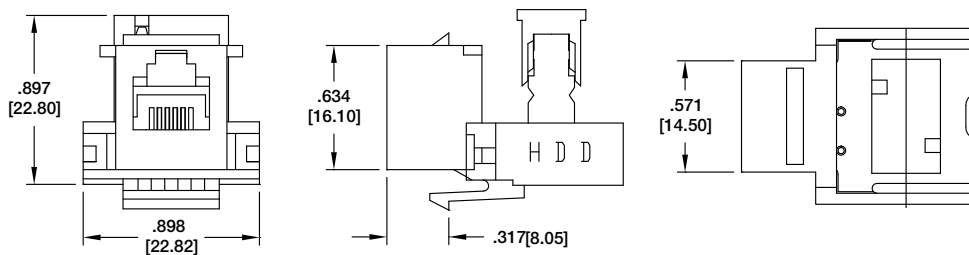
Recommended PCB Layout

CAT. 3 KEYSTONE JACK 8 POSITION 8 CONTACT



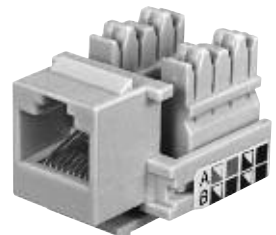
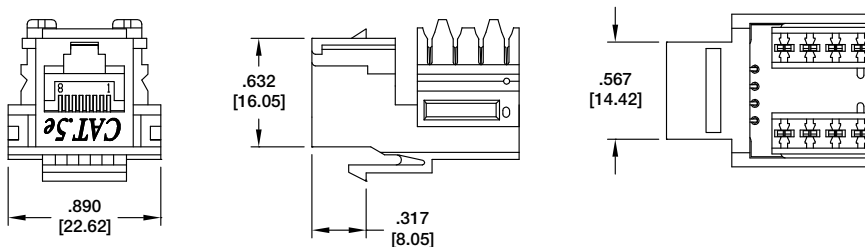
MTJK-88-10

CAT. 3 KEYSTONE JACK 6 POSITION 4 CONTACT



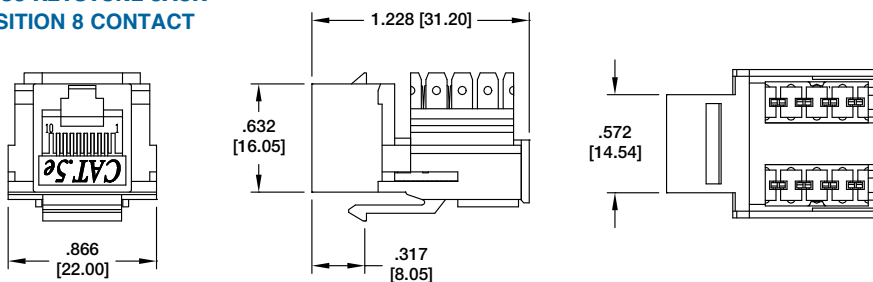
MTJK-64-29

CAT. 5e KEYSTONE JACK 8 POSITION 8 CONTACT



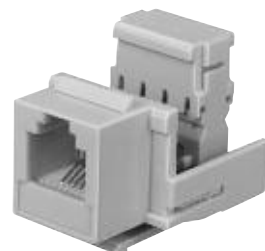
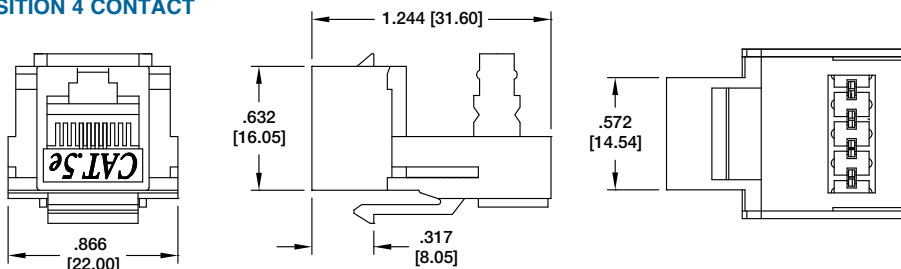
MTJK-88-02-C5E

CAT. 5e KEYSTONE JACK 8 POSITION 8 CONTACT



MTJK-88-05-C5E

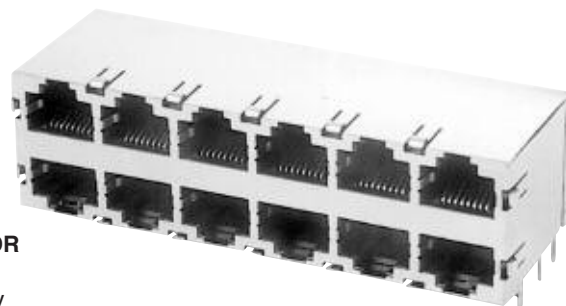
CAT. 5e KEYSTONE JACK 8 POSITION 4 CONTACT



MTJK-84-01-C5E

ORDERING INFORMATION GANGED JACKS WITHOUT LEDs

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



MTJG-12-88JX1-FSG-PG



MTJG-2-88GX1-FSG

ORDERING INFORMATION GANGED JACKS WITH LEDs

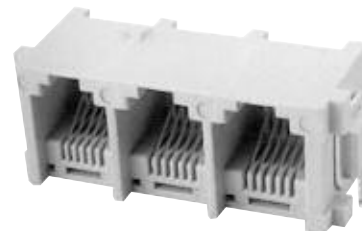
MTJG	2	64	AR	2	1	LD
SERIES INDICATOR MTJG = Ganged Telephone Jack	NO. OF PORTS 2, 4, 6, 8, 12 or 16	PORT SIZE / POSITIONS FILLED 62 = 6 position, 2 contacts (6P2C) 64 = 6 position, 4 contacts (6P4C) 66 = 6 position, 6 contacts (6P6C) 88 = 8 position, 8 contacts (8P8C)	HOUSING TYPE AR, G, J	CONTACT PLATING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



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

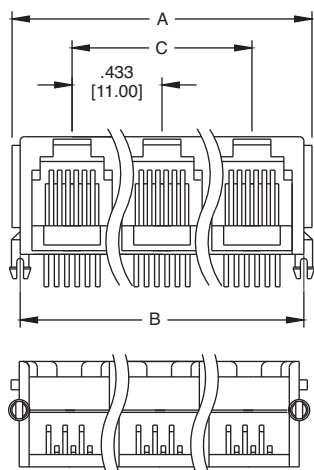
PG = Panel ground tabs

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

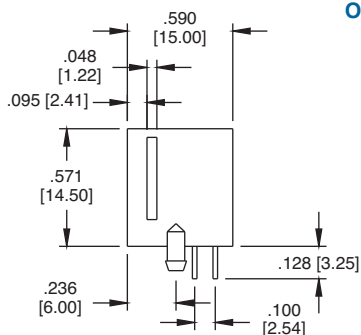




$$A = .433 [11.00] \times \text{No. of Ports} + .100 [2.54]$$

$$B = .433 [11.00] \times \text{No of Ports} + .020 [0.50]$$

$$C = .433 [11.00] \times \text{No of Ports} - 1$$



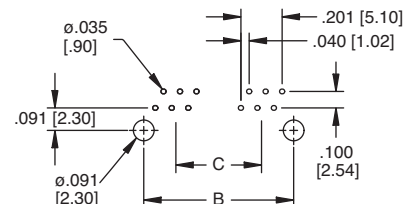
Ordering Information pg. 34



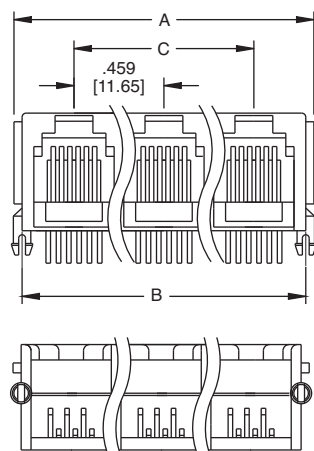
MTJG-2-642X1

TYPE 2

6P4C
6P6C



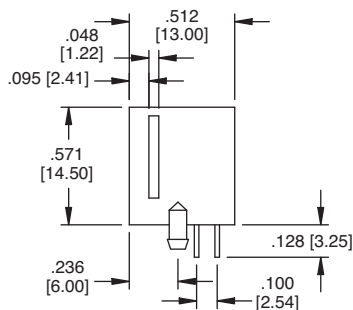
Recommended PCB Layout



$$A = .459 [11.65] \times \text{No. of Ports} + .100 [2.54]$$

$$B = .459 [11.65] \times \text{No of Ports} + .020 [0.50]$$

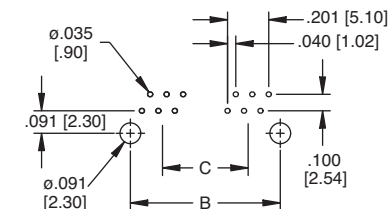
$$C = .459 [11.65] \times \text{No of Ports} - 1$$



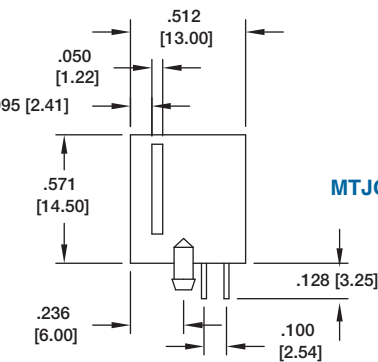
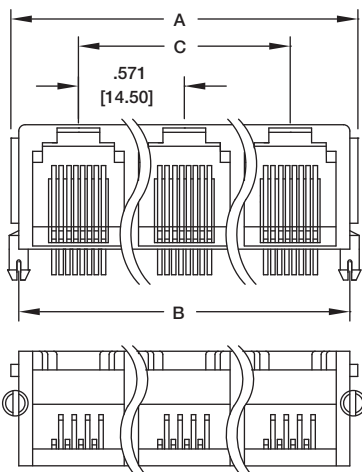
MTJG-2-642BX1

TYPE 2B

6P4C
6P6C



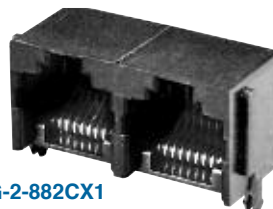
Recommended PCB Layout



$$A = .571 [14.50] \times \text{No. of ports} + .122 [3.10]$$

$$B = .571 [14.50] \times \text{No. of Ports} + .019 [0.50]$$

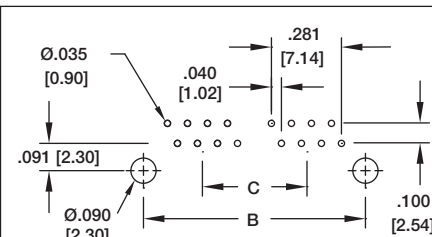
$$C = .571 [14.50] \times \text{No. of Port} - 1$$



MTJG-2-882CX1

TYPE 2C

8P8C



Recommended PCB Layout

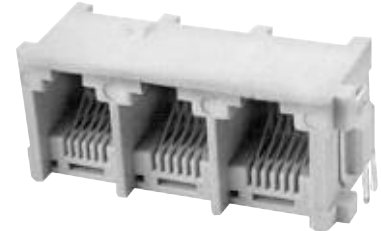
Ordering Information pg. 34

TYPE 7H

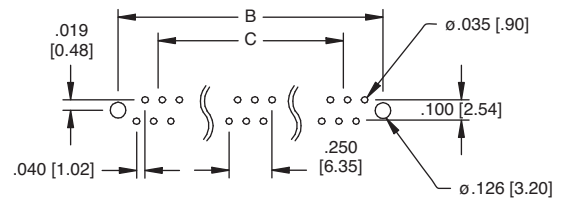
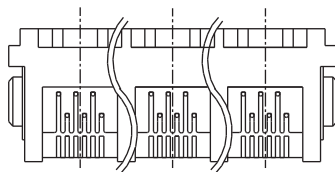
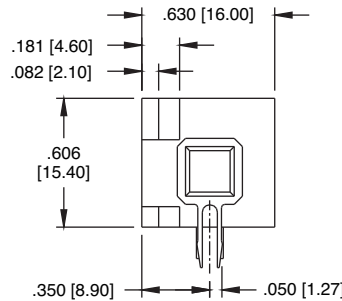
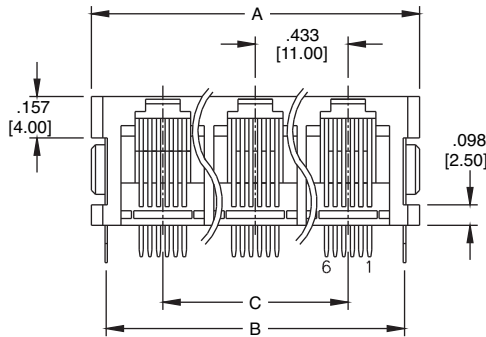
RIGHT ANGLE ENTRY

6P4C

6P6C



MTJG-3-667HX2



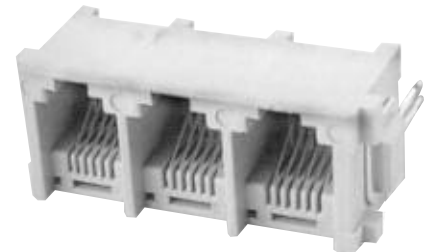
Recommended PCB Layout

TYPE 7V

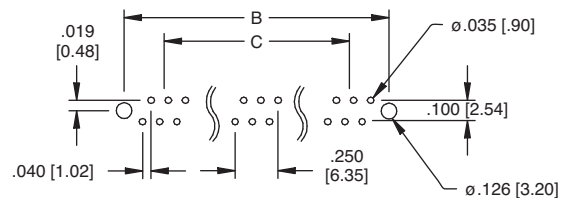
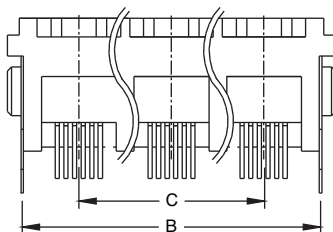
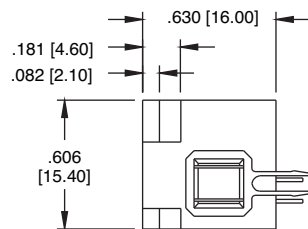
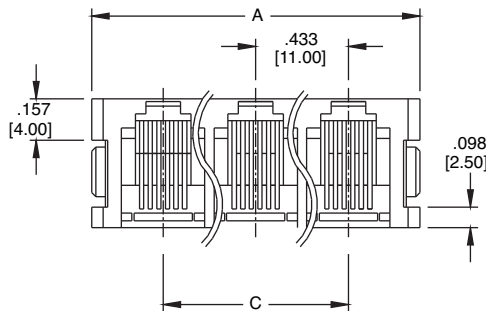
TOP ENTRY

6P4C

6P6C

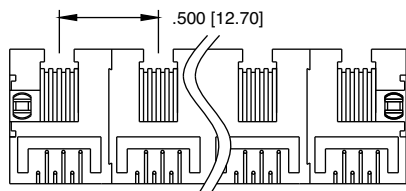
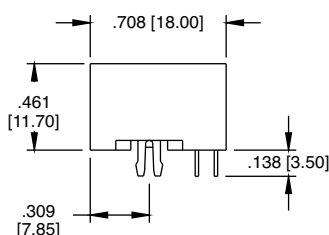
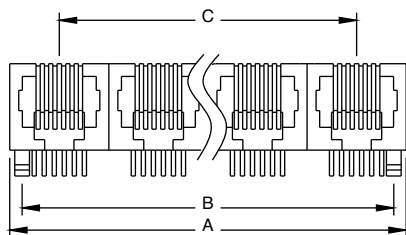


MTJG-3-667VX2



Recommended PCB Layout

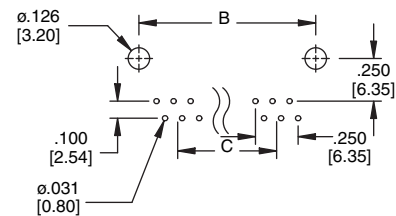
DIMENSION	No of Ports						
	2	3	4	5	6	7	8
A	1.110 [28.20]	1.543 [39.20]	1.976 [50.20]	2.409 [61.20]	2.843 [72.20]	3.275 [83.20]	3.710 [94.20]
B	.992 [25.20]	1.425 [36.20]	1.858 [47.20]	2.291 [58.20]	2.724 [69.20]	3.157 [80.20]	3.590 [91.20]
C	.433 [11.00]	.886 [22.00]	1.299 [33.00]	1.732 [44.00]	2.165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



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

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

$$C = .500 [12.70] \times \text{NO. OF PORTS} - 1$$



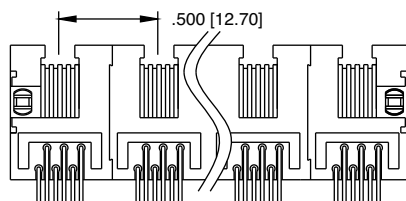
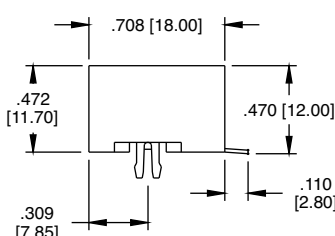
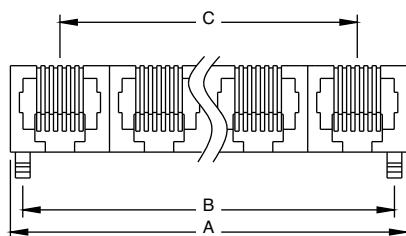
Recommended PCB Layout



MTJG-3-665X1

TYPE 5
THRU HOLE
6P4C
6P6C

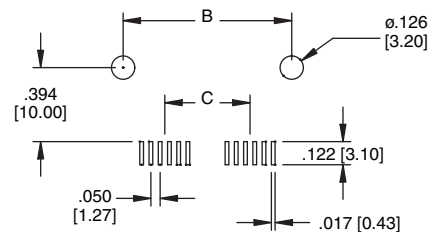
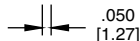
Ordering Information pg. 34



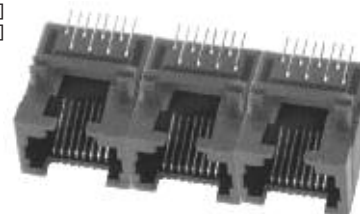
$$A = .500 [12.70] \times (\text{NO. OF PORTS} - 1) + .519 [13.20]$$

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

$$C = .500 [12.70] \times \text{NO. OF PORTS} - 1$$



Recommended PCB Layout

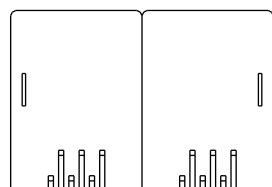
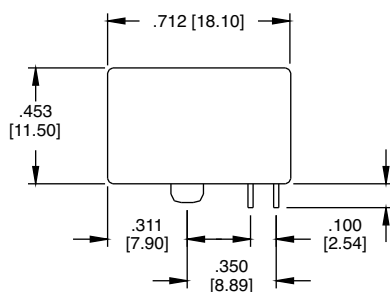
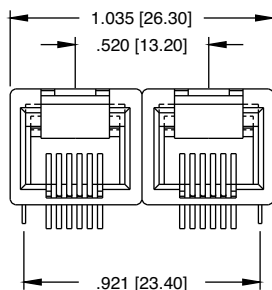


MTJG-3-885X1-SMT

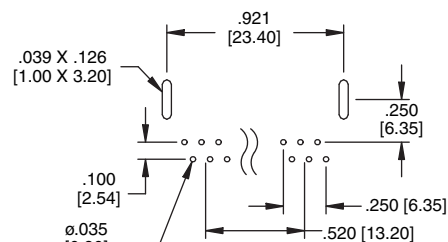
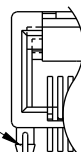
Available in 6P6C or 8P8C Versions

TYPE 5
SMT
8P8C

Ordering Information pg. 34



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



Recommended PCB Layout

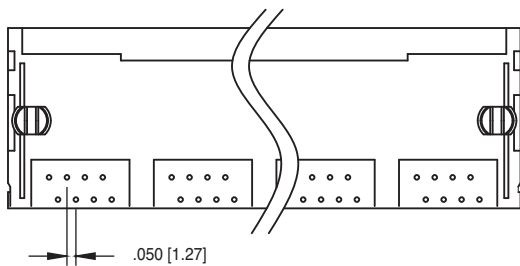
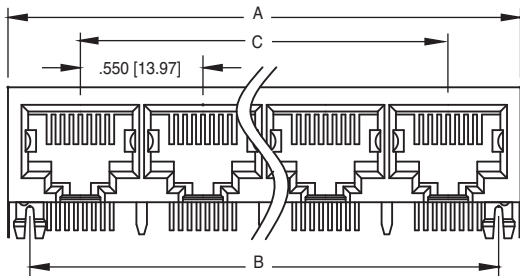


MTJG-2-66NX1

TYPE N
METAL PEG
6P4C
6P6C

Ordering Information pg. 34

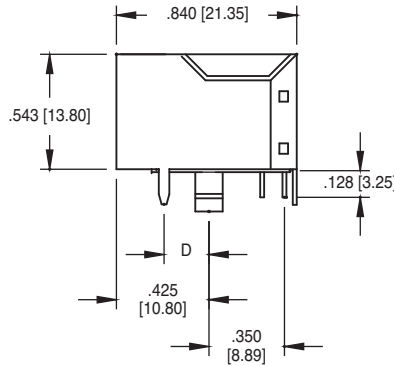
TYPE G
GANGED
8P8C



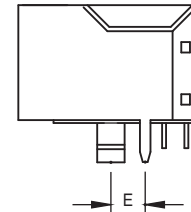
$$A = .550 [13.97] \times (\text{NO. OF PORTS} - 1) + .679 [17.27]$$

$$B = .550 [13.97] \times (\text{NO. OF PORTS} - 1) + .450 [11.43]$$

$$C = .550 [13.97] \times \text{NO. OF PORTS} - 1$$



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



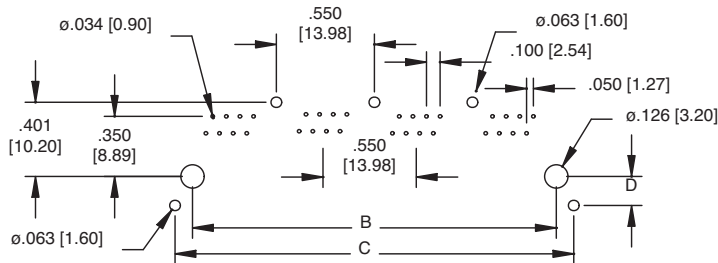
"E" DIM.
FSD = .120 [3.05]
FSR = .144 [3.65]



MTJG-4-88GX1-FSB

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

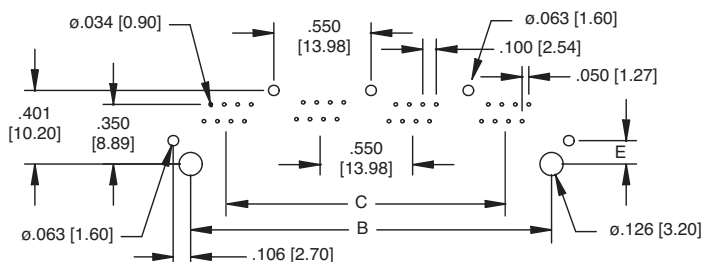
"D" DIM.
FSA = .170 [4.32] FSE = .120 [3.05]
FSB = .144 [3.65] FSG = .180 [4.57]



MTJG-4-88GX1-FSB-PG

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

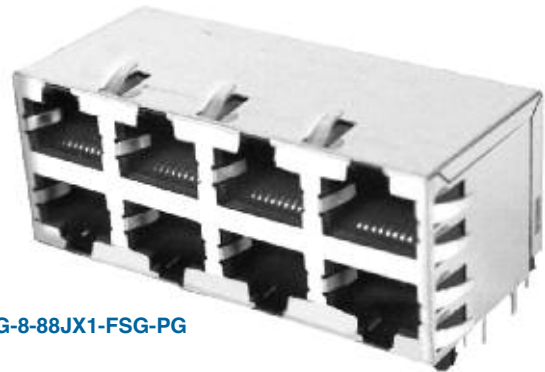
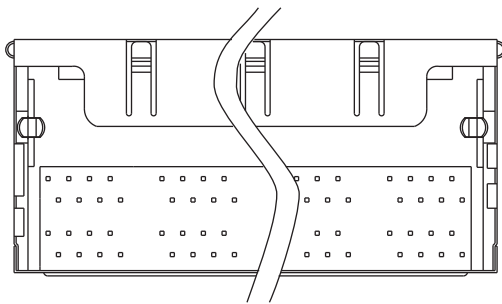
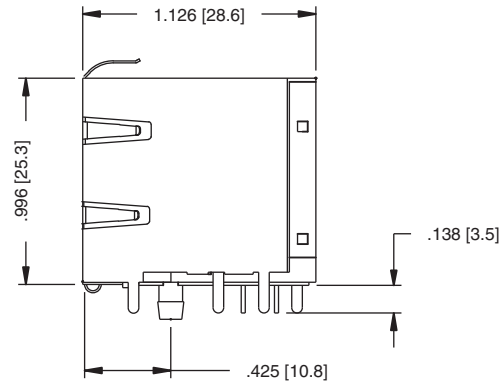
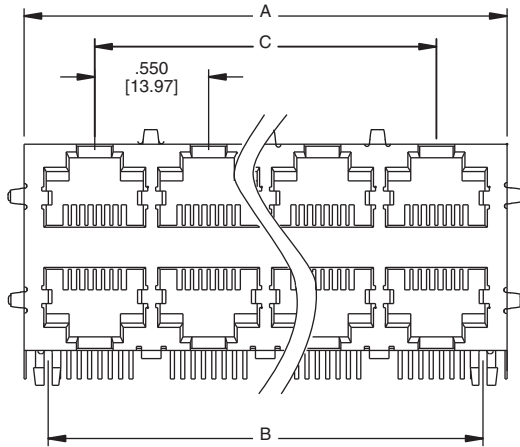
"E" DIM.
FSD = .120 [3.05]
FSR = .144 [3.65]



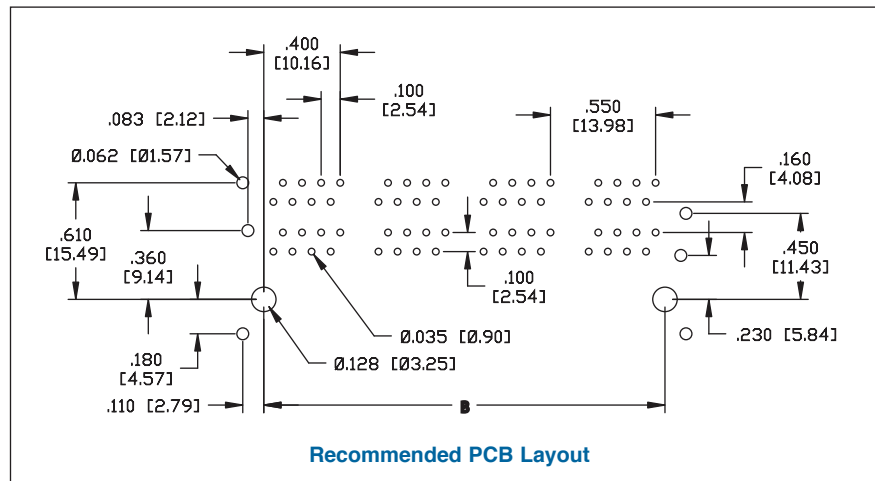
Ordering Information pg. 34

TYPE J

8P8C



MTJG-8-88JX1-FSG-PG



Recommended PCB Layout

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

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

INTRODUCTION:

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

FEATURES:

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

MATING PLUGS:

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

SPECIFICATIONS:

MATERIAL:

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

ELECTRICAL:

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

MECHANICAL:

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

TEMPERATURE RATING:

Operation Temperature: -40°C ~ +85°C

PACKAGING:

Anti-ESD plastic trays or tubes

SAFETY AGENCY APPROVALS:

UL Recognized & CSA Certified, File no. E224049

Contact Plating:

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



MAGNETICS TELEPHONE JACK ORDERING INFORMATION

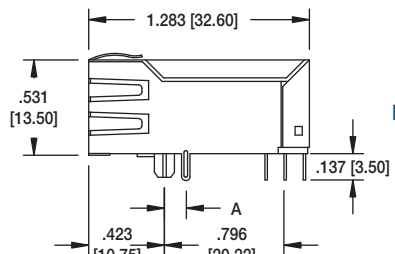
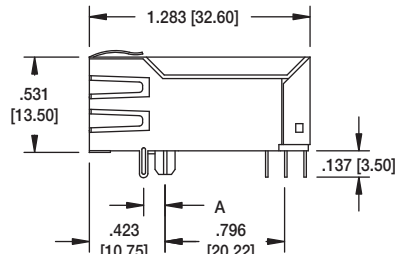
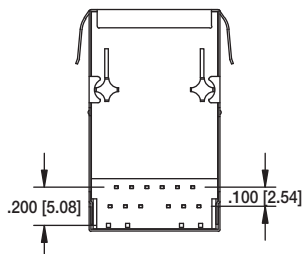
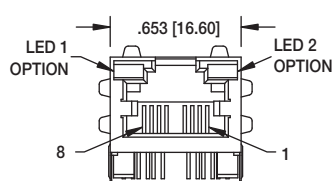
MTJ	8	8	C	X	1	FSD	LD	M5
SERIES INDICATOR MTJ = Modular Telephone Jack		NO. OF CONTACT POSITIONS FILLED 8 or 10		PLATING X = Gold Flash 0 = 15 μin gold 1 = 30 μin gold 2 = 50 μin gold		SHIELD PIN LOCATION OPTION FSD or FSP (See drawing on page 41)		TRANSFORMER TYPE M1 Thru M20 (See page 44-45) Consult Factory if transformer type required is not shown
	HOUSING PLUG SIZE 8 or 10		HOUSING TYPE C = Tab Up, Extended Body S = Tab Up, Standard Body T = Tab Down, Short Body		BODY COLOR 1 = Black		LED LX = Led Color (See Chart on page 43) RLX = Led with Resistor	

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

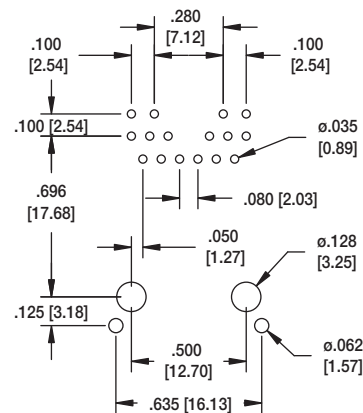


MTJ-88CX1-FSP-PG-LG-M3

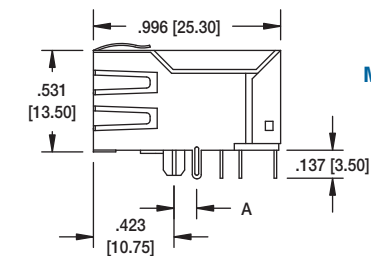
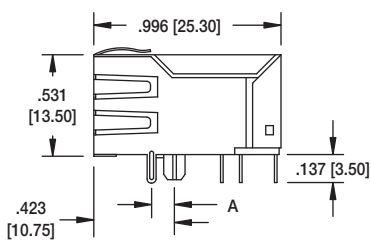
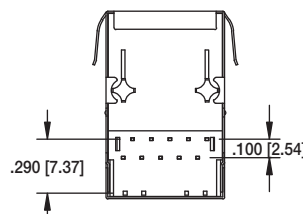
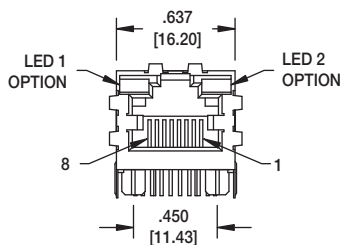
SHIELD PIN LOCATION
FSD DIMENSION: A = .120 [3.05]
FSP DIMENSION: A = .125 [3.05]

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

TYPE C TAB UP & TOP LEDs, EXTENDED BODY



**Recommended PCB Layout
FSP Option Shown**

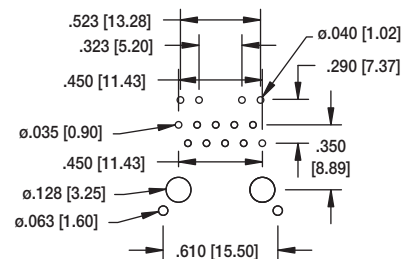


MTJ-88SX1-FSP-PG-LG-M7

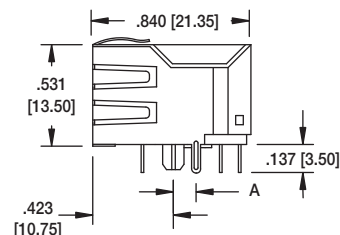
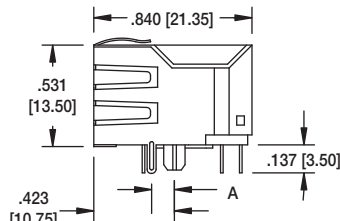
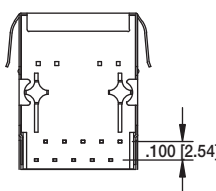
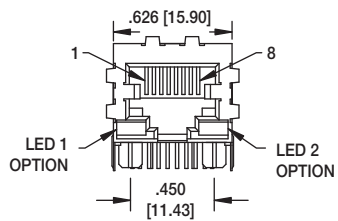
SHIELD PIN LOCATION
FSD DIMENSION: A = .120 [3.05]
FSP DIMENSION: A = .125 [3.17]

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

TYPE S TAB UP & TOP LEDs, STANDARD BODY



**Recommended PCB Layout
FSP Option Shown**

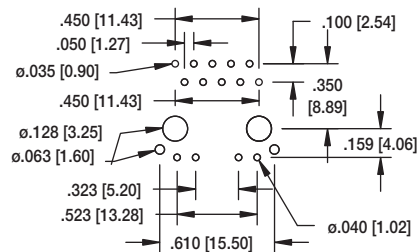


MTJ-88TX1-FSP-PG-LG-M5

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

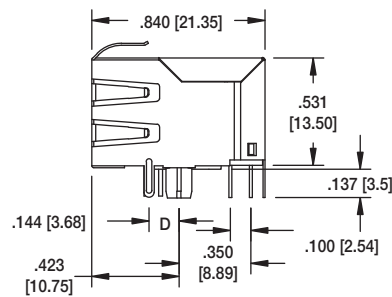
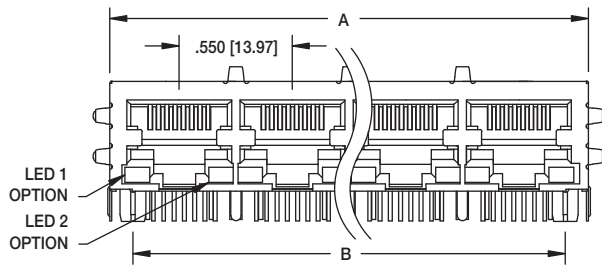
AVAILABLE WITH MAGNETIC TRANSFORMERS: M1, M3, M4, M5, M6, M7, M9, M10, M11, M12 & M13. See pgs. 42-43

TYPE T TAB DOWN & BOTTOM LEDs, SHORT BODY



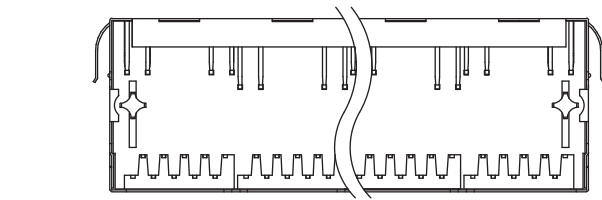
**Recommended PCB Layout
FSP Option Shown**

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]



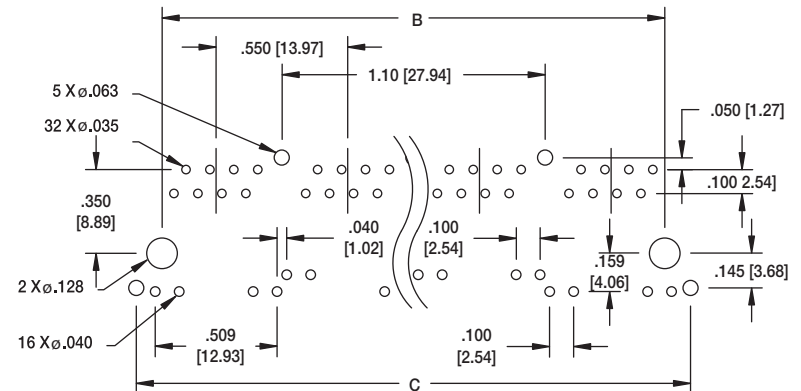
MTJG-4-88TX1-FSB-PG

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

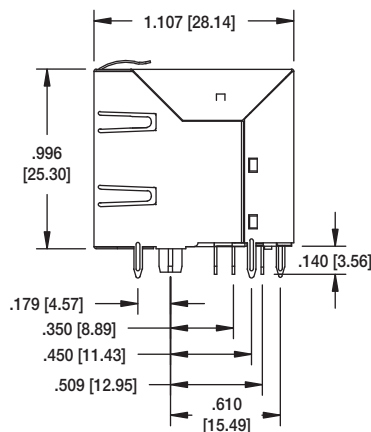
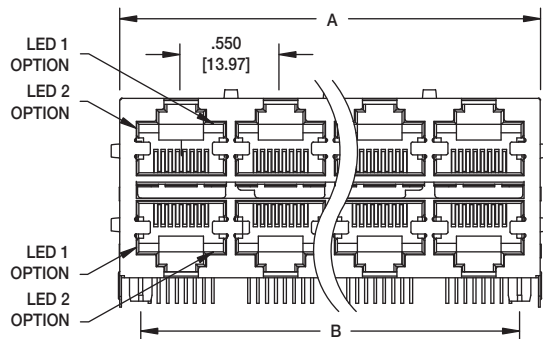
$$A = .550 [13.97] X (\text{NO OF PORTS} - 1) + .679 [17.27]$$

$$B = .550 [13.97] X (\text{NO OF PORTS} - 1) + .450 [11.43]$$

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

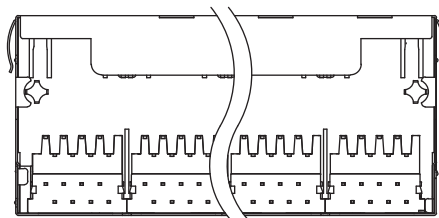


Recommended PCB Layout



TYPE J STACKED

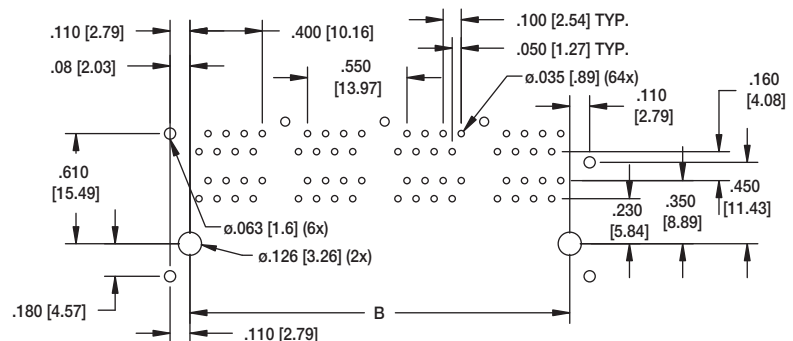
DIMENSIONS		
PORTS	A	B
2 X 1	.677 [17.20]	.450 [11.43]
2 X 2	1.227 [31.17]	1.00 [25.40]
2 X 4	2.331 [59.22]	2.100 [53.34]
2 X 5	2.876 [73.07]	2.650 [67.31]
2 X 6	3.426 [87.04]	3.200 [81.28]
2 X 8	4.527 [115.00]	4.300 [109.22]



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

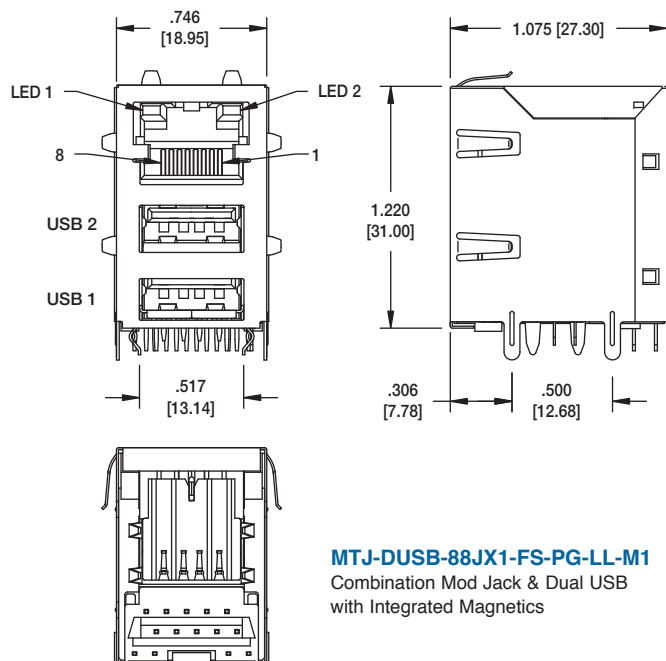
Drawing shown with metal shield, panel ground tabs & LEDs.

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



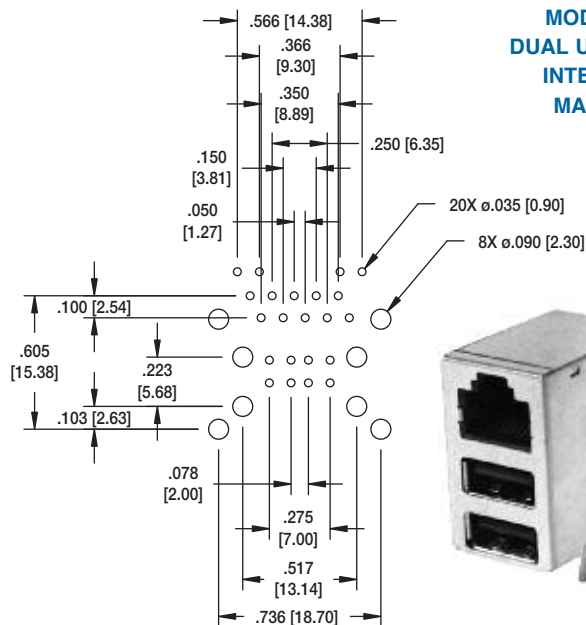
Recommended PCB Layout

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



MTJ-DUSB-88JX1-FS-PG-LL-M1

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

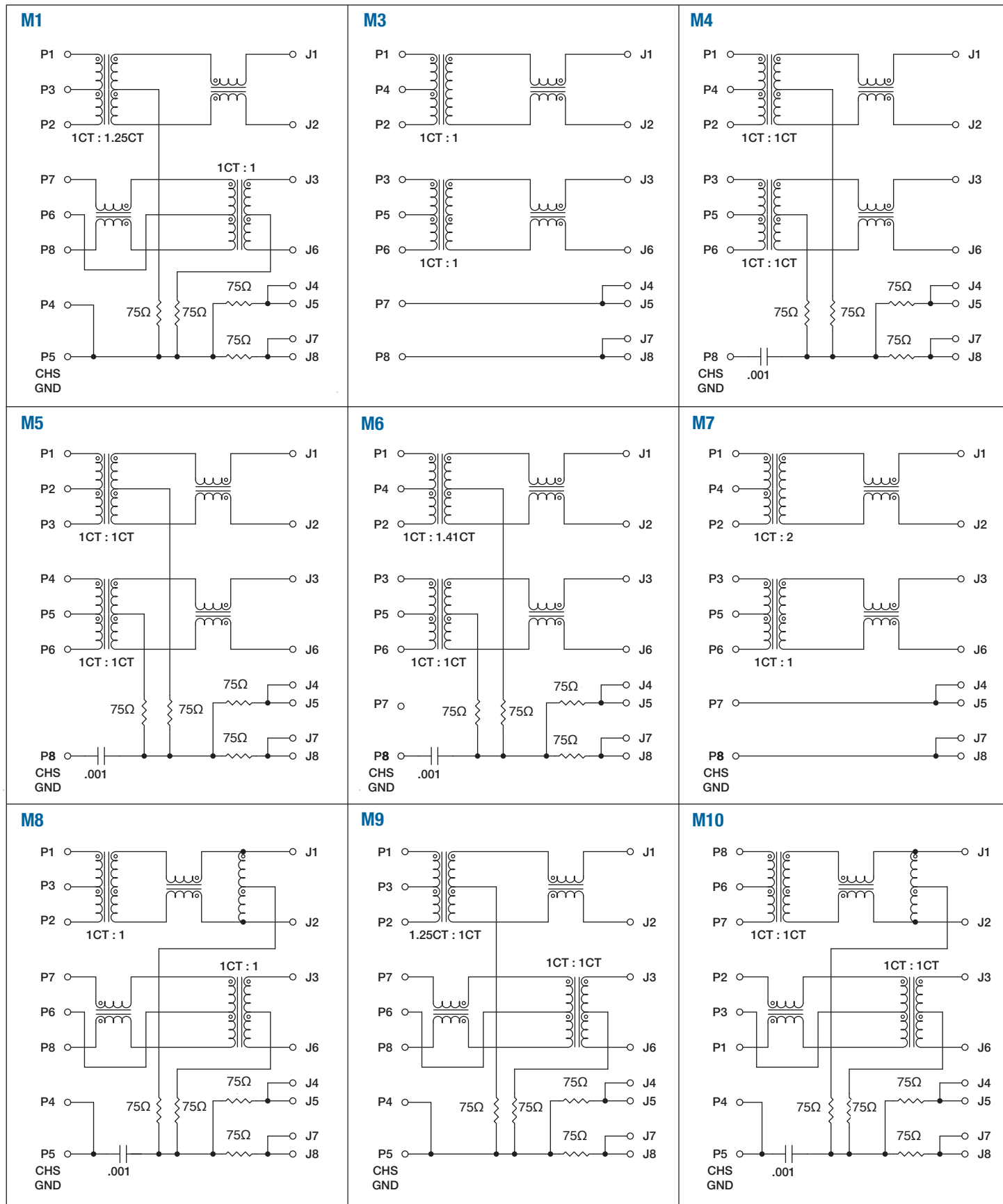
OTHER LED COLOR
COMBINATIONS AVAILABLE

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

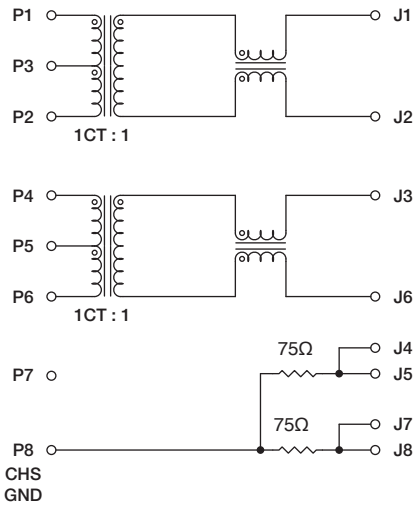
AVAILABLE WITH MAGNETIC
TRANSFORMERS M1, M3, M4,
M5, M6, M7, M8, M9, M10, M11,
M12, M13, M16 & M20
See Pgs 42-43:

ORDERING INFORMATION FOR JACKS WITH INTEGRATED MAGNETICS & LEDs

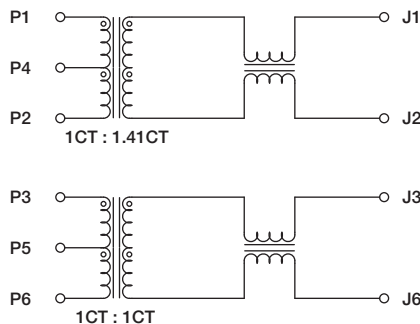
MTJG	4	8	8	T	X	1	FSD	LD	M5
SERIES INDICATOR MTJG = Magnetics Ganged Jack	NO. OF PORTS 2 thru 8	HOUSING PLUG SIZE 8 or 10	NO. OF CONTACT POSITIONS FILLED 8 or 10	HOUSING TYPE T or J	PLATING X = Gold Flash 0 = 15 μ in gold 1 = 30 μ in gold 2 = 50 μ in gold	BODY COLOR 1 = Black	SHIELD PIN LOCATION FSD thru 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									



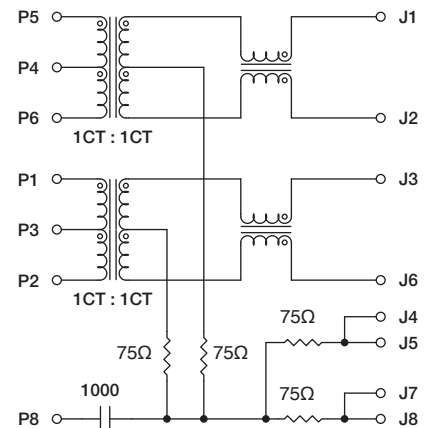
M11



M12

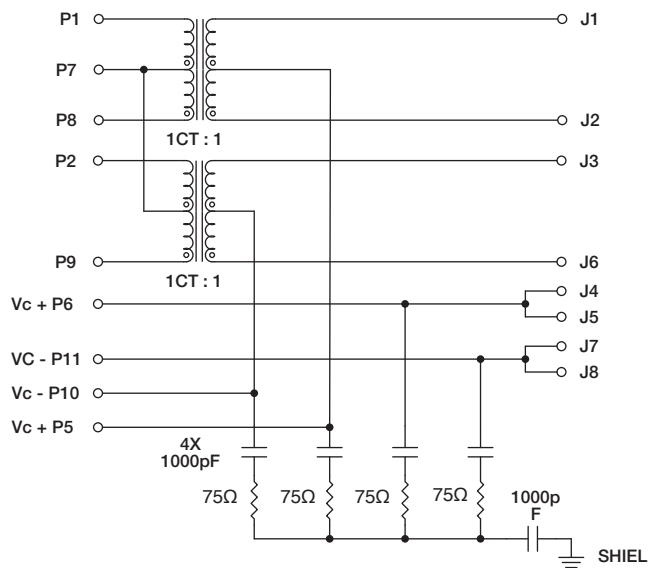


M13

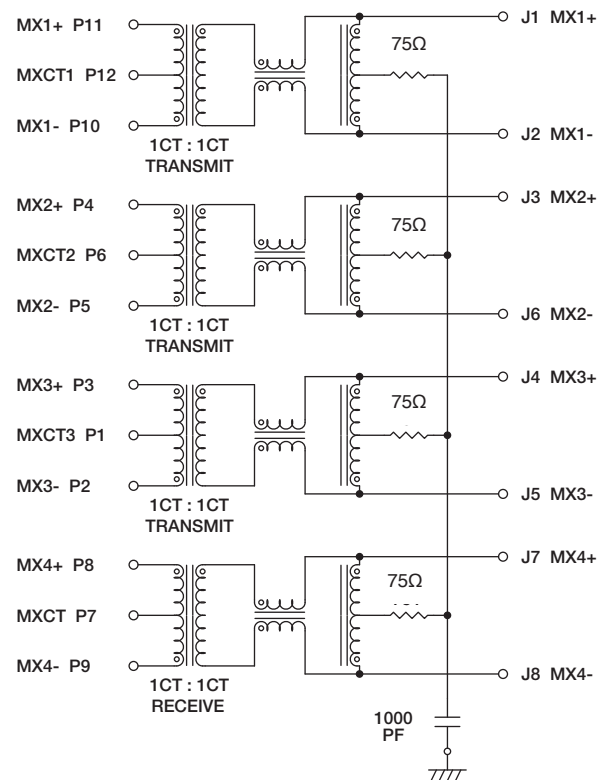


M16

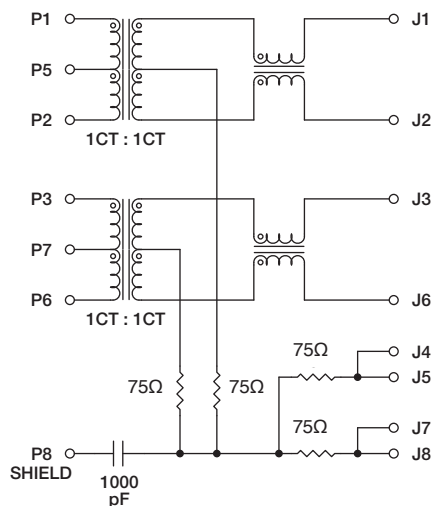
POWER OVER ETHERNET



M20



M19



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:

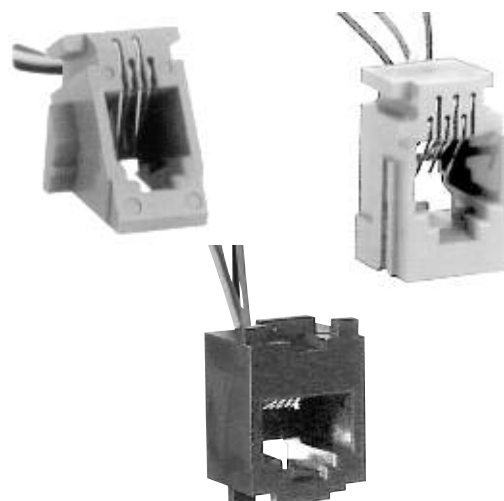
Operating temperature: -40°C to +85°C

PACKAGING:

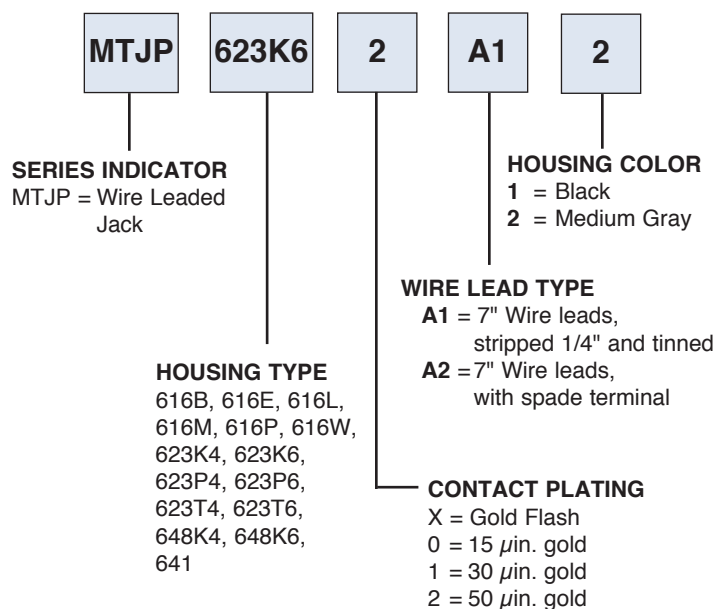
Anti-ESD plastic bags

APPROVALS AND CERTIFICATIONS:

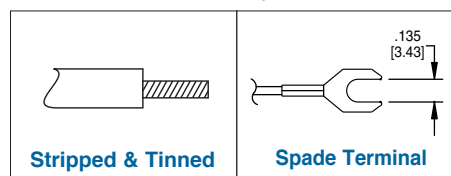
UL Recognized & CSA Certified, File no. E224049



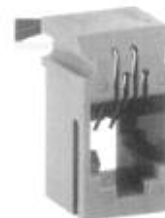
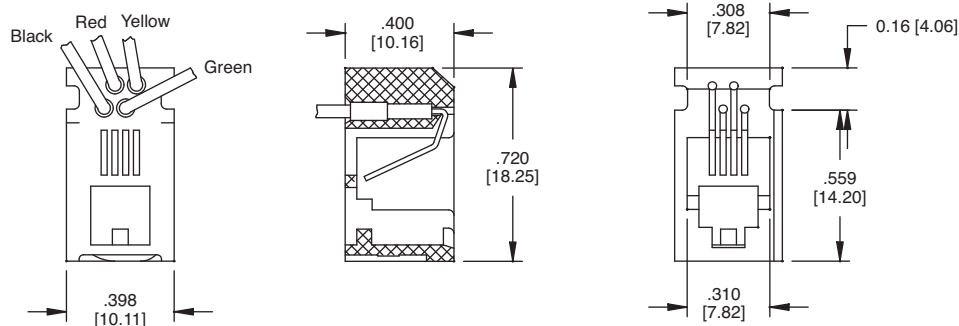
ORDERING INFORMATION WIRE LEADED JACKS



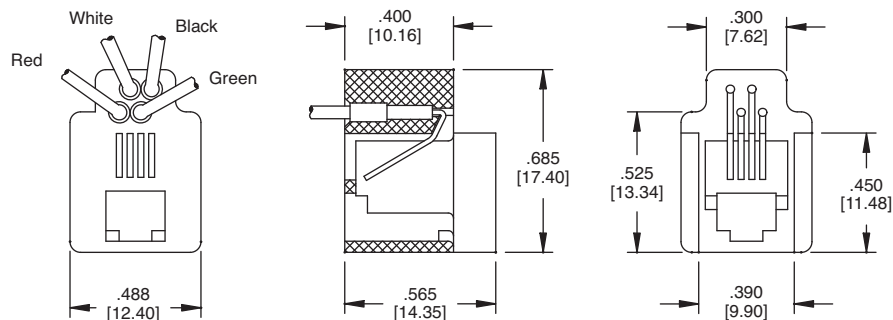
Wire Lead Options



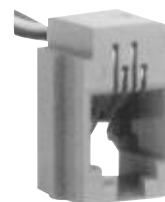
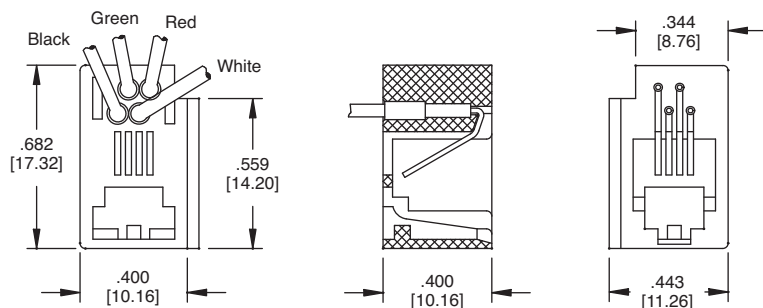
MTJP-616L



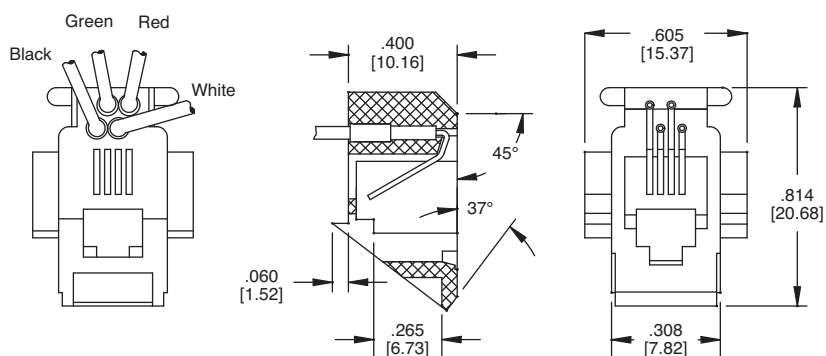
MTJP-616M



MTJP-616E

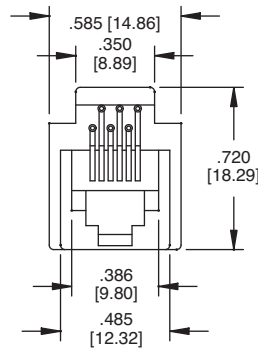
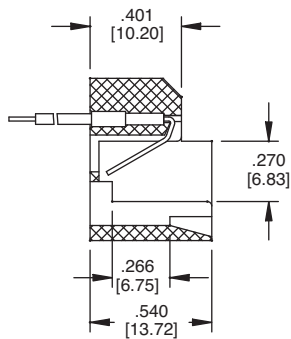
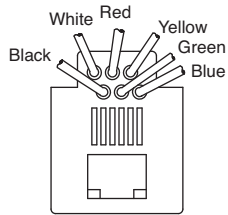


MTJP-616W



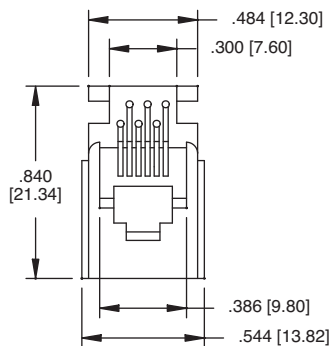
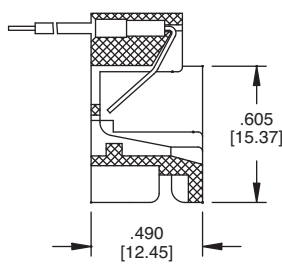
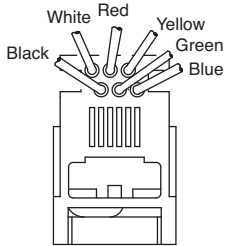
MTJP-623K4

MTJP-623K6



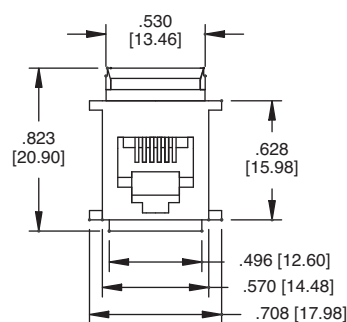
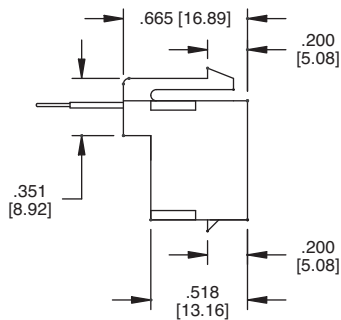
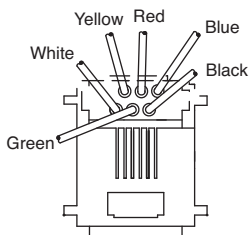
MTJP-623P4

MTJP-623P6



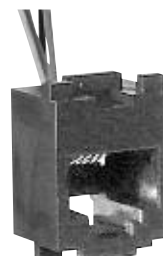
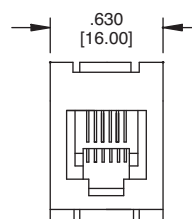
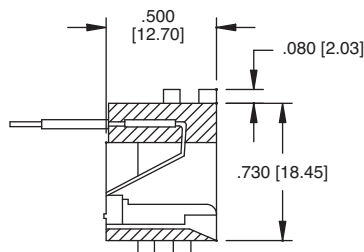
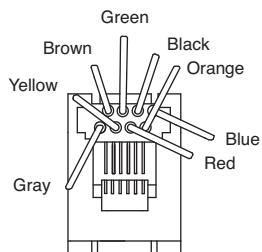
MTJP-648K4

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

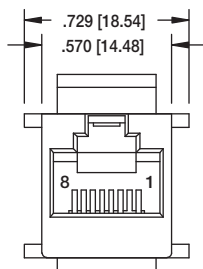
B

INSULATOR COLOR

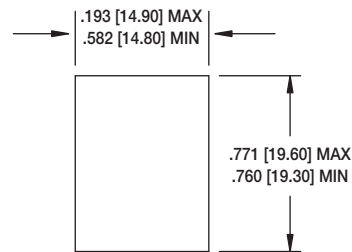
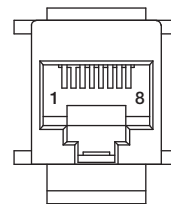
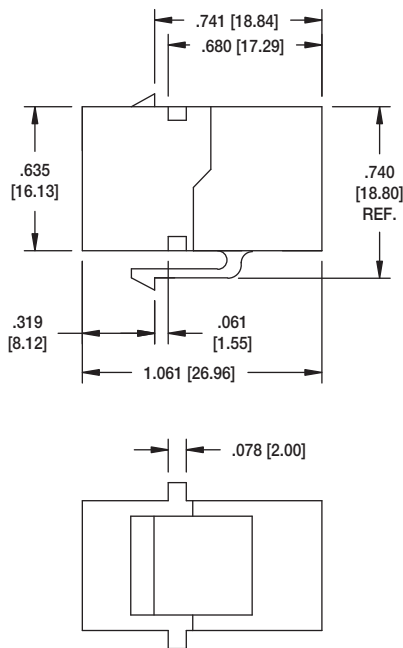
B = Black Y = Yellow
W = White R = Red
IV = Ivory G = Green
GY = Gray BL = Blue

OPTIONS:

Add designator to end of part number
S = Shielded



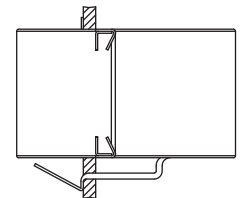
MTJC-88XIV



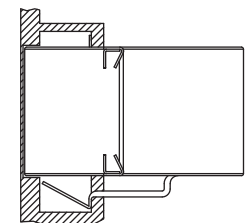
RECOMMENDED PANEL CUT-OUT
PANEL THICKNESS .062 [1.57]

MTJC-88-XB
PLASTIC HOUSING

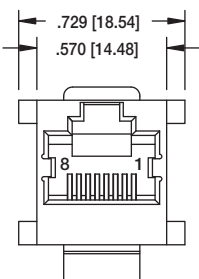
MTJC Couplers can be used in either of the following mounting applications



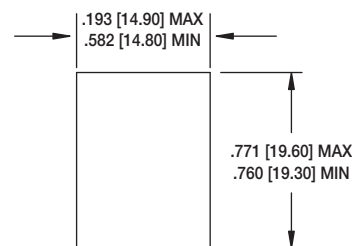
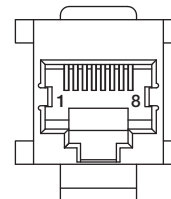
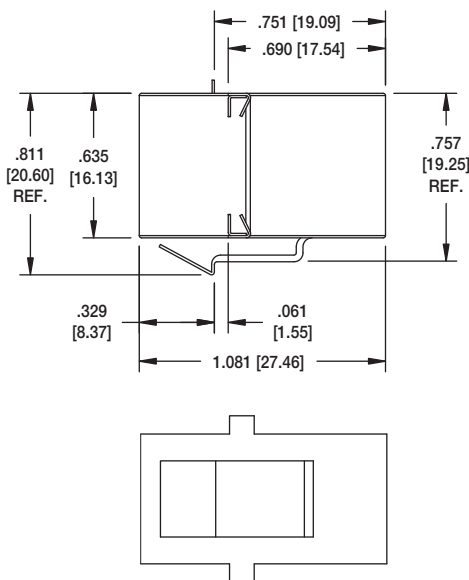
Single Wall Plate Mounting



Double Wall Plate Mounting



MTJC-88XB-S



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

MTJC-88-XBS
METAL SHIELDED