

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:

Insulator: PBT, Nylon or ABS, 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:

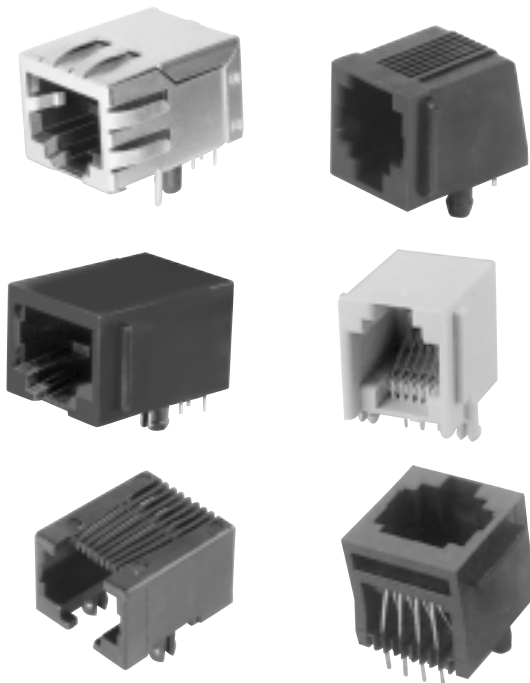
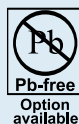
Operating temperature: -40°C to +125°C

PACKAGING:

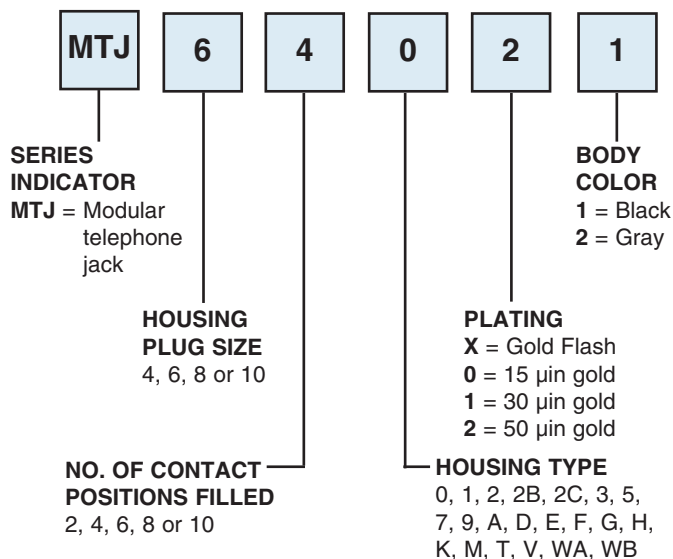
Anti-ESD plastic trays

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)

FS* = Five sided shield (Illustrations pages 16-32)

Consult factory for custom shielding requirements

SMT = Surface mount tails, housings 0, 5, 9, G & W with Hi-Temp insulator

N = No panel stops

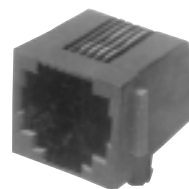
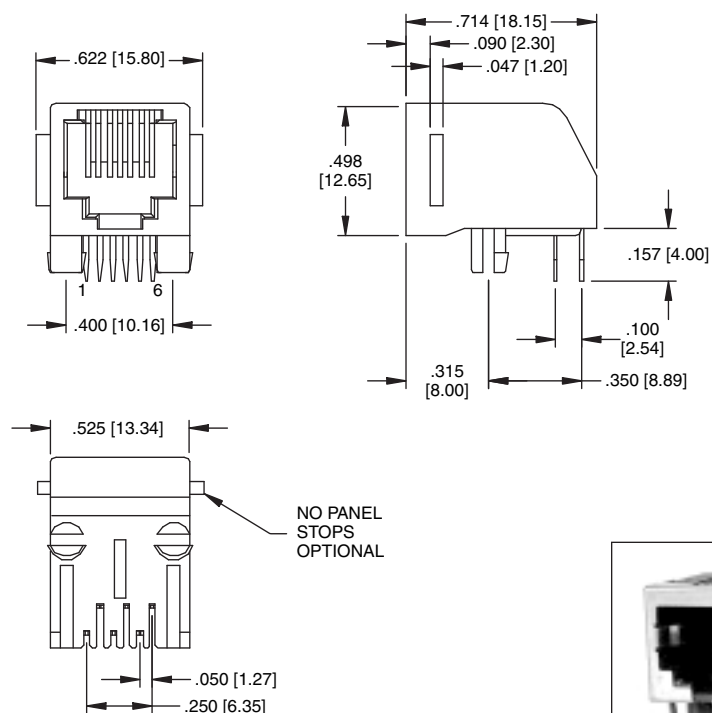
K = Keyed telephone jack

HT = Hi-Temp insulator for Hi-Temp soldering processes

RC = RoHS compliant lead-free product with Hi-Temp insulator

PG = Panel ground tabs

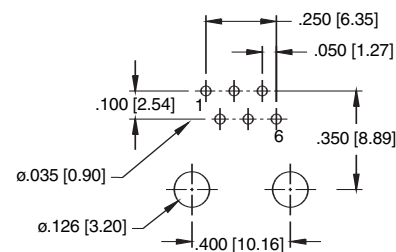
TYPE 0



MTJ-660X1

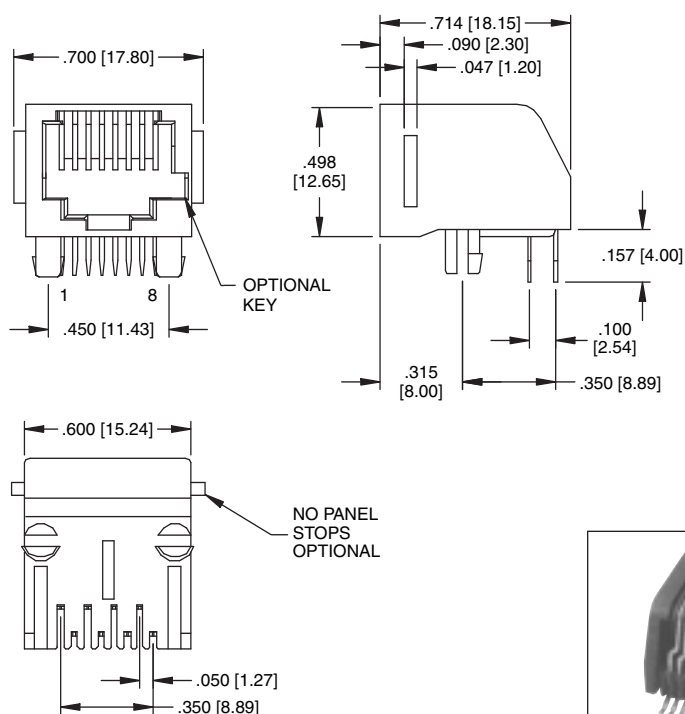


Face Shield Option

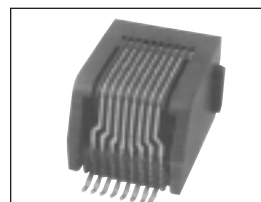


Recommended PCB Layout

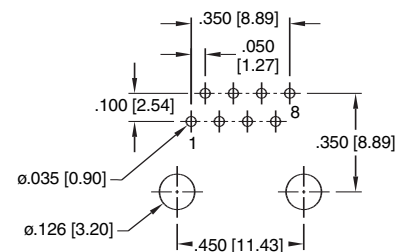
TYPE 0



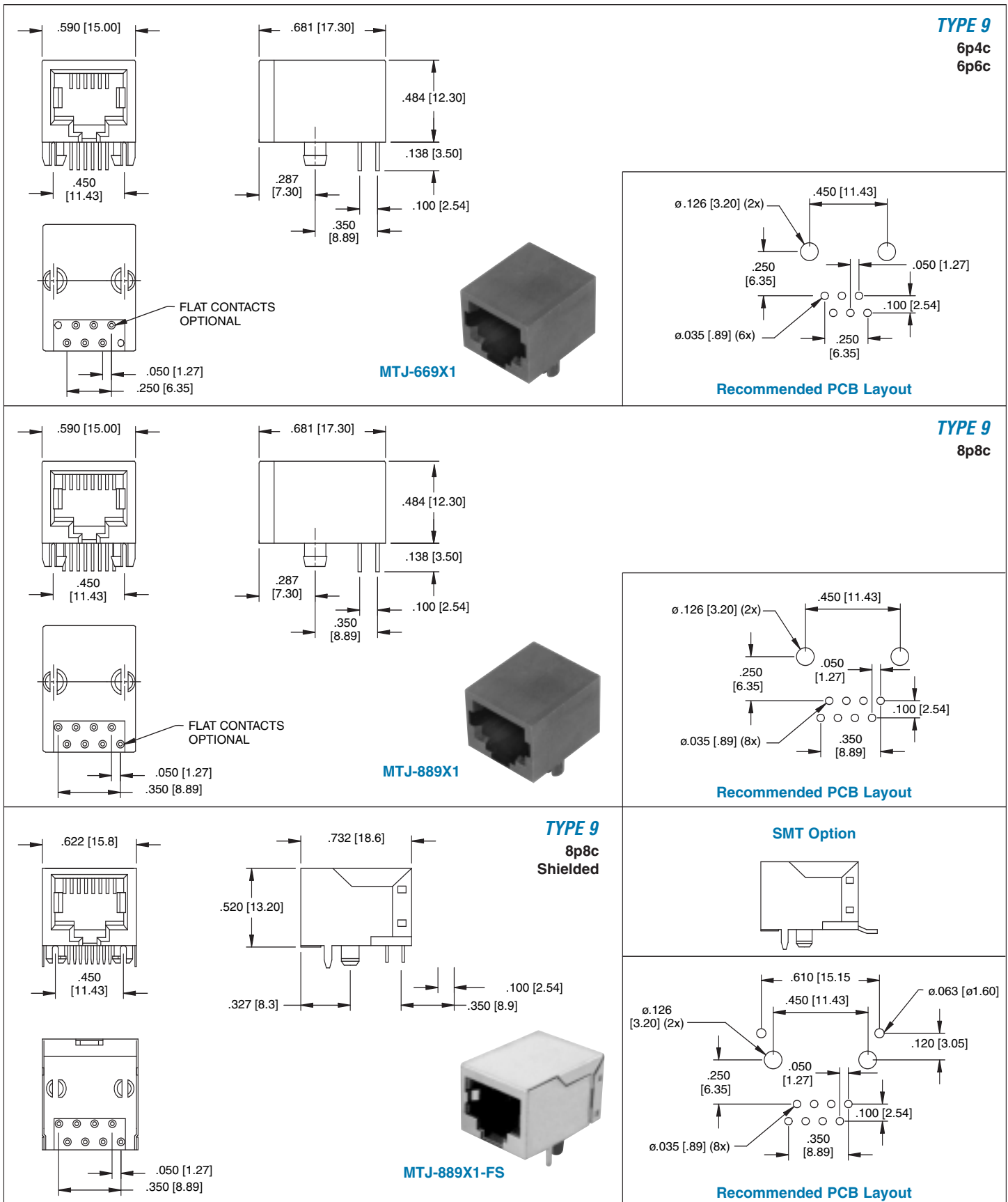
MTJ-880X1



SMT Option

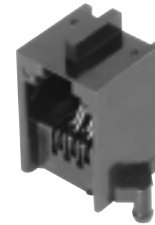
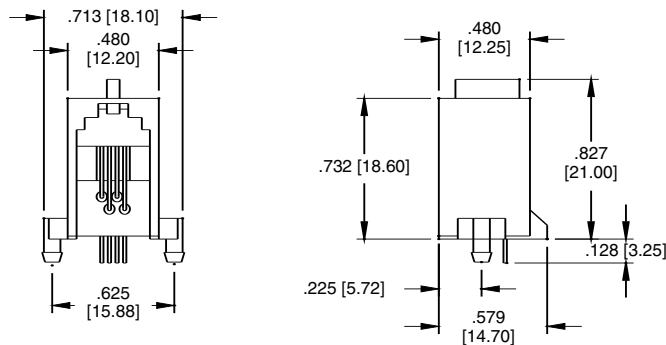


Recommended PCB Layout



TYPE 7

4p4c

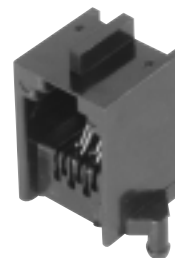
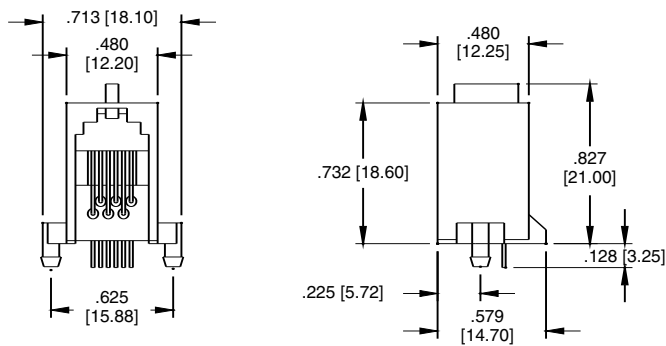


MTJ-447X1

TYPE 7

6p4c

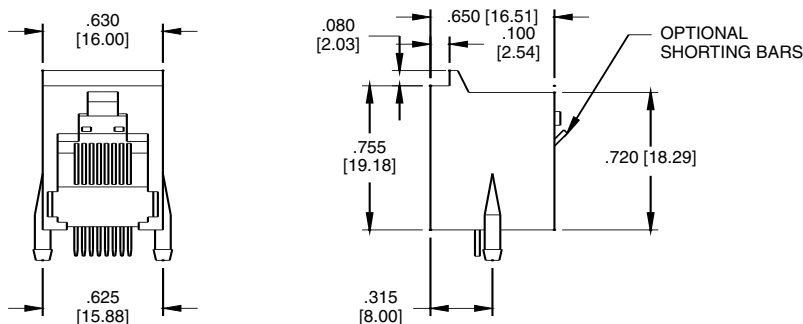
6p6c



MTJ-647X1

TYPE 7

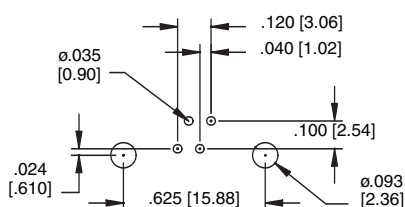
8p8c



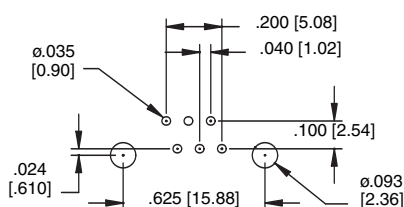
MTJ-887X1

Recommended PCB Layout

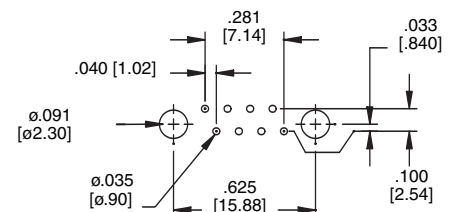
4p4c

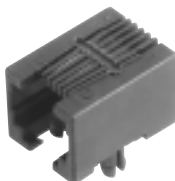
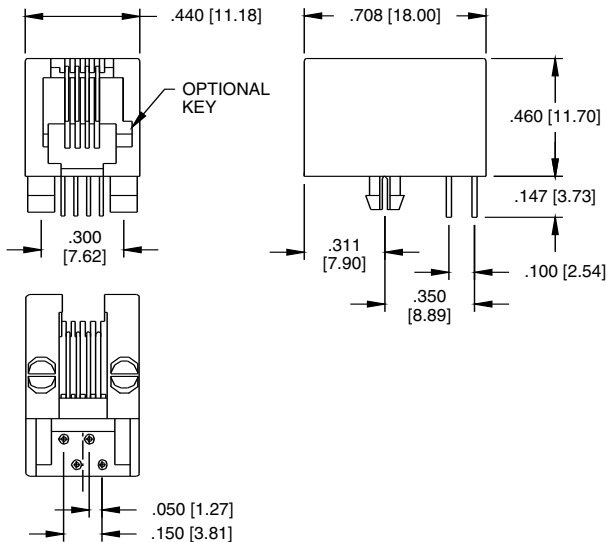


6p4c
6p6c



8p8c

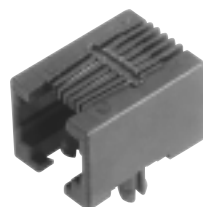
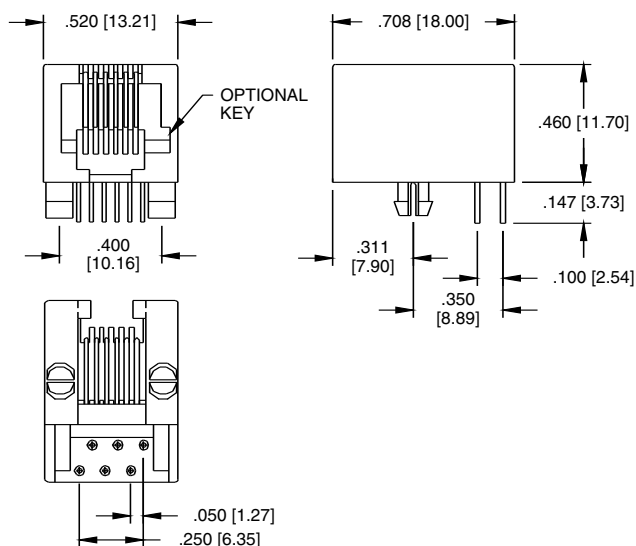
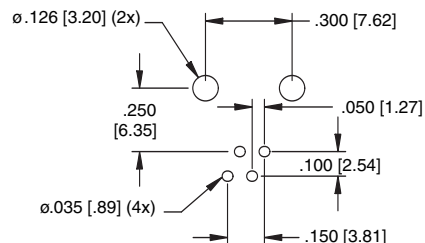




MTJ-445X1

TYPE 5
4p4c

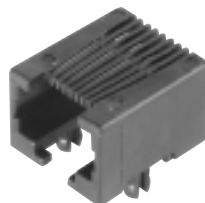
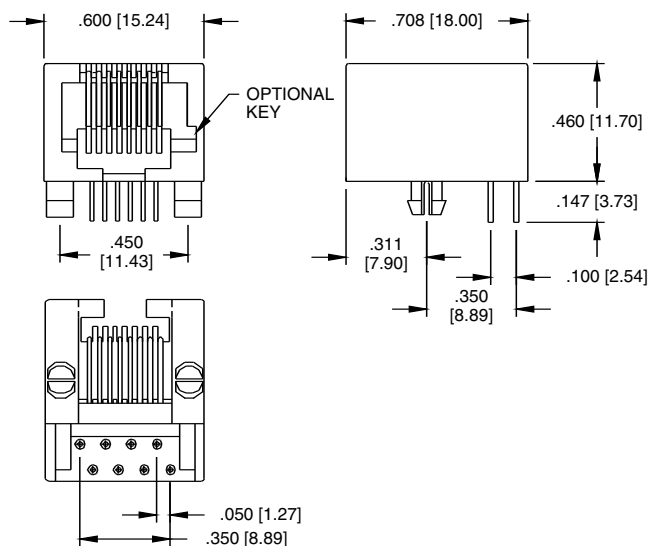
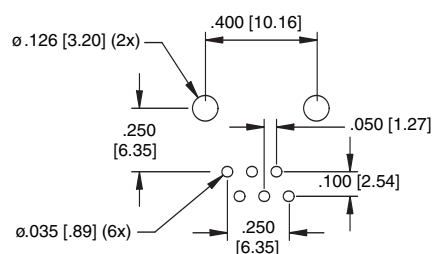
Recommended PCB Layout



MTJ-665X1

TYPE 5
6p6c

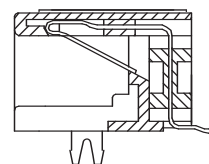
Recommended PCB Layout



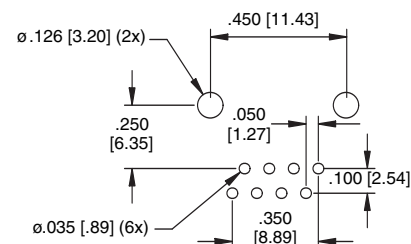
MTJ-885X1

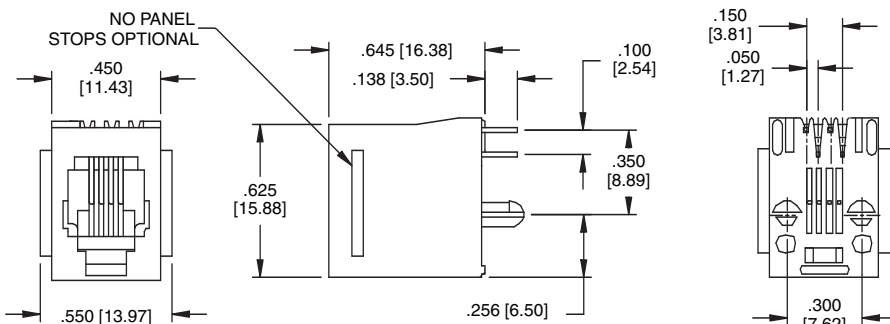
TYPE 5
8p8c

SMT Option



Recommended PCB Layout



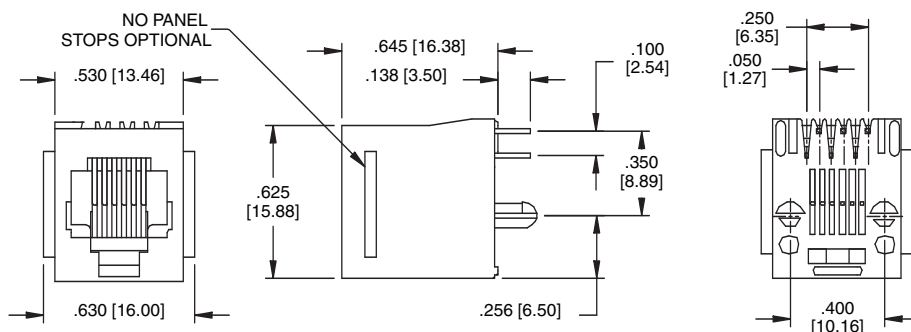


TYPE 3

4p4c



MTJ-443X1



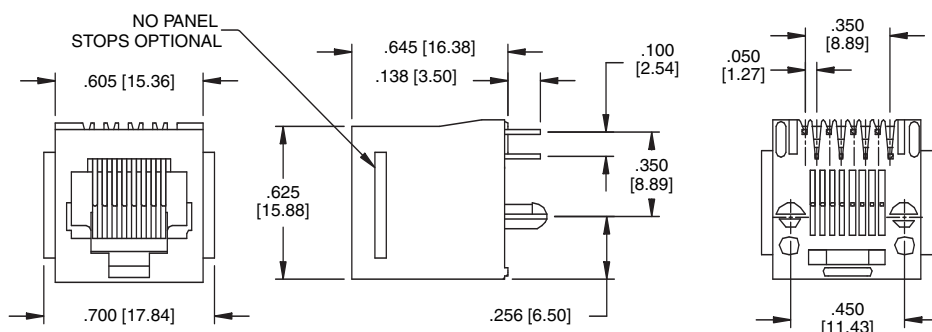
TYPE 3

6p4c

6p6c

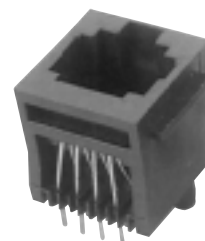


MTJ-663X1



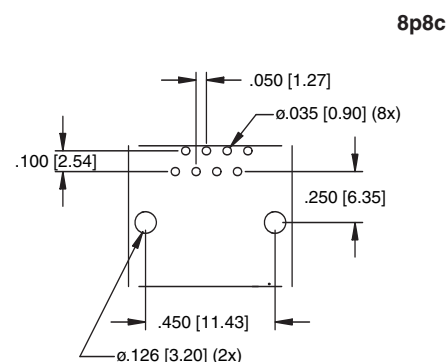
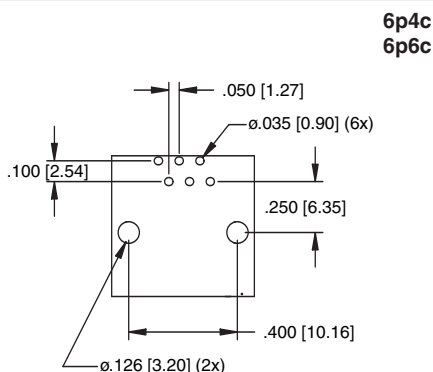
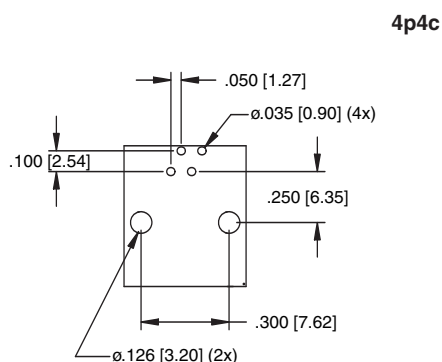
TYPE 3

8p8c

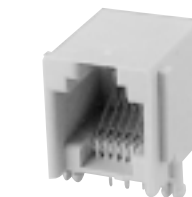
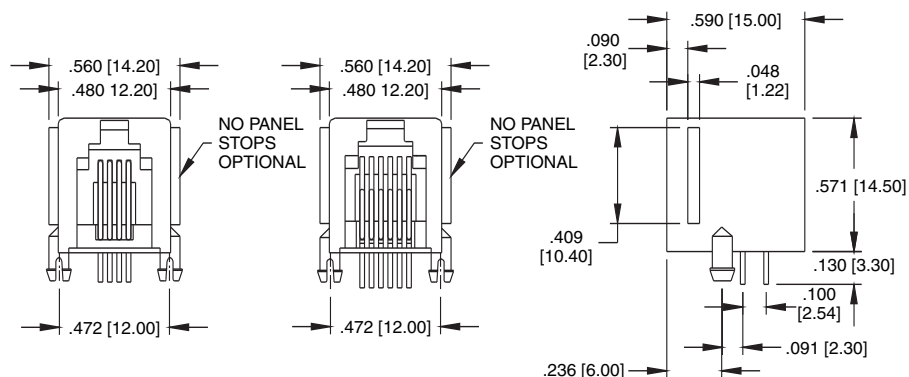


MTJ-883X1

Recommended PCB Layout



TYPE 2

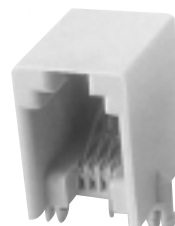
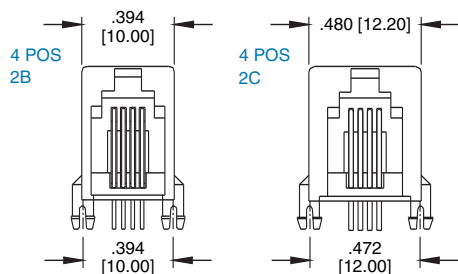


MTJ-662X2

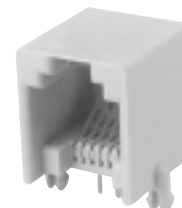


MTJ-642X2

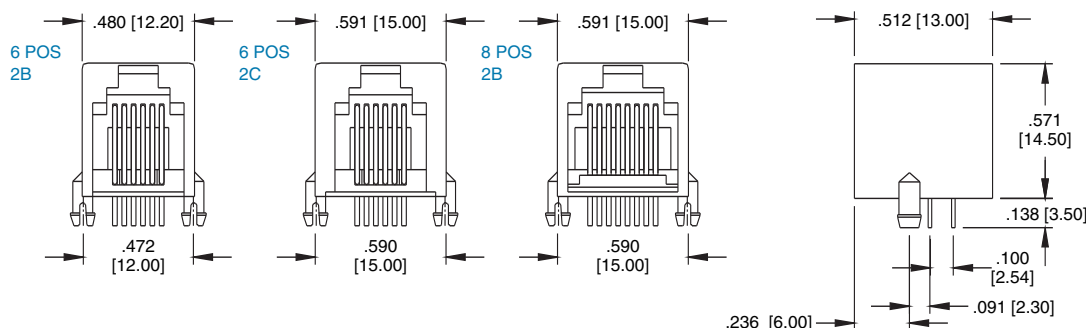
TYPE 2B & 2C



MTJ-642BX2

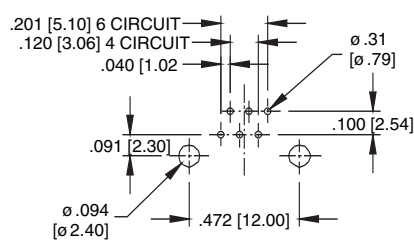


MTJ-662BX2

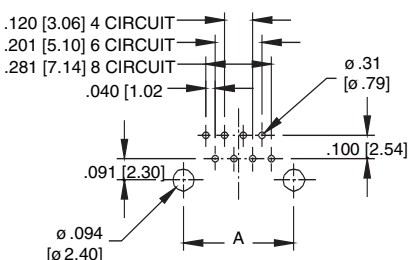


Recommended PCB Layout

Type 2



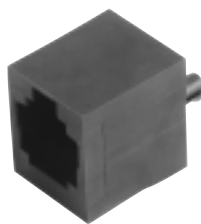
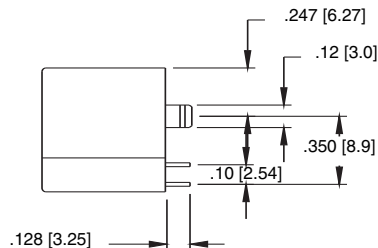
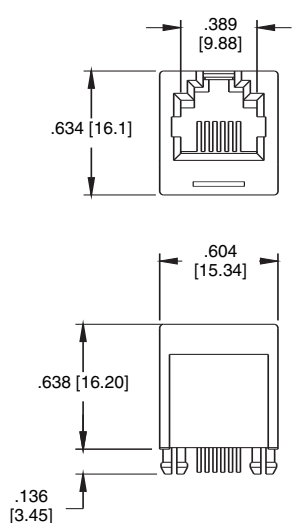
Type 2B & 2C



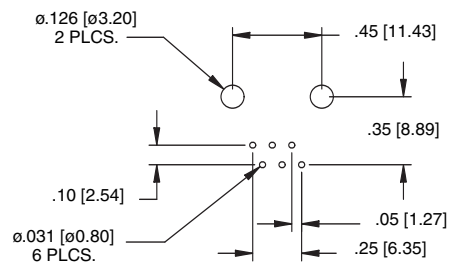
DIM. "A"	
TYPE 2B 4P4C	.394 [10.00]
TYPE 2C 4P4C	.472 [12.00]
TYPE 2B 6P6C	.472 [12.00]
TYPE 2C 6P6C	.591 [15.00]
TYPE 2B 8P8C	.590 [15.00]

TYPE F

4p4c
6p6c



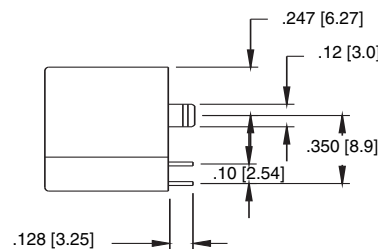
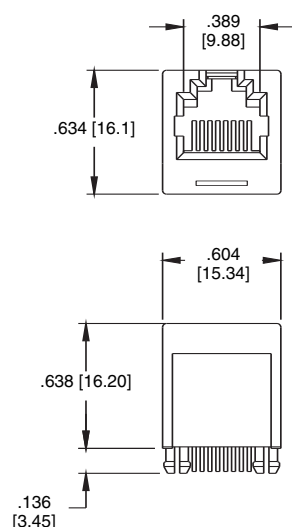
MTJ-44FX1



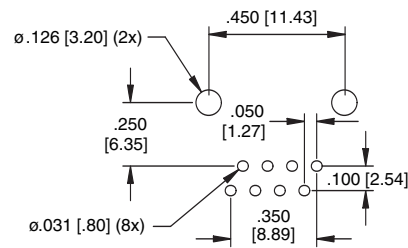
Recommended PCB Layout

TYPE F

8p8c



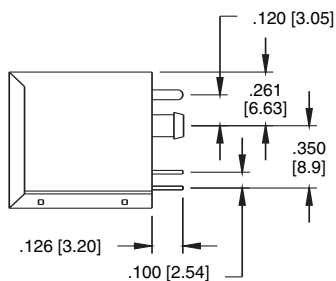
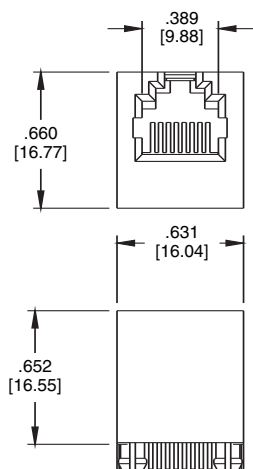
MTJ-88FX1



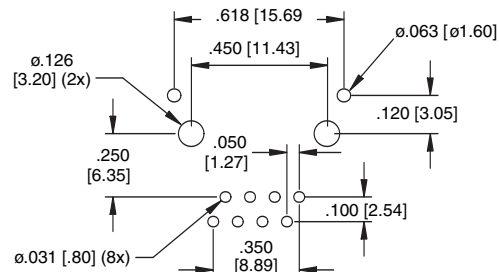
Recommended PCB Layout

TYPE F

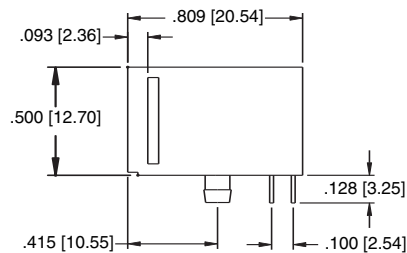
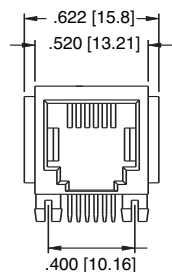
8p8c
Shielded



MTJ-88FX1-FS



Recommended PCB Layout

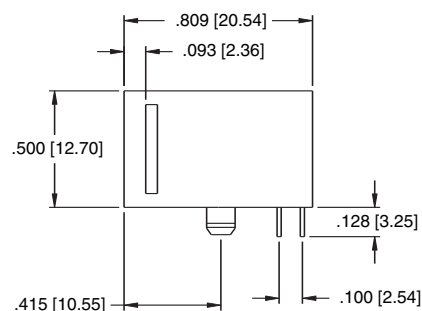
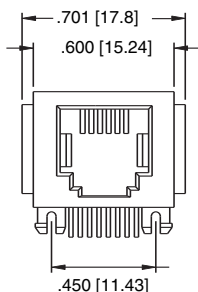
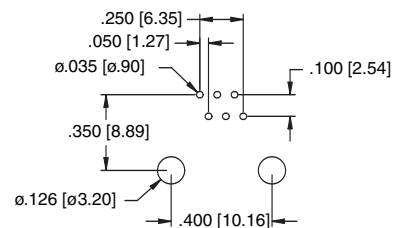


MTJ-64GX1

TYPE G

4p4c
6p6c

Recommended PCB Layout

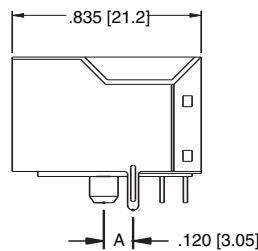
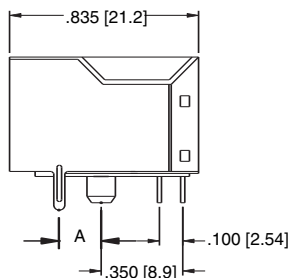
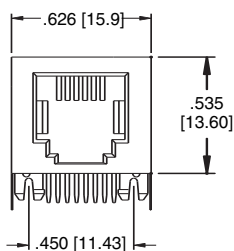
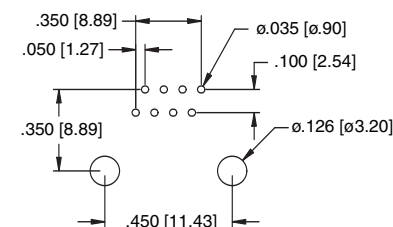


MTJ-88GX1

TYPE G

8p8c

Recommended PCB Layout



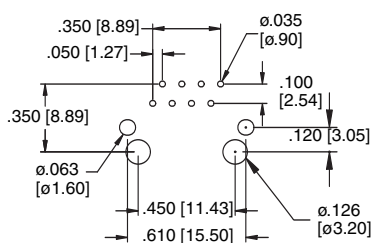
SHIELD PIN LOCATION
FSD OPTION: A = .120 [3.05]

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

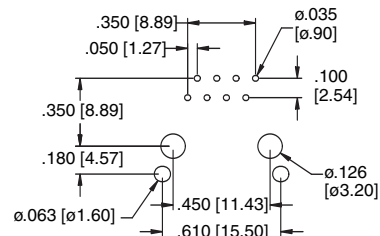


MTJ-88GX1-FSD

Recommended PCB Layout



PCB Layout (FSA, FSB, & FSE)



ADAM TECH MODULAR TELEPHONE PLUGS

ADAM TECHNOLOGIES

MTP SERIES

INTRODUCTION:

Adam Tech MTP series Modular Telephone Plugs are manufactured to terminate flat oval or round telephone cord to REA and Cat. 5 EIA/TIA specifications. Our double strain relief design, molded in polycarbonate, is manufactured with contacts pre-loaded in a variety of sizes and options including shielding and specific contacts for flat or round cable. Adam Tech is a major supplier of telephone line cords to the telecommunications industry.

FEATURES:

- Preassembled Contacts
- REA Compliant Terminations
- Cat. 5 and 5E available
- Contacts for Flat or Round wire
- Short or Long body choices
- Shielded versions

MATING TELEPHONE JACKS:

Adam Tech modular telephone jack series and all industry standard telephone Jacks.

SPECIFICATIONS:

Material:

- Insulator: Polycarbonate, rated UL94V-0
- Insulator Color: Clear
- Contacts: Phosphor Bronze

Contact Plating:

50 µin Gold (optional 15 or 30 µin) over nickel underplate.

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:

- Cable to plug tensile strength: 7.71 Kgs (17 lbs) min.
- Durability: 250 Cycles min.
- Wire range: 26 to 28 Awg

Temperature Rating:

Operating temperature: -40°C to +70°C

PACKAGING:

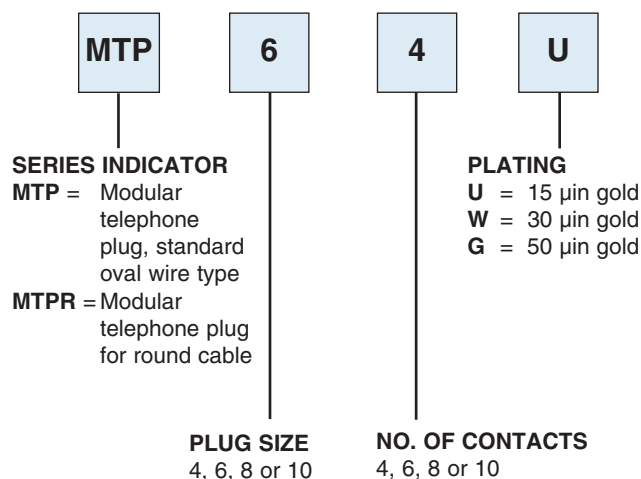
Anti-ESD plastic bags

SAFETY AGENCY APPROVALS:

UL Recognized File No. E224053



ORDERING INFORMATION



OPTIONS:

Add designator(s) to end of part number

K = Molded in key (Plug size 8 or 10 only)

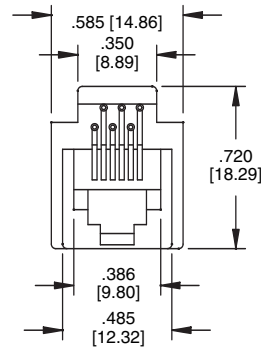
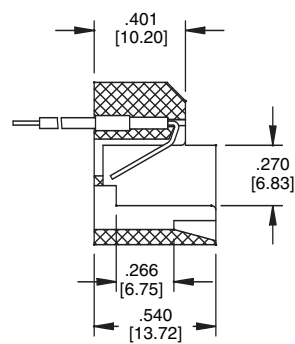
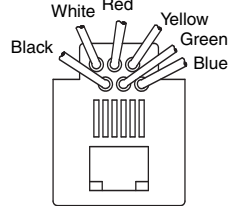
S = Solid wire contacts

EMI = Metal shielded type (Plug size 8 or 10 only)

OL = Offset Latch (Plug size 6 only)

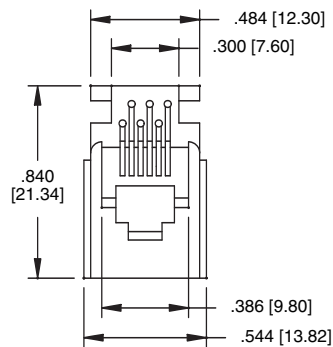
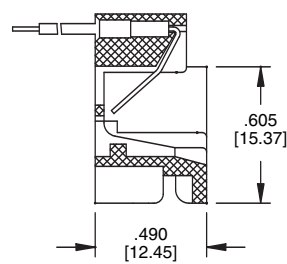
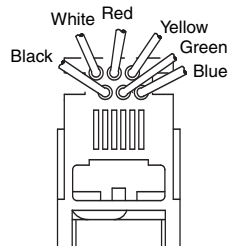
MTJP-623K4

MTJP-623K6



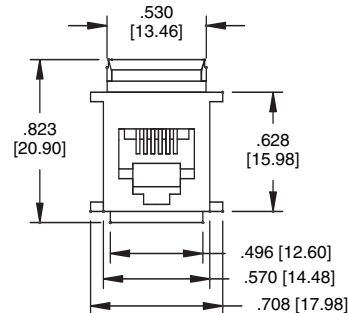
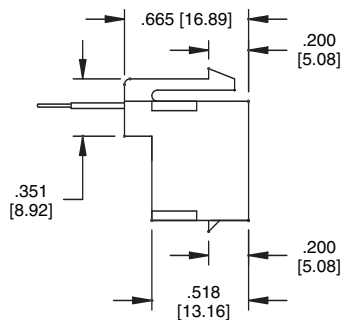
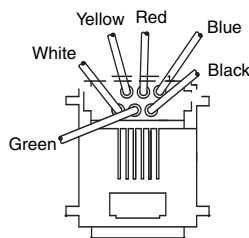
MTJP-623P4

MTJP-623P6



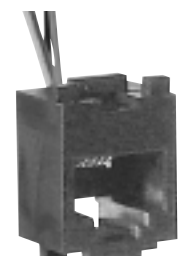
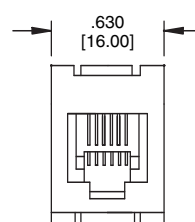
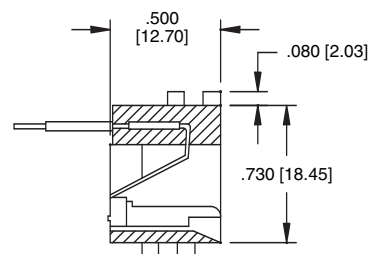
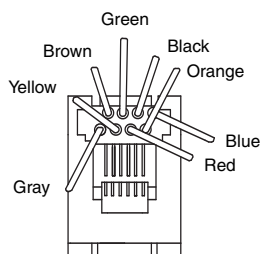
MTJP-648K4

MTJP-648K6

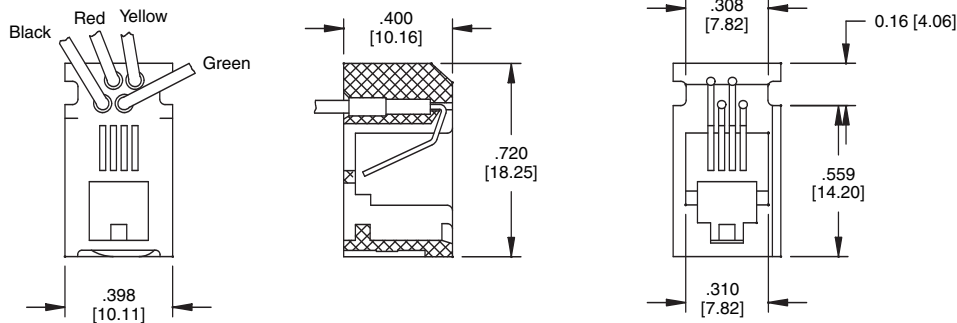


MTJP-641

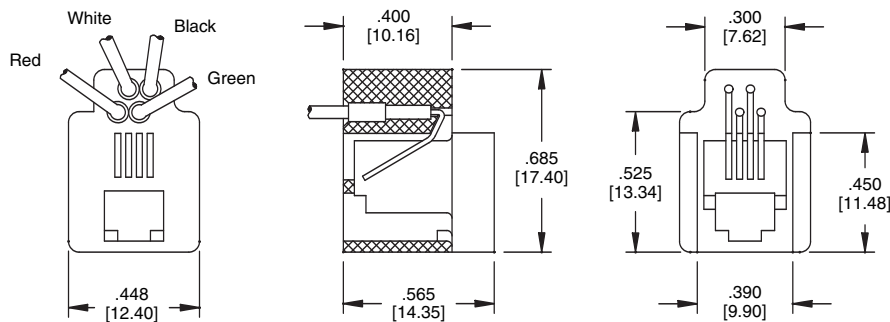
MTJP-641 KEYED



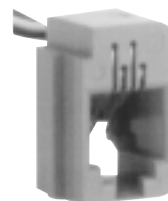
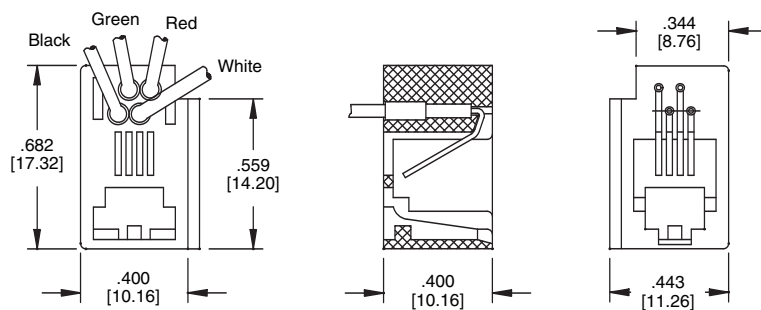
MTJP-616L



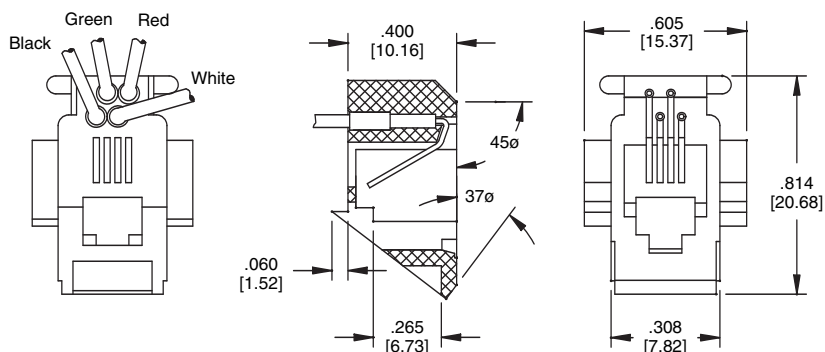
MTJP-616M



MTJP-616E



MTJP-616W



INTRODUCTION:

Adam Tech MTJP Series Wire Leaded Telephone Jacks are a full series of Handset and Panel Jacks 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 and with choice of Stripped and Tinned leads or leads with Spade Terminals and choice of contact plating. 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 telephone 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 Flash 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

Temperature Rating:

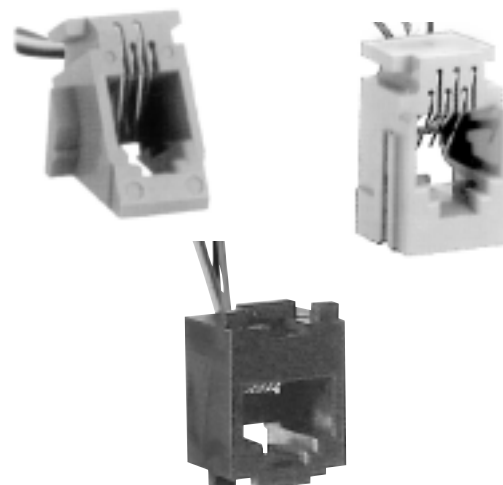
Operating temperature: -40°C to +125°C

PACKAGING:

Anti-ESD plastic bags

APPROVALS AND CERTIFICATIONS:

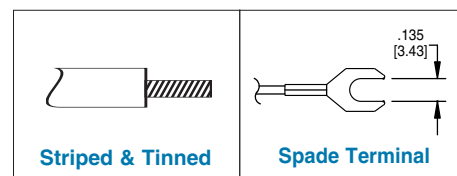
UL Recognized E224049



ORDERING INFORMATION MTJP SERIES WIRE LEADED JACKS

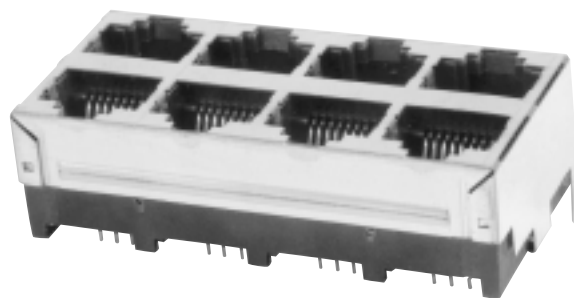
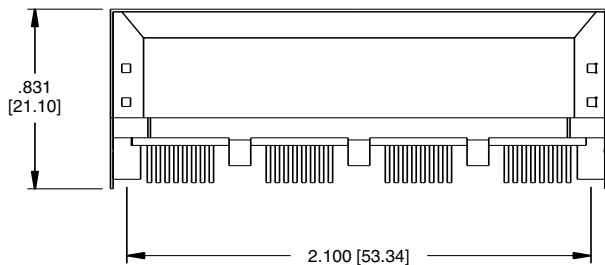
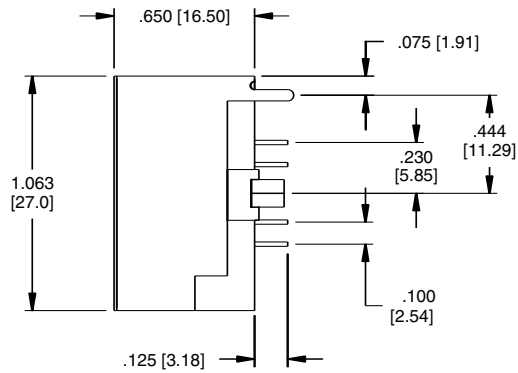
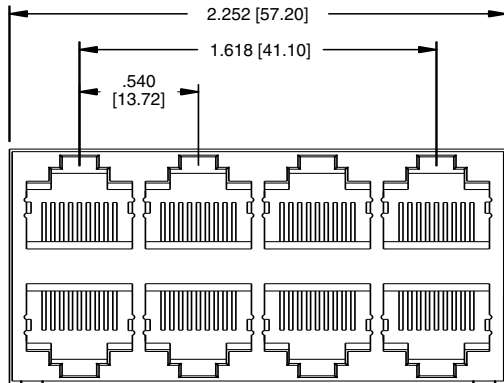
MTJP	623K6	2	A1	2
SERIES INDICATOR MTJP = Wire Leaded Telephone Jack	HOUSING TYPE 616B, 616W, 616P, 623K4, 623K6, 623P4, 623P6, 623T4, 623T6, 648K4, 648K6, 641, 647	CONTACT PLATING X = Gold Flash 0 = 15 μin. gold 1 = 30 μin. gold 2 = 50 μin. gold	HOUSING COLOR 1 = Black 2 = Medium Gray	WIRE LEAD TYPE A1 = 7" Wire leads, stripped 1/4" and tinned A2 = 7" Wire leads, with spade terminal

Wire Lead Options

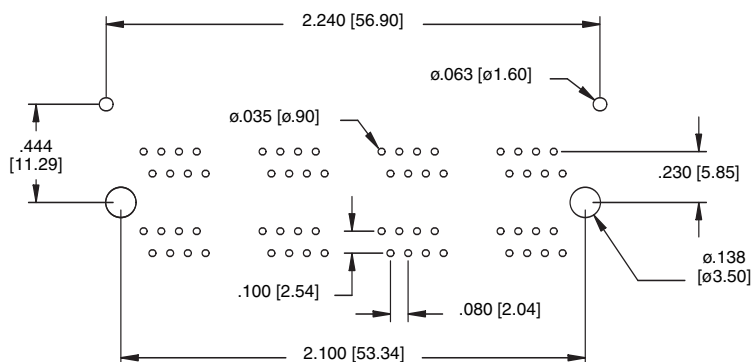


TYPE C

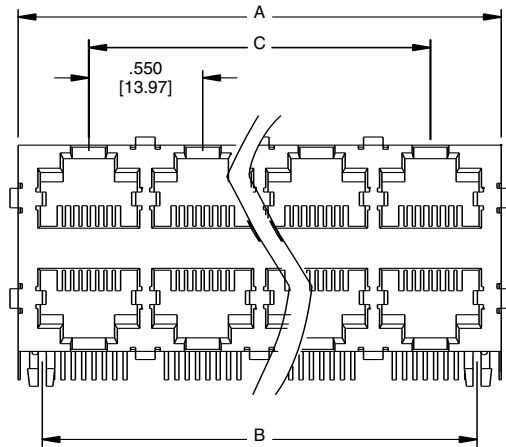
8p8c



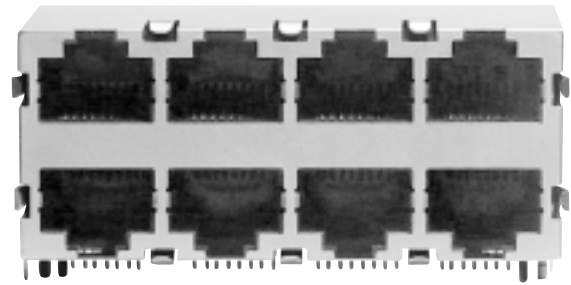
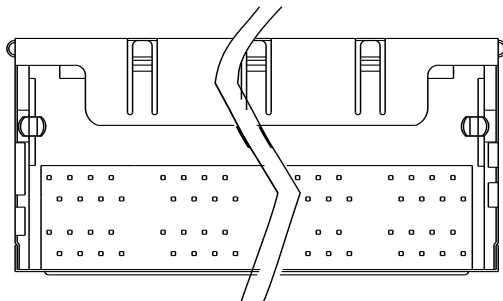
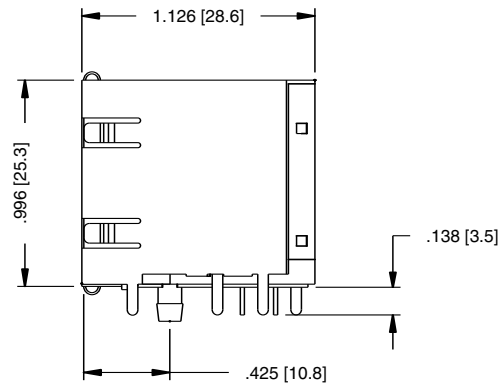
MTJG-8-88CX1-S



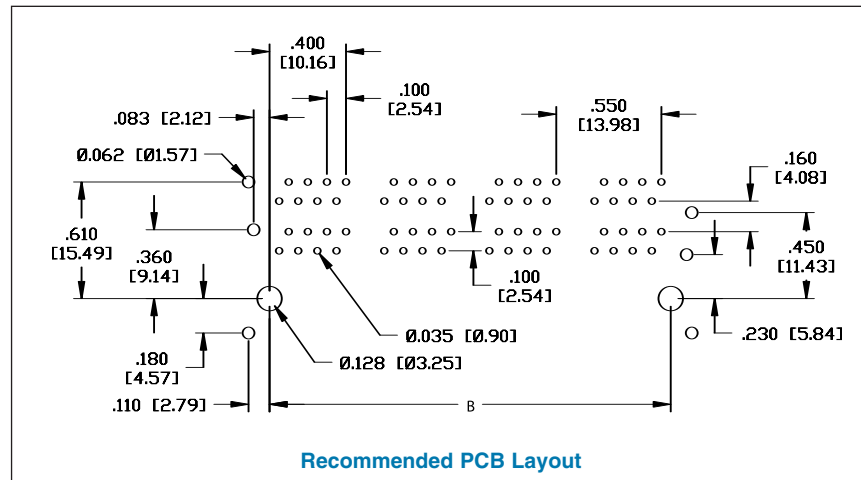
Recommended PCB Layout



TYPE J
8p8c



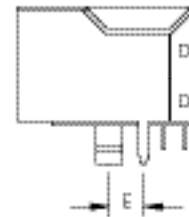
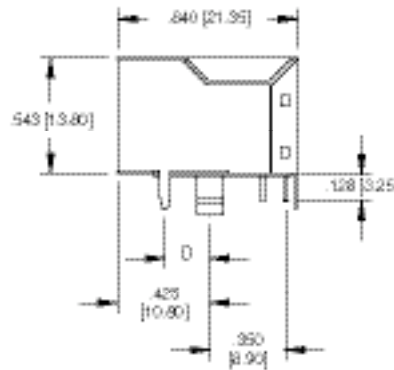
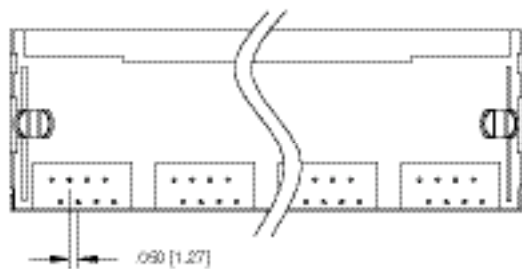
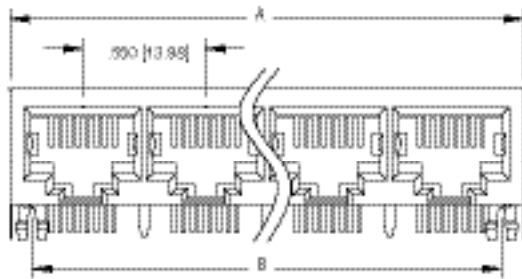
MTJG-8-88JX1-FSG-PG



PART NUMBER	PORTS	DIMENSIONS		
		A	B	C
MTJG-6-88JX1-FSG-PG	2 X 3	1.780 [45.21]	1.549 [39.34]	1.100 [27.94]
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]

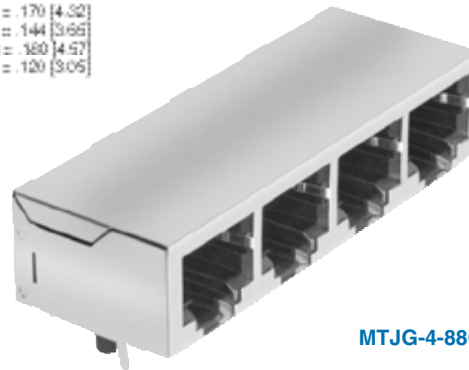
TYPE G GANGED

8p8c



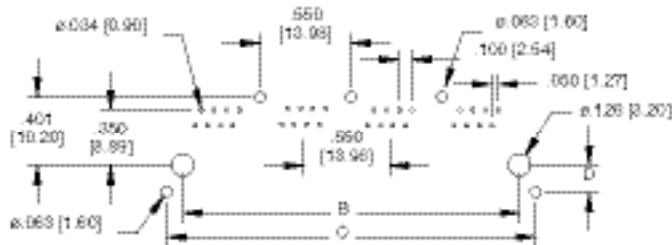
"E" DIM.
FSD = .120 [3.05]
FSR = .144 [3.65]

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



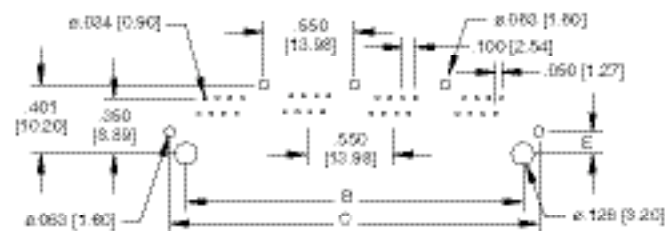
MTJG-4-88GX1-FSB

"D" DIM.
FSA = .170 [4.32]
FSB = .144 [3.65]

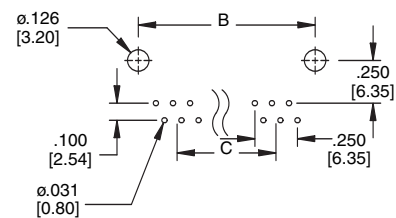
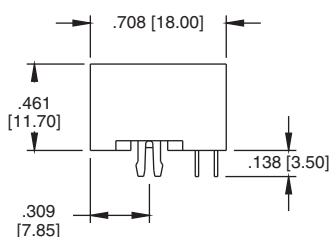
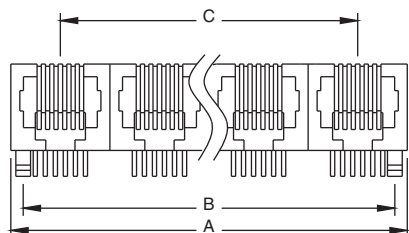


Recommended PCB Layout FSA & FSB

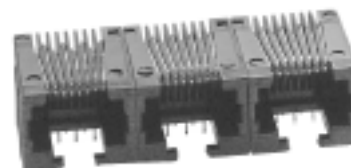
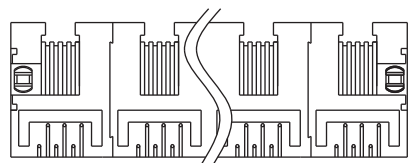
"E" DIM.
FSD = .120 [3.05]
FSR = .144 [3.65]



Recommended PCB Layout FSD & FSR



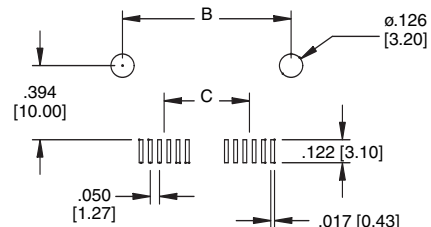
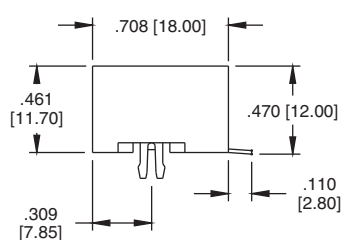
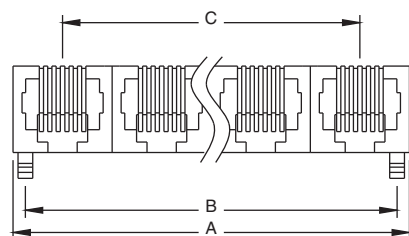
Recommended PCB Layout



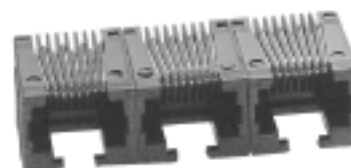
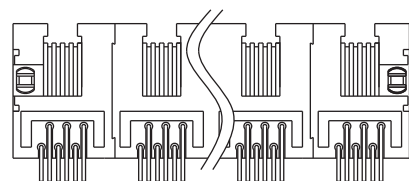
TYPE 5

6p4c
6p6c

MTJG-3-665X1



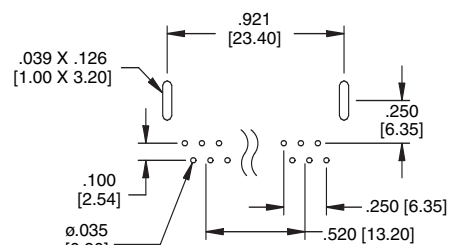
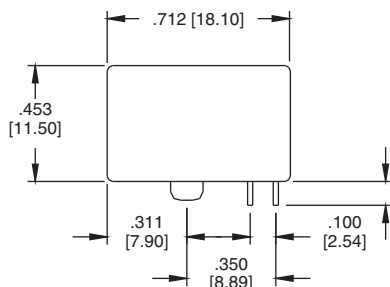
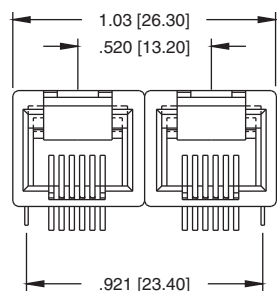
Recommended PCB Layout



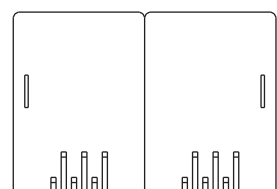
TYPE 5 SMT

6p4c
6p6c

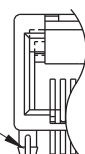
MTJG-3-665X1-SMT



Recommended PCB Layout

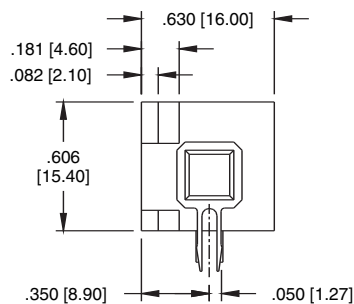
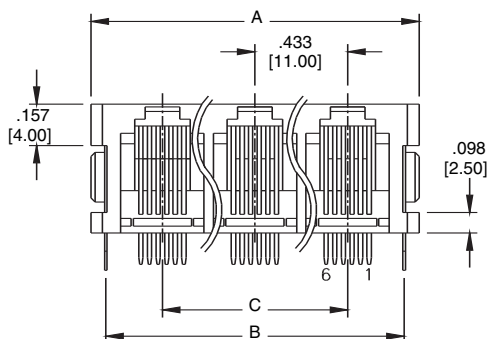


OPTIONAL
SPLITROUND PEG
ADD -SP TO END
OF PART NO. FOR
SPLITROUND PEG
OPTION



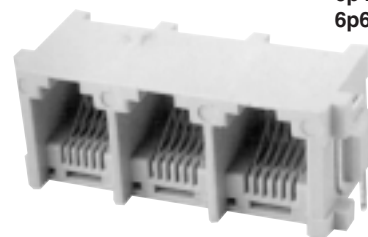
TYPE N METAL PEG

6p4c
6p6c

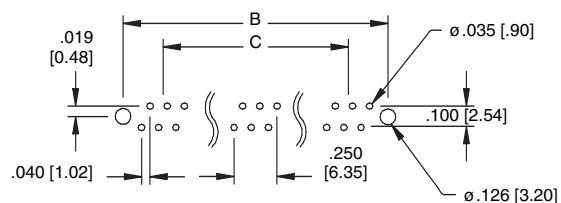
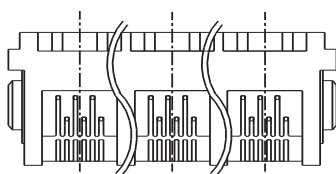


**TYPE 7H
RIGHT ANGLE ENTRY**

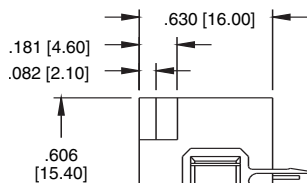
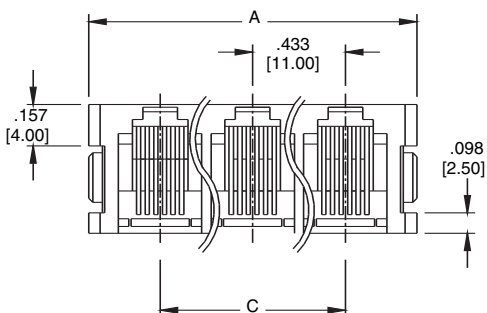
6p4c
6p6c



MTJG-3-667HX2

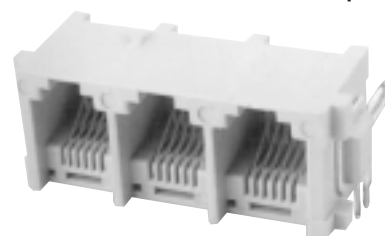


Recommended PCB Layout

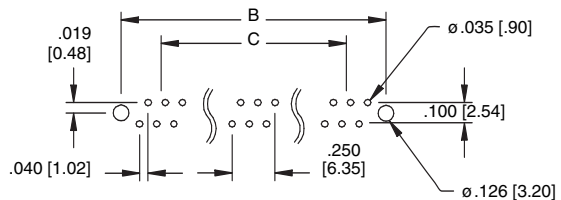
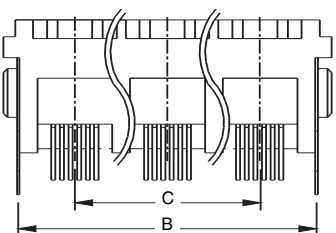


TYPE 7V TOP ENTRY

6p4c
6p6c

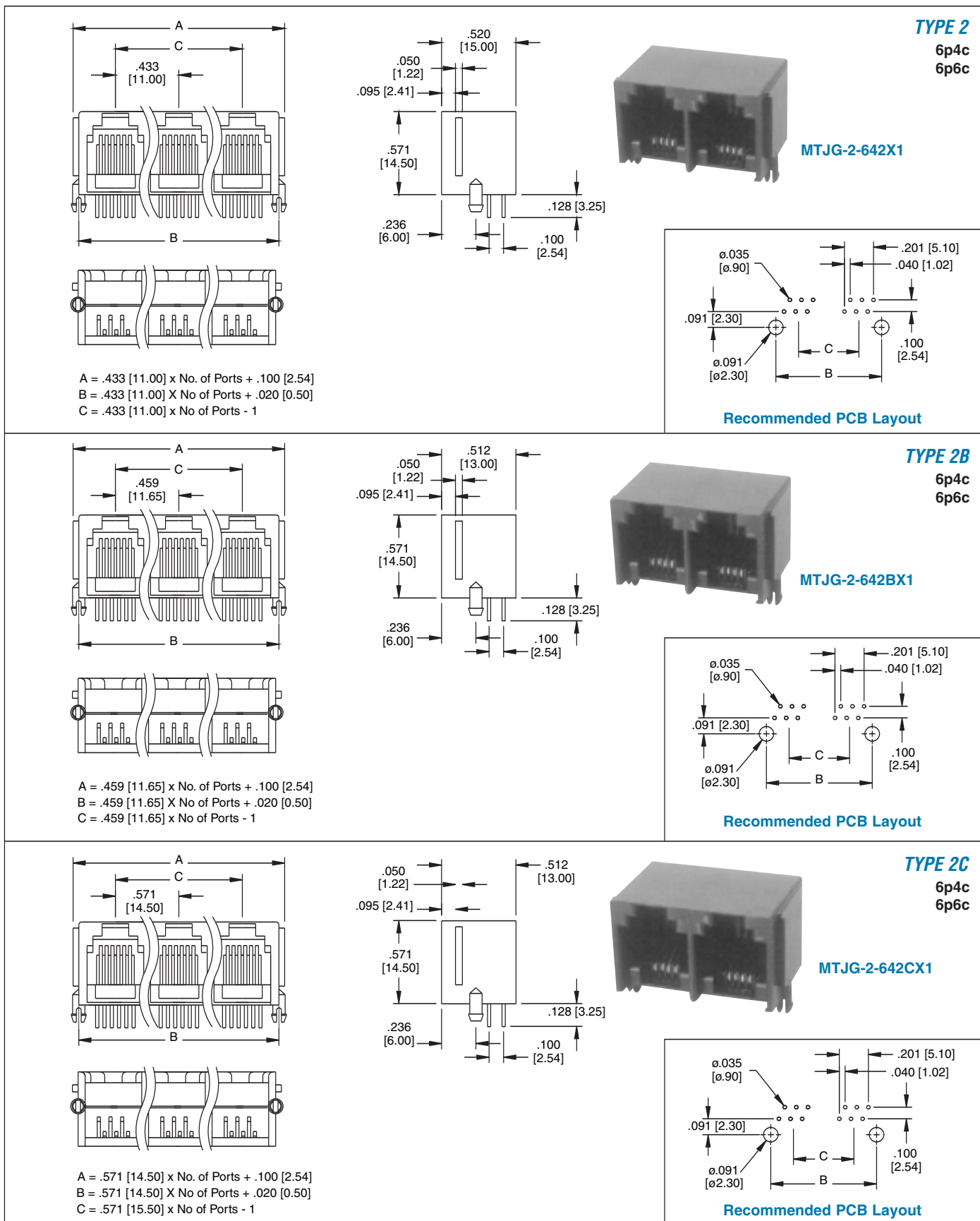


MTJG-3-667VX2

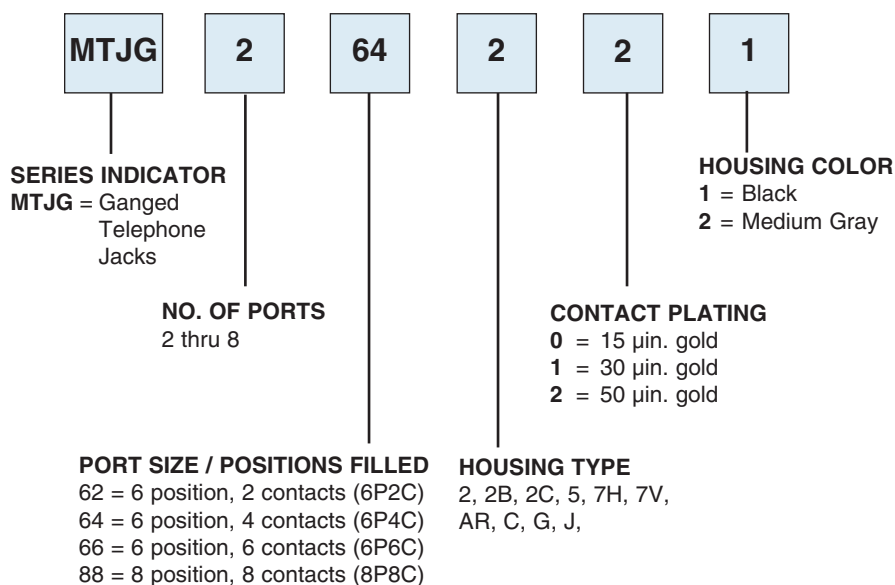


Recommended PCB Layout

No of Ports							
DIMENSION	2	3	4	5	6	7	8
A	1.110 [28.20]	1.543 [39.20]	1.976 [50.20]	2.410 [61.20]	2.842 [72.20]	3.275 [83.20]	3.710 [94.20]
B	.992 [25.20]	1.425 [36.20]	1.860 [47.20]	2.290 [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]



ORDERING INFORMATION MTJG SERIES GANG JACKS



OPTIONS:

Add as suffix to basic part no.

-S, -FSA, -FSB, -FSD = Fully shielded jack
(refer to specification page for illustration)

PG = Panel ground tabs

SMT = Surface mount tails with Hi-Temp insulator

LED CONFIGURATION		
SUFFIX	LED 1	LED 2
LA	YEL	YEL
LD	GRN	GRN
LG	YEL	GRN
LH	GRN	YEL
LI	ORG/GRN	ORG/GRN

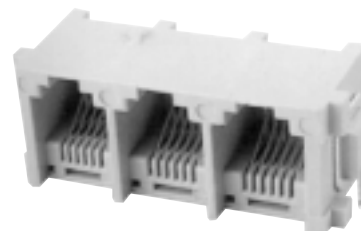
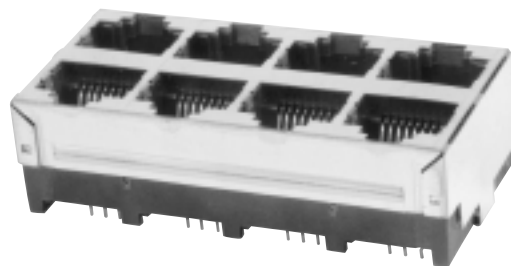
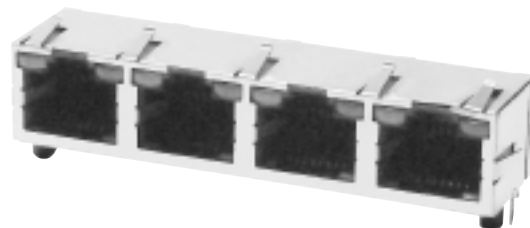
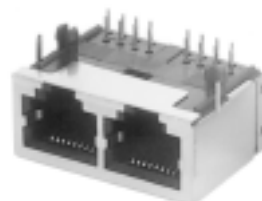
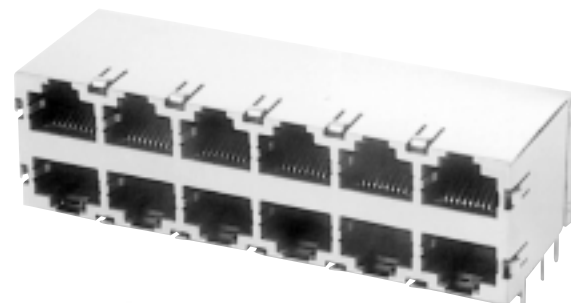
Add suffix to end of P/N:

HI-TEMP
INSULATOR
AVAILABLE

RoHS
COMPLIANT
OPTION AVAILABLE

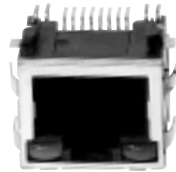
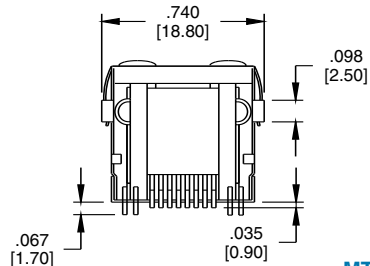
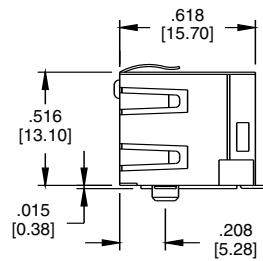
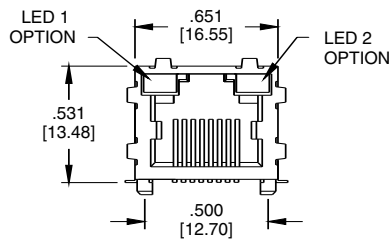
UL **CSA** **FC**

Pb-free
Option available

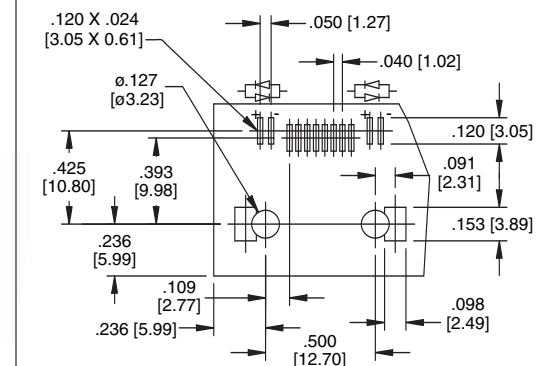


TYPE AR

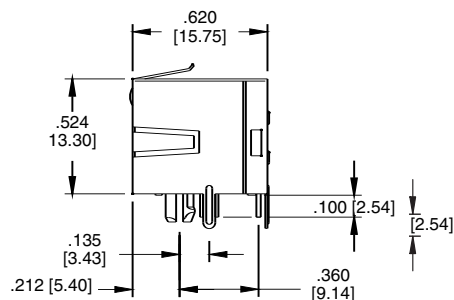
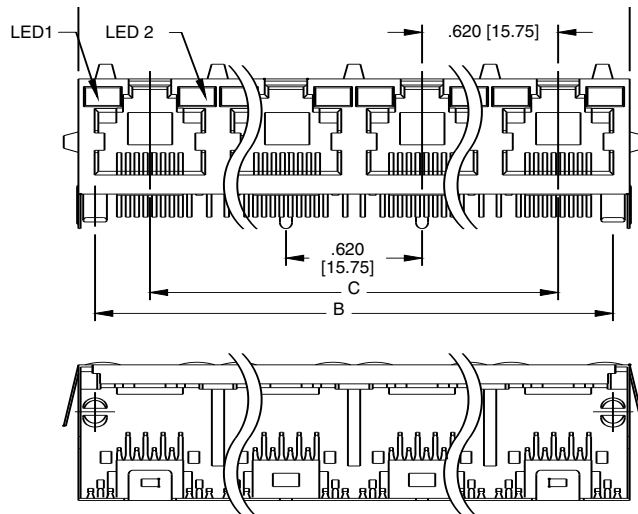
8P8C



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



Recommended PCB Layout



TYPE AR GANGED

8P8C

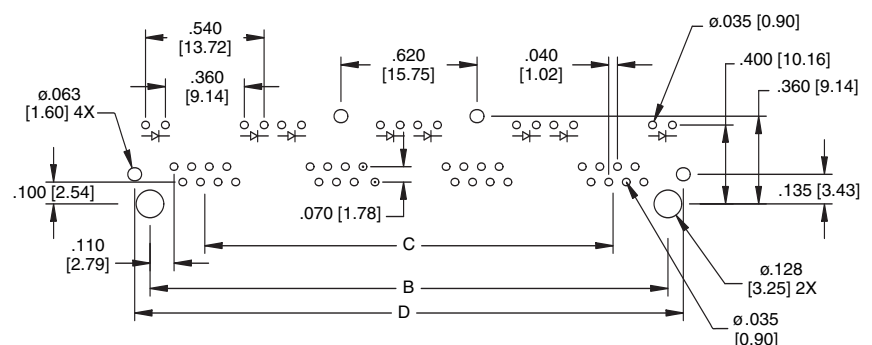


MTJG-4-88ARX1-FS-PG-LG

LED CONFIGURATION		
SUFFIX	LED 1	LED 2
LA	YEL	YEL
LD	GRN	GRN
LG	YEL	GRN
LH	GRN	YEL
LI	ORG/GRN	ORG/GRN

Add suffix to end of P/N:

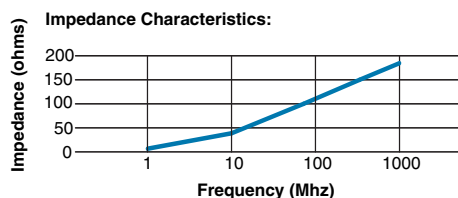
2, 4 & 8 PORTS AVAILABLE

$$A = .620 [15.75] \times \text{No. of Ports} + .029 [0.75]$$
$$B = .620 [15.75] \times \text{No of Ports} - 1 [+ .500 [12.70]]$$
$$C = .620 [15.75] \times \text{No of Ports} - 1$$
$$D = .620 [15.75] \times \text{No. of Ports} + .019 [0.50]$$


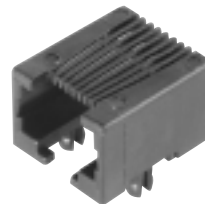
Recommended PCB Layout

FILTERED MODULAR JACKS

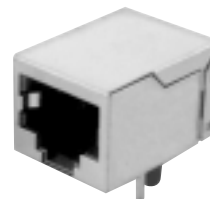
Inductive filtered modular jacks improve signal integrity and are available in a variety of styles including tin plated copper shielding with a choice of magnetic transformer or ferrite filter. Adam Tech offers drop in equivalents to all industry standard filtered jacks



TYPE M



MTJ-88MX1

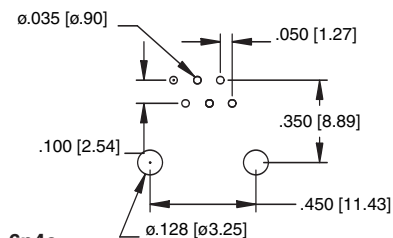
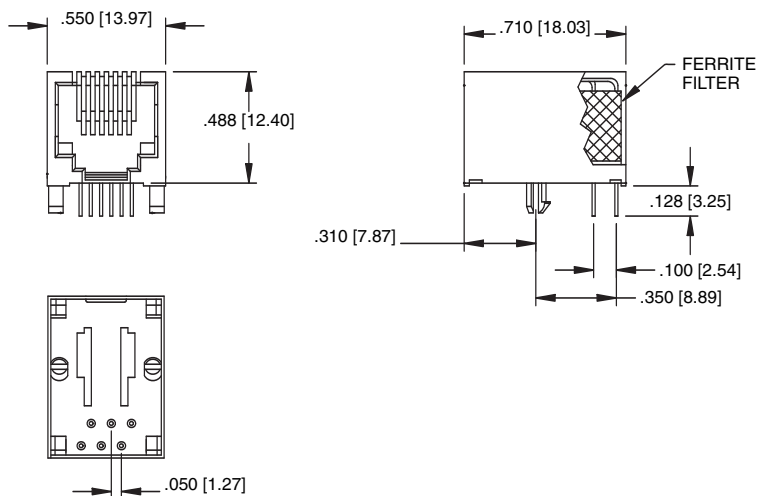


MTJ-88MX1-FSE

EMI FERRITE FILTERED JACK

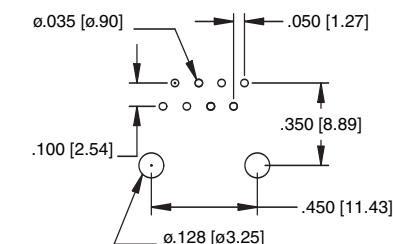
Type M

6p6c
6p4c



6p4c
6p6c

Recommended PCB Layout



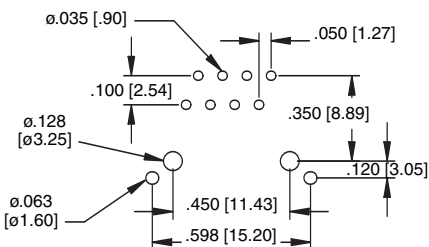
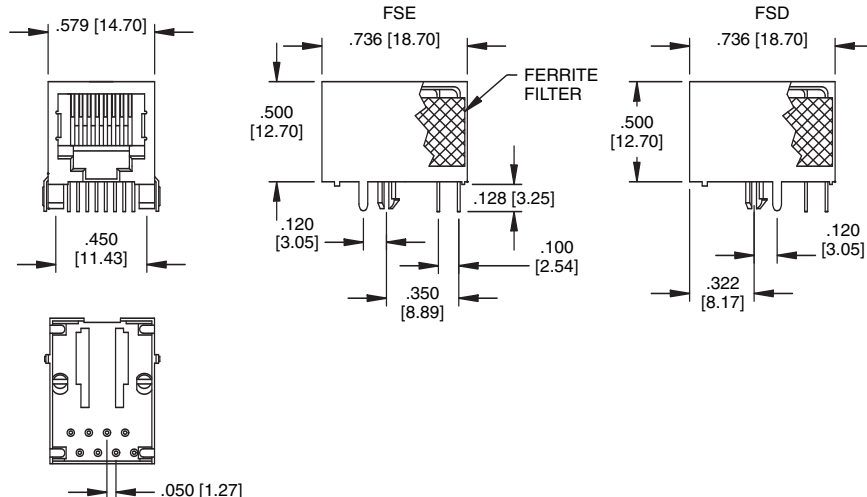
8p8c

Recommended PCB Layout

EMI FERRITE FILTERED & SHIELDED JACK

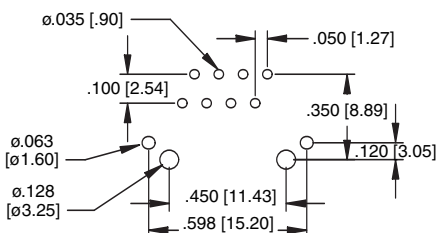
Type M

8p8c



FSE
8p8c

Recommended PCB Layout

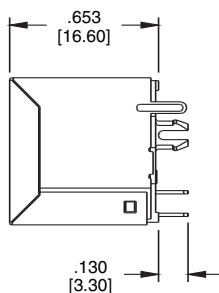
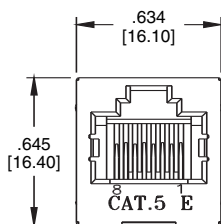


FSD
8p8c

Recommended PCB Layout

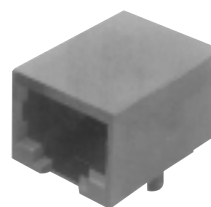
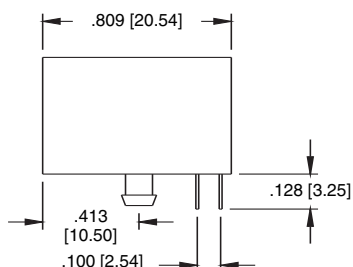
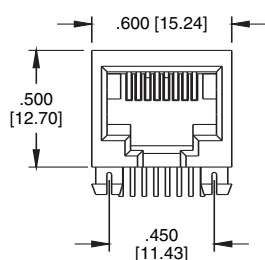
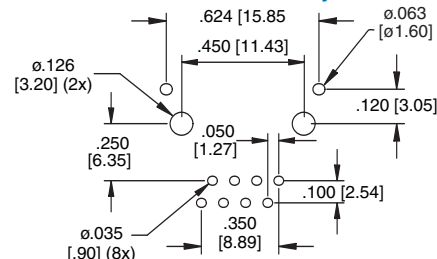
TYPE A, CATEGORY 5, TOP ENTRY

8P8C



MTJ-88AX1-FSE

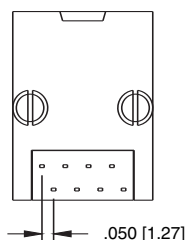
Recommended PCB Layout



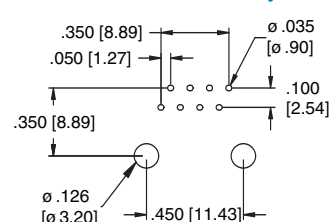
MTJ-88TX1

TYPE T, CATEGORY 5, SIDE ENTRY

8P8C

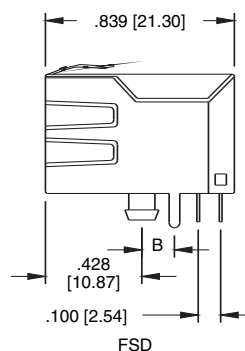
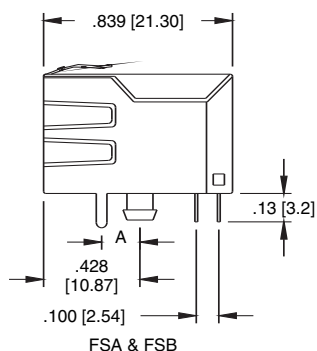
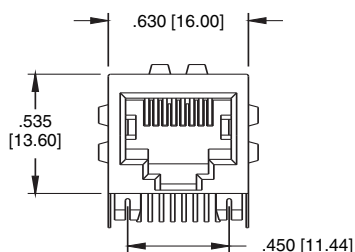


Recommended PCB Layout

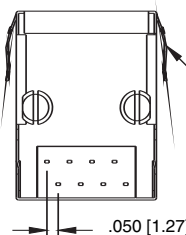


TYPE T, CATEGORY 5 SHIELDED SIDE ENTRY

8P8C



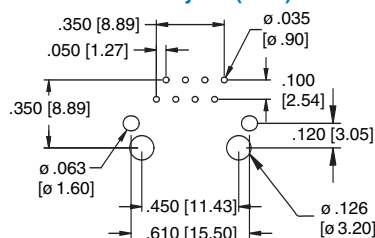
MTJ-88TX1-FSE-PG6



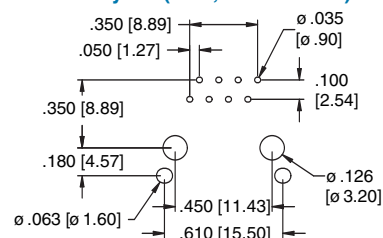
OPTIONAL
PANEL GROUNDS

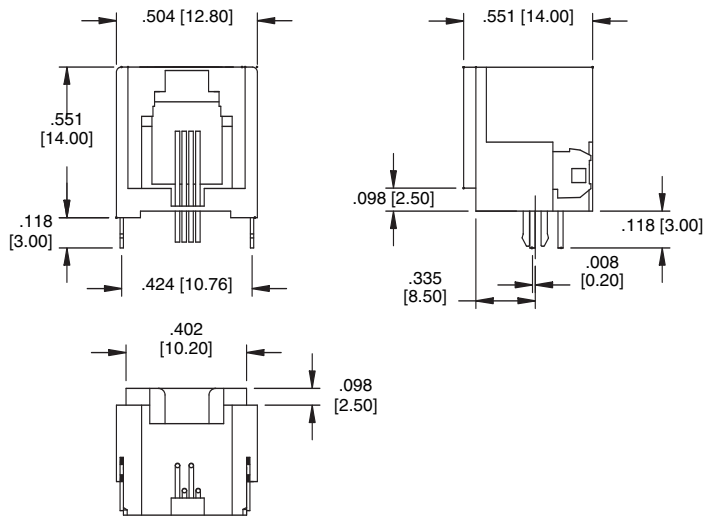
SHIELD PIN LOCATION
FSA OPTION: A = .170 [4.32]
FSB OPTION: A = .144 [3.66]
FSE OPTION: A = .120 [3.05]

PCB Layout (FSD)



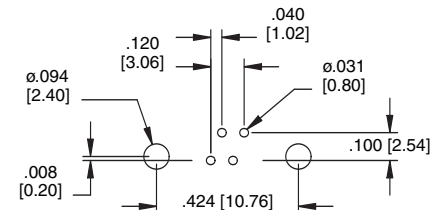
PCB Layout (FSA, FSB & FSE)



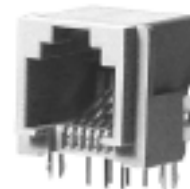
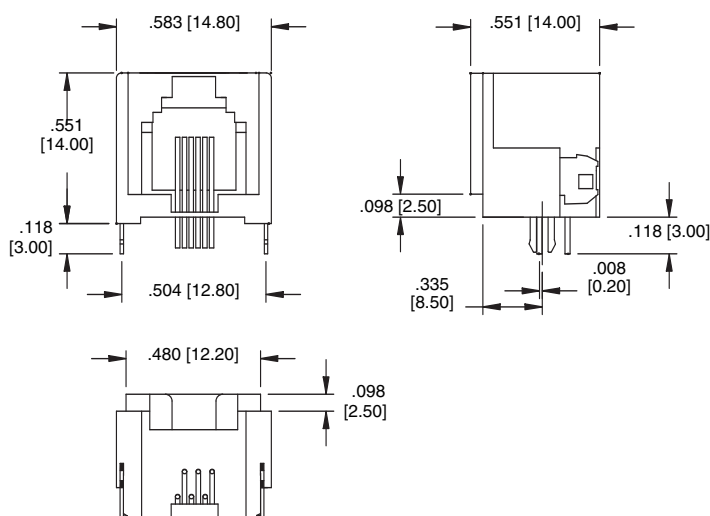


MTJ-44EX1

TYPE E
4p4c

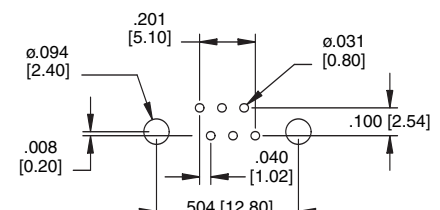


Recommended PCB Layout

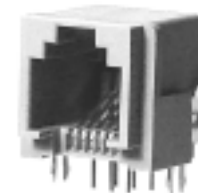
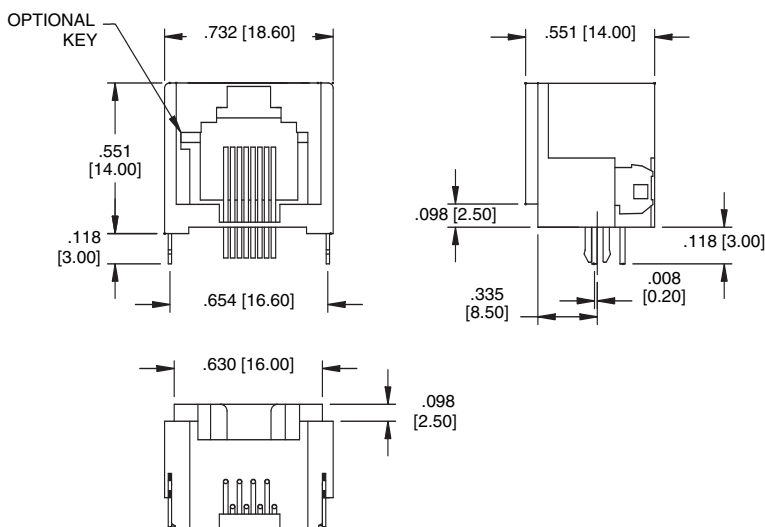


MTJ-66EX1

TYPE E
6p4c
6p6c

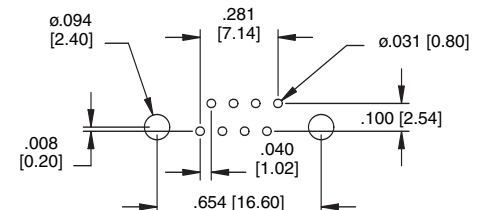


Recommended PCB Layout

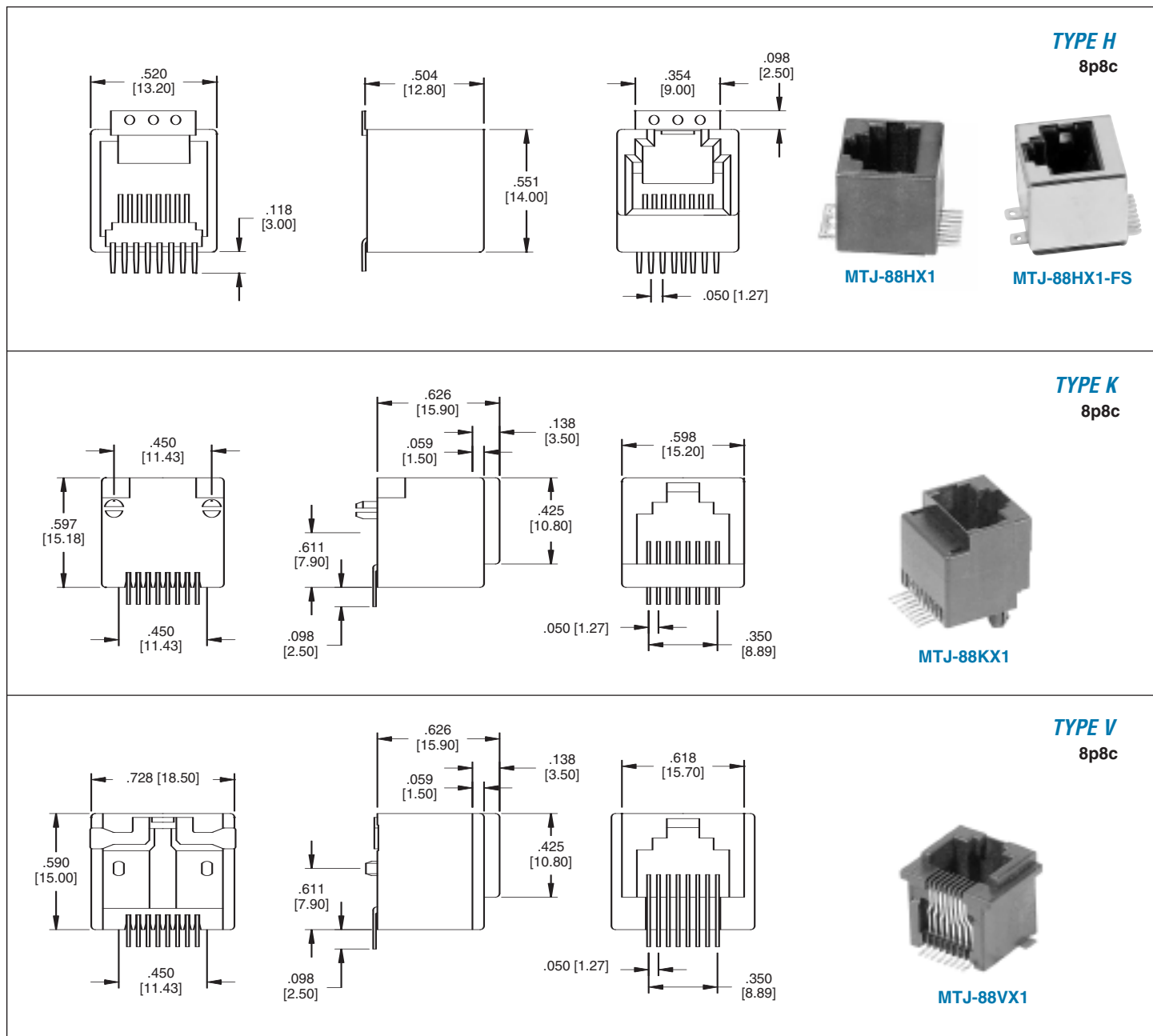


MTJ-88EX1

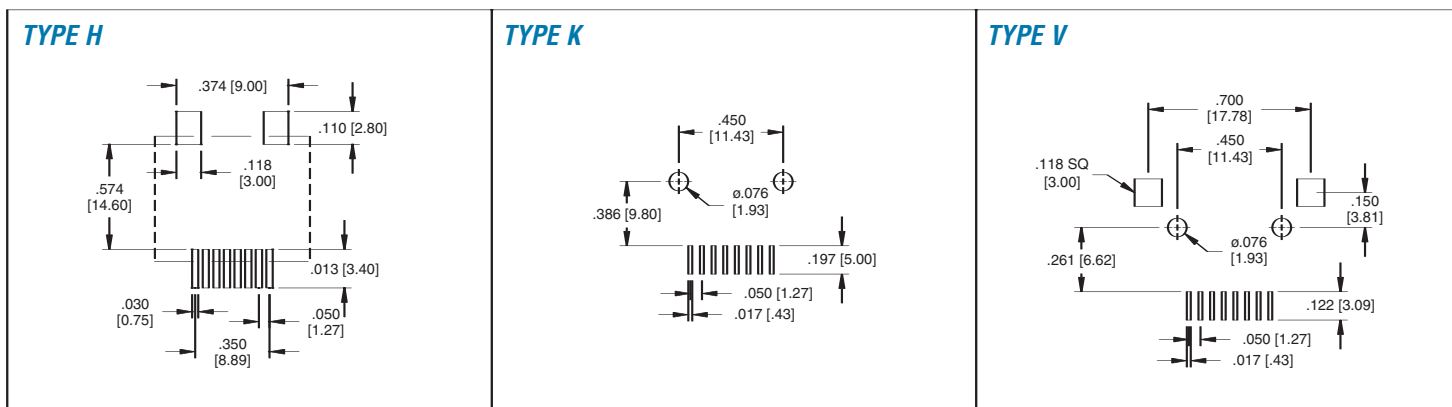
TYPE E
8p8c

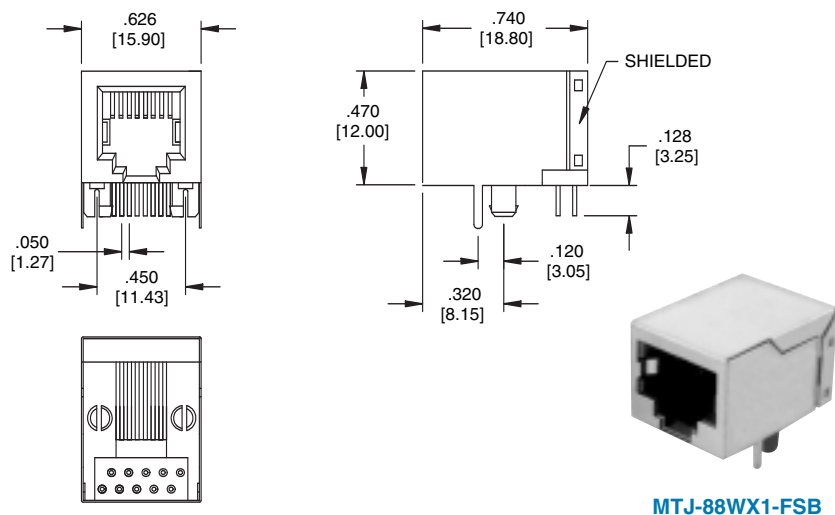


Recommended PCB Layout



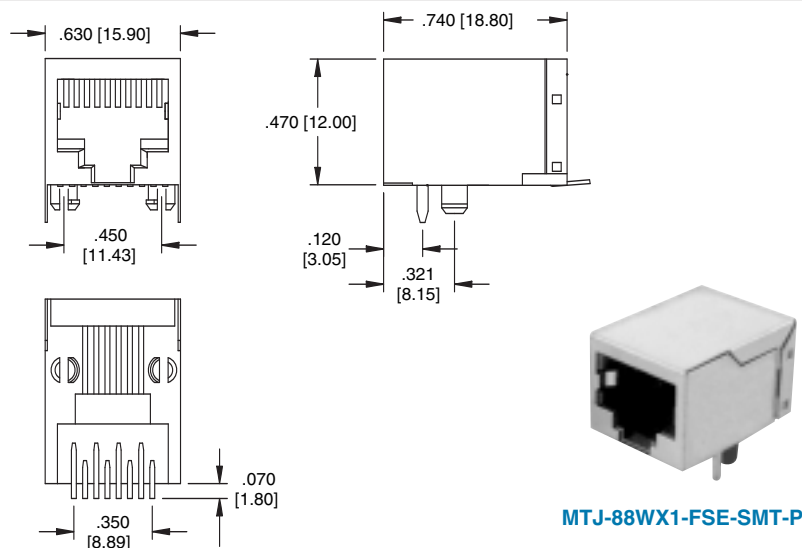
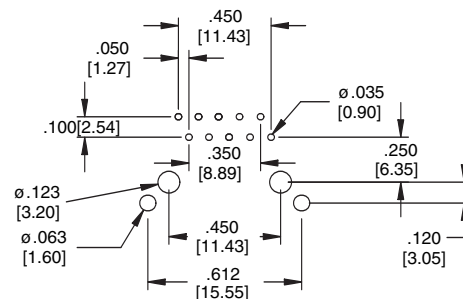
Recommended PCB Layout





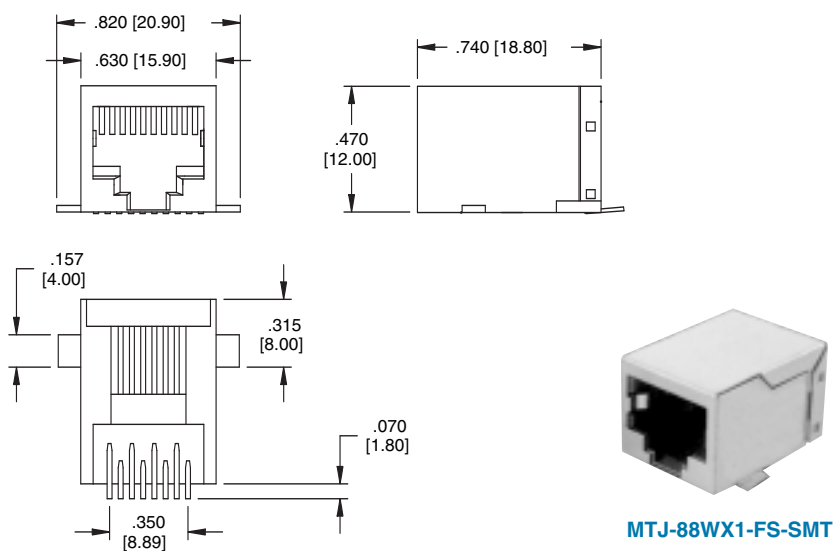
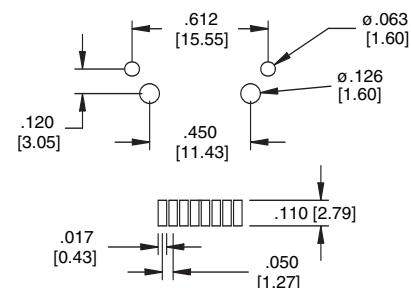
TYPE W SHIELDED

8p8c
10p10c



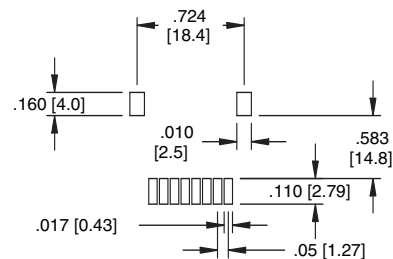
TYPE W SHIELDED SMT WITH PLASTIC PEG

8p8c



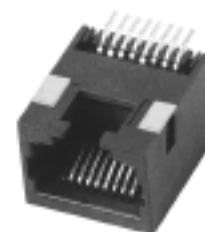
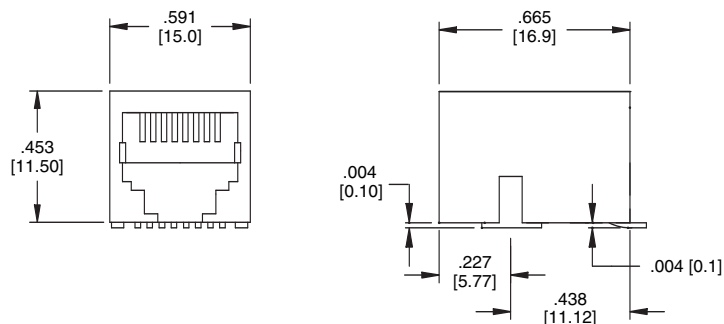
TYPE W SHIELDED TRUE SMT

8p8c

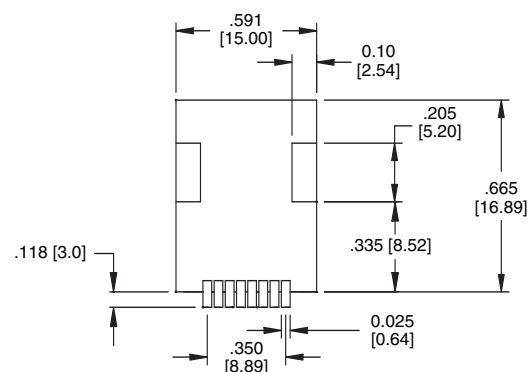
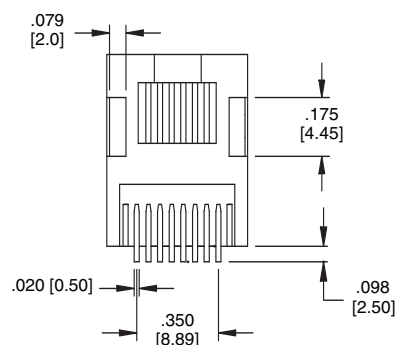


TYPE WA TABS IN

8p8c



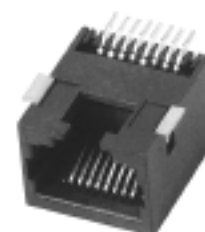
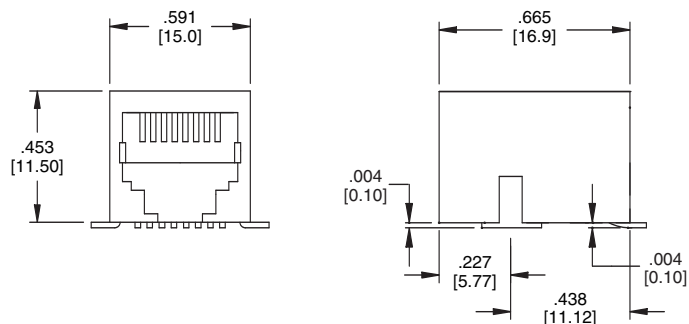
MTJ-88WAX1



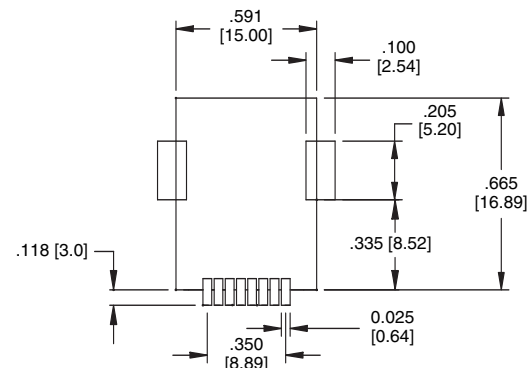
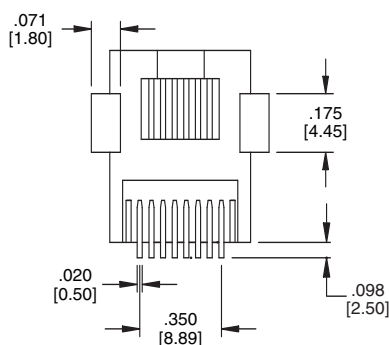
Recommended Solder Pad Layout

TYPE WB TABS OUT

8p8c

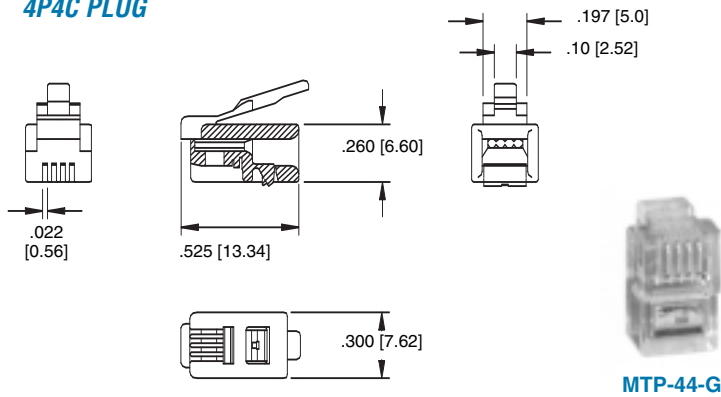


MTJ-88WBX1

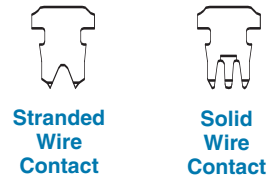


Recommended Solder Pad Layout

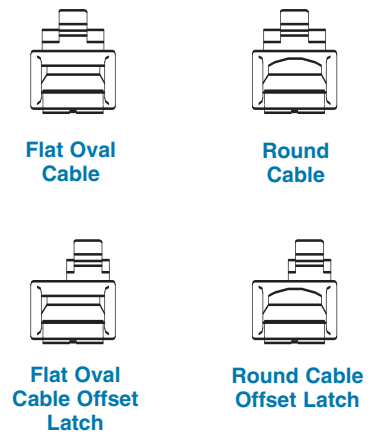
4P4C PLUG



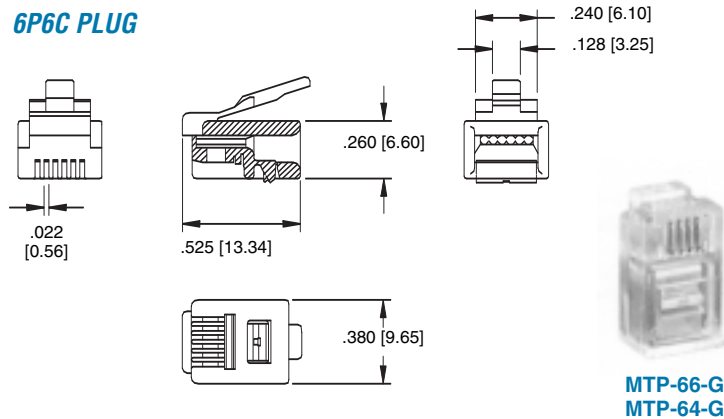
Contact Options



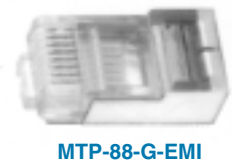
Cable Options



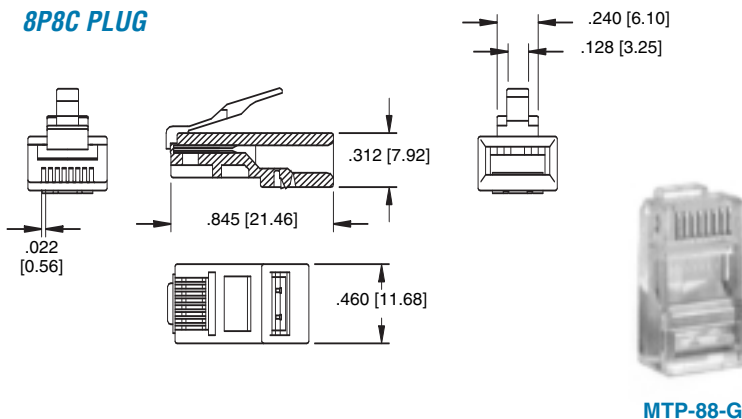
6P6C PLUG



Plug with Metal EMI Shield Option



8P8C PLUG



10P10C PLUG

