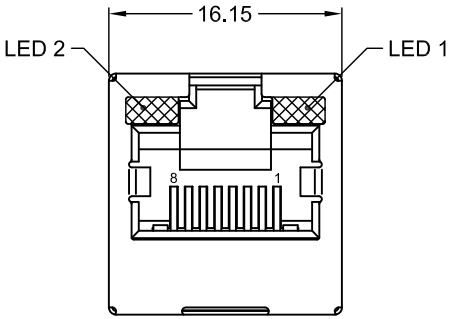
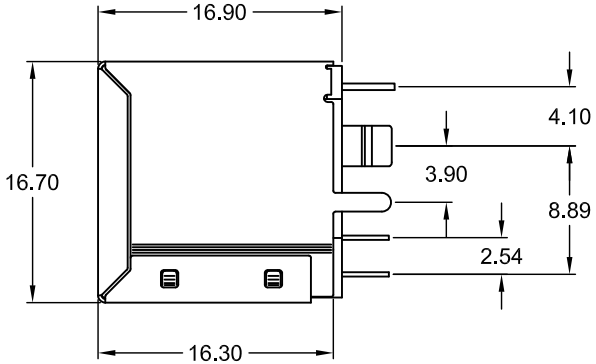
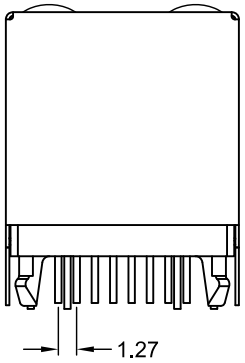
REV.	DESCRIPTION	DRAWN	DATE
A	NEW	Nick	06.07.2009
B	New DWG. No. / LED Polarity	Ronny	01.02.2012

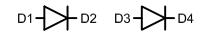




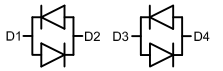


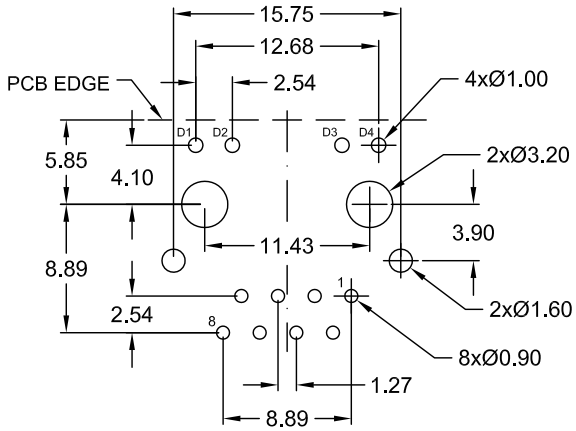
LED Schematic

typical for single color LED



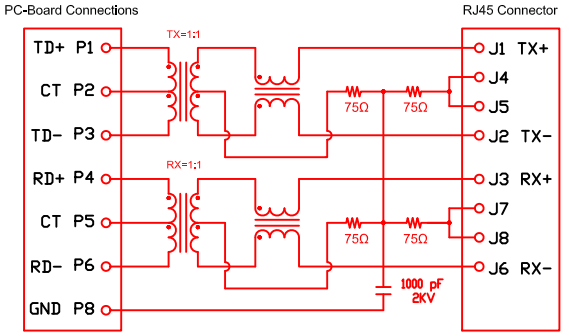
typical for bi color LED





Recommended PCB Hole Layout
Top View

Schematic: "2" Type



Replace "x" with
LED Color Options

PART NUMBER	GOLD PLATING CONTACT AREA
MJT-188-M0S2-95/KxCS	3µ"
MJT-188-M0S2-96/KxCS	6µ"
MJT-188-M0S2-97/KxCS	15µ"
MJT-188-M0S2-98/KxCS	30µ"
MJT-188-M0S2-9H/KxCS	50µ"

LED Color Options		
	LED 1	LED 2
0	NO LED	NO LED
1	GREEN	YELLOW
2	GREEN	NO LED
3	NO LED	GREEN
4	YELLOW	GREEN
5	GREEN	GREEN
6	YELLOW	YELLOW
7	ORANGE/GREEN	ORANGE/GREEN
8	YELLOW/GREEN	YELLOW/GREEN
9	NO LED	RED
A	GREEN/YELLOW	GREEN/YELLOW
B	RED/GREEN	RED/GREEN
C	GREEN/YELLOW	RED/GREEN
D	GREEN/YELLOW	GREEN
E	GREEN/YELLOW	YELLOW

RoHS 2002/95/EC compliant

SPECIFICATION

1. MATERIAL:
   Housing - PBT UL 94V-0 (black)
   Contact - 0.35mm PhBz; Au/Sn plated
   Shield - Brass; Ni plated
2. OPERATING LIFE: 750 Cycles min.
3. TEMPERATURE RANGE:
   Storrage - -40°C to +85°C
   Operating - 0°C to 70°C

Cavity conform to FCC Rules and
Registration PAR68, Subparts F

ELECTRICAL CHARACTERISTICS

Test Notes: (25°C ±5°C)

1. TR: (100KHz 0.1V):
   Pins: (P1-P3):(J1-J2)=1:1±3%
   Pins: (P4-P6):(J3-J6)=1:1±3%
2. LX: (100KHz 100mV 8mA DC Bias)
   Pins: (P1-P3),(P4-P6)=350µH min.
3. DCR:
   Pins: (J1-J2),(J3-J6)=1.2Ω max.
4. HIPOT:
   Pins: (P1,P2,P3)to(J1,J2)=1500V AC for 60 Sec.
   Pins: (P4,P5,P6)to(J3,J6)=1500V AC for 60 Sec.
5. INSERTION LOSS:
   -1.0dB max. at 0.3MHz to 100MHz
6. RETURN LOSS:
   -20dB min. at 1MHz to 30MHz
   -15dB min. at 30MHz to 60MHz
   -10dB min. at 60MHz to 80MHz
7. CROSS TALK:
   -30dB min. at 1MHz to 100MHz
8. COMMON TO COMMON MODE REJECTION:
   -30dB min. at 1MHz to 100MHz

E-tec Interconnect

UNIT	mm
SCALE	Free

GENERAL TOLERANCE	
X.° ±	.X ° ±
X. ±	.X ± 0.25
XX. ±	.XX ± 0.15
XXX. ±	.XXX ± 0.075

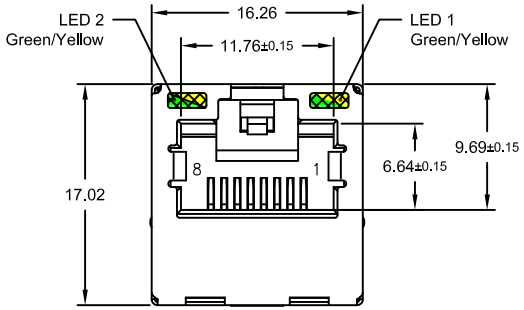
DRAWN	Nick	DATE 06.07.2009
CHECK	Ronny	DATE 01.02.2012
APPROVE	HOGI	DATE 01.02.2012

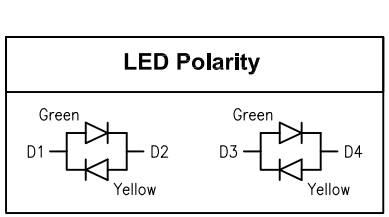
DWG. NO. 1442500 — SHEET 1/1
Series NO. MJT-188-M0S2-xx/KxCS — REV. B

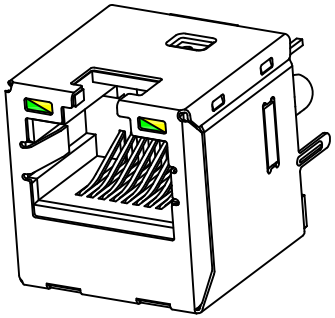
RJ 45 PCB JACK <8P8C>

TOP ENTRY TYPE with LED
FULLY SHIELDED
2 Type 10/100 Base TX Filtered

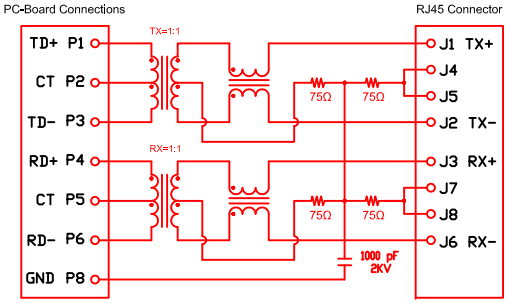
REV.	DESCRIPTION	DATE	DRAWN
A	New	17.11.2010	Peter
B	New DWG. No / add LED Pins	01.02.2012	Ronny
C	Material PBT --> LCP	24.07.2012	RH
D	Plug insert area: 6,80 -> 6,64; 9,72 -> 9,69; 11,90 -> 11,76	21.01.2015	Ronny

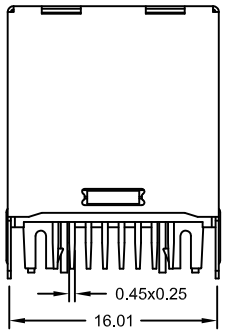


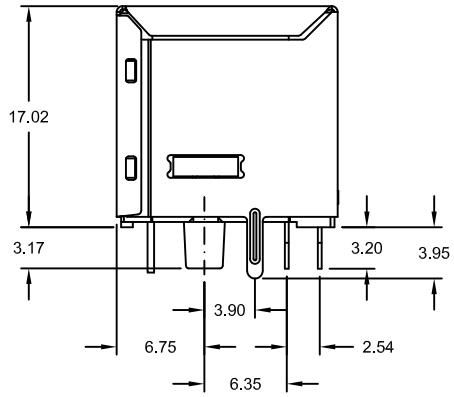


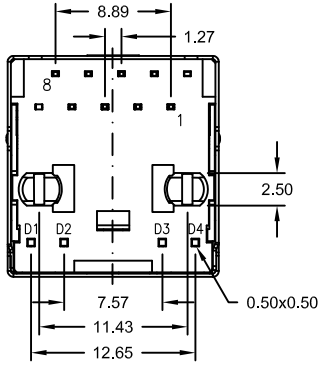


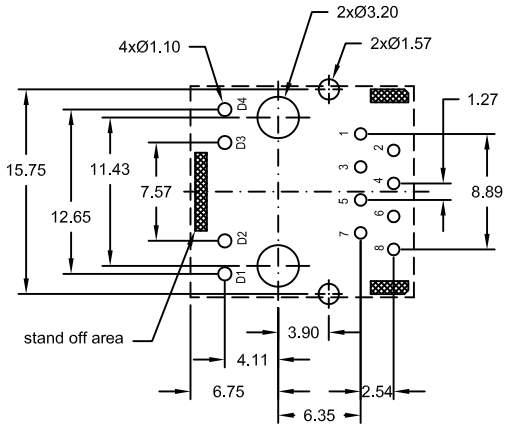
Schematic: "2" Type











Recommended PCB Hole Layout Top View

PART NUMBER	GOLD PLATING CONTACT AREA
MJT-188-M50S2-96KACS	6µ"
MJT-188-M50S2-97KACS	15µ"
MJT-188-M50S2-98KACS	30µ"
MJT-188-M50S2-9HKACS	50µ"

RoHS compliant

SPECIFICATION

1. MATERIAL:
   Housing - LCP UL 94V-0 (black)
   Contact - 0.25mm PhBz; Sn/Au plated
   Shield - Brass; Ni plated
2. OPERATING LIFE: 750 Cycles min.
3. TEMPERATURE RANGE:
   Storrage -40°C to +125°C
   Operating -40°C to +85°C
4. Cavity comply with FCC Rules and Regulations Part 68, Subpart F

ELECTRICAL CHARACTERISTICS

Test Notes: (25°C ±5°C)

1. TR: (100KHz 0.1V):
   Pins: (P1-P3):(J1-J2)=1:1±3%
   Pins: (P4-P6):(J3-J6)=1:1±3%
2. LX: (100KHz 100mV 8mA DC Bias)
   Pins: (P1-P3):(P4-P6)=350µH min.
3. DCR:
   Pins: (J1-J2):(J3-J6)=1.2Ω max.
4. HIPOT:
   Pins: (P1-P3)to(J1,J2)=1500V AC for 60 Sec.
   Pins: (P4-P6)to(J3,J6)=1500V AC for 60 Sec.
5. INSERTION LOSS:
   -1.0dB max. at 1MHz to 100MHz
6. RETURN LOSS (100Ω ±5Ω):
   -18dB min. at 1MHz to 30MHz, load 100Ω
   -16dB min. at 30MHz to 60MHz, load 100Ω
   -12dB min. at 60MHz to 80MHz, load 100Ω
7. CROSS TALK:
   -30dB min. at 1MHz to 100MHz
8. COMMON TO COMMON MODE REJECTION:
   -30dB min. at 1MHz to 100MHz

E-tec Interconnect

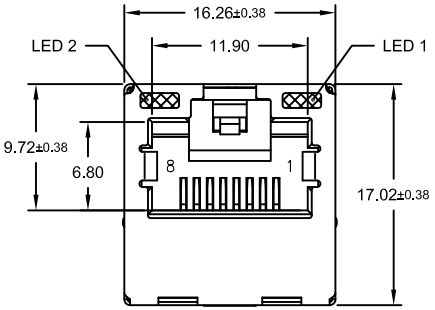
UNIT mm	GENERAL TOLERANCE		DRAWN Peter	DATE 17.11.2010	DWG. NO. 1442503 SHEET 1/1
SCALE Free	X.° ±	.X ° ±	CHECK Ronny	DATE 21.01.2015	Series NO. MJT-188-M50S2-9xKxCS REV. D
	X. ±	.X0 ±	APPROVE Hogi	DATE 21.01.2015	
	XX. ±	.XX ± 0.25			
	XXX. ±	.XXX ±			

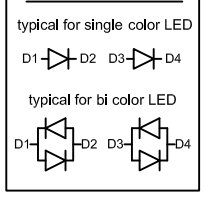
RJ 45 PCB JACK <8P8C>

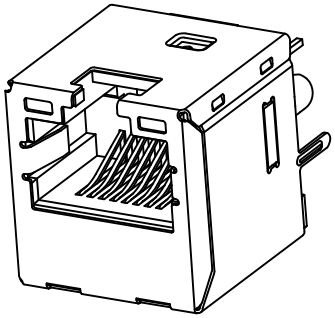
TOP ENTRY TYPE FULLY SHIELDED

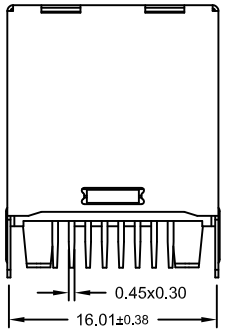
Schematic "2" Type 10/100 Mbps TX Filtered with LED #2 = geen/yellow #1 = green/yellow

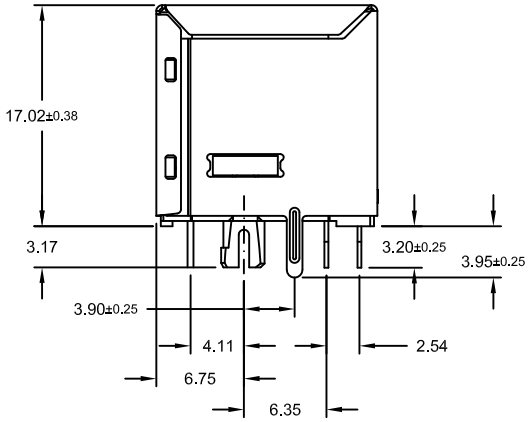
REV.	DESCRIPTION	DATE	DRAWN
A	New	12.02.2014	Ryan

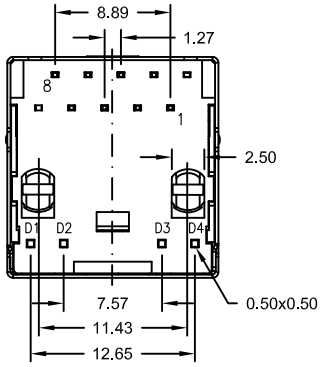










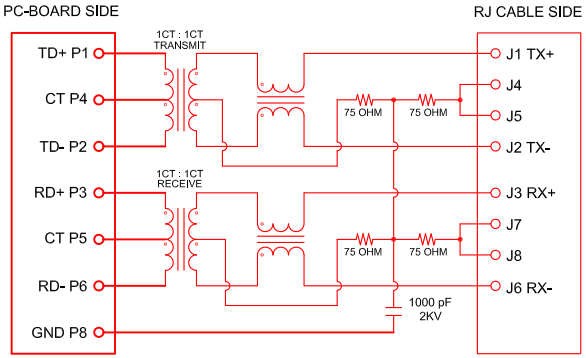


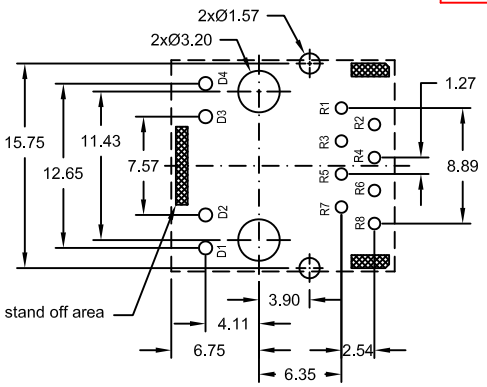
Replace "x" with LED Color Options

PART NUMBER	GOLD PLATING CONTACT AREA
MJT-188-M50SE-96KxCS	6µ"
MJT-188-M50SE-97KxCS	15µ"
MJT-188-M50SE-98KxCS	30µ"
MJT-188-M50SE-9HKxCS	50µ"

	LED Color Options LED 2	LED 1
0	NO LED	NO LED
1	YELLOW	GREEN
2	NO LED	GREEN
3	GREEN	NO LED
4	GREEN	YELLOW
5	GREEN	GREEN
6	YELLOW	YELLOW
7	ORANGE/GREEN	ORANGE/GREEN
8	YELLOW/GREEN	YELLOW/GREEN
9	RED	NO LED
A	GREEN/YELLOW	GREEN/YELLOW
B	RED/GREEN	RED/GREEN
C	RED/GREEN	GREEN/YELLOW
D	GREEN	GREEN/YELLOW
E	YELLOW	GREEN/YELLOW

Schematic: "E" Type





Recommended PCB Hole Layout
Top View

RoHS compliant

SPECIFICATION
1. MATERIAL:
   Housing - PBT UL 94V-0 (black)
   Contact - 0.35mm PhBz; Sn/Au plated
   Shield - Brass; Ni plated
2. OPERATING LIFE: 750 Cycles min.
3. TEMPERATURE RANGE:
   Storrage -40°C to +125°C
   Operating -40°C to +105°C
4. Cavity conform to FCC Rules and Registration PAR68, Subparts F

ELECTRICAL CHARACTERISTICS
Test Notes: (25°C ±5°C)
1. TR: (100KHz 0.1V):
   Pins: (P1-P2):(J1-J2)=1:1±3%
   Pins: (P3-P6):(J3-J6)=1:1±3%
2. LX: (100KHz 100mV 8mA DC Bias)
   Pins: (P1-P2):(P3-P6)=350µH min.
3. DCR:
   Pins: (J1-J2):(J3-J6)=1.2Ω max.
4. HIPOT:
   Pins: (P1,P2)to(J1,J2)=1500V AC for 60 Sec.
   Pins: (P3,P6)to(J3,J6)=1500V AC for 60 Sec.
5. INSERTION LOSS:
   -1.0dB max. at 1MHz to 100MHz
6. RETURN LOSS (100Ω ±5Ω):
   -18dB min. at 1MHz to 30MHz
   -16dB min. at 30MHz to 60MHz
   -12dB min. at 60MHz to 80MHz
7. CROSS TALK:
   -30dB min. at 1MHz to 100MHz
8. COMMON TO COMMON MODE REJECTION:
   -30dB min. at 1MHz to 100MHz

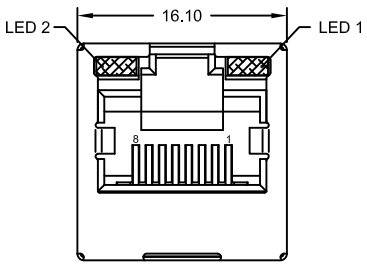
E-tec Interconnect

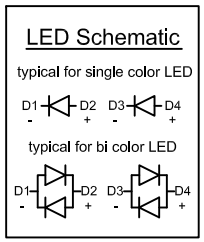
UNIT mm	GENERAL TOLERANCE		DRAWN Ryan	DATE 12.02.2014	DWG. NO. 1442504 SHEET 1/1
SCALE Free	X.° ± 3°	.X ° ±	CHECK Ronny	DATE 12.02.2014	REV. A
	X. ±	.X ± 0.25	APPROVE Hogi	DATE 12.02.2014	Series NO. MJT-188-M50SE-9xKxCS
	XX. ±	.XX ± 0.15			
	XXX. ±	.XXX ± 0.075			

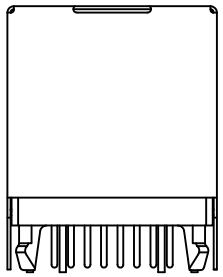
RJ 45 PCB JACK <8P8C>

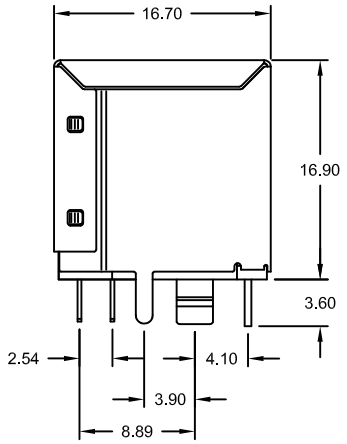
TOP ENTRY TYPE FULLY SHIELDED WITH LED's
Schematic E Type 10/100 Mbps TX Filtered
for CAT 5 & 6 fast Ethernet

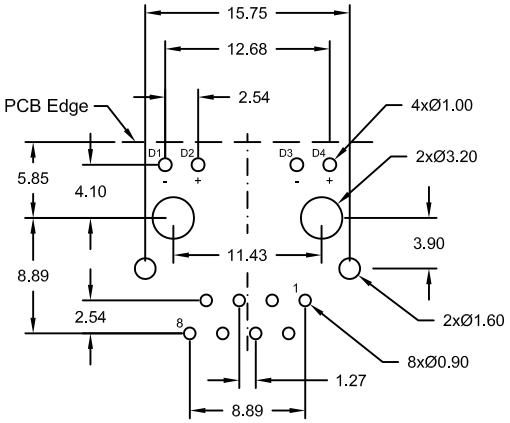
REV.	DESCRIPTION	DATE	DRAWN
A	New	23.11.2015	Ryan



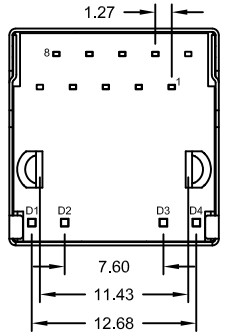




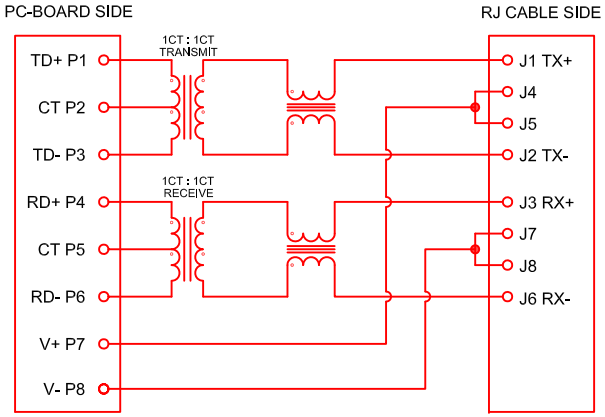




Recommended PCB Hole Layout
Top View



Schematic: "AB" Type



Replace "x" with
LED Color Options

PART NUMBER	GOLD PLATING CONTACT AREA
MJT-188-M0SAB-96/KxCS	6µ"
MJT-188-M0SAB-97/KxCS	15µ"
MJT-188-M0SAB-98/KxCS	30µ"
MJT-188-M0SAB-9H/KxCS	50µ"

	LED Color Options	
	LED 2	LED 1
1	YELLOW	GREEN
2	NO LED	GREEN
3	GREEN	NO LED
4	GREEN	YELLOW
5	GREEN	GREEN
6	YELLOW	YELLOW
7	ORANGE/GREEN	ORANGE/GREEN
8	YELLOW/GREEN	YELLOW/GREEN
9	RED	NO LED
A	GREEN/YELLOW	GREEN/YELLOW
B	RED/GREEN	RED/GREEN
C	RED/GREEN	GREEN/YELLOW
D	GREEN	GREEN/YELLOW
E	YELLOW	GREEN/YELLOW

RoHS compliant

Specifications

Material

Housing: PBT UL 94V-0 (black)
Contact: Phosphor Bronze t=0.35mm
Plating: Sn on solder area;
Au flash on contact area
Shield: Brass; Ni plated

Operating temperature: 0°C to +70°C

Operating life: 750 cycles min.

Cavity comply with FCC Rules and Regulations Part 68, Subpart F

Electrical Characteristics

Test Notes: (25°C ±5°C)
1. TR: (100KHz 0.1V):
Pins: (P1-P3):(J1-J2)=1:1±3%
Pins: (P4-P6):(J3-J6)=1:1±3%
2. LX: (100KHz 100mV 8mA DC Bias)
Pins: (P1-P3):(P4-P6)=350µH min.
3. DCR:
Pins: (J1-J2):(J3-J6)=1.2Ω max.
4. HIPOT:
Pins: (P1,P3)to(J1,J2)=1500V AC for 60 Sec.
Pins: (P4,P6)to(J3,J6)=1500V AC for 60 Sec.
5. INSERTION LOSS:
-1.0dB max. at 1MHz to 100MHz
6. RETURN LOSS (100Ω ±5Ω):
-18dB min. at 1MHz to 30MHz
-16dB min. at 30MHz to 60MHz
-12dB min. at 60MHz to 80MHz
7. CROSS TALK:
-30dB min. at 1MHz to 100MHz
8. COMMON TO COMMON MODE REJECTION:
-30dB min. at 1MHz to 100MHz

E-tec Interconnect

UNIT	mm
SCALE	Free

GENERAL TOLERANCE	
X.° ±	X. ±
.X° ±	.X ±
.XX° ±	.XX ± 0.25
.XXX° ±	.XXX ±

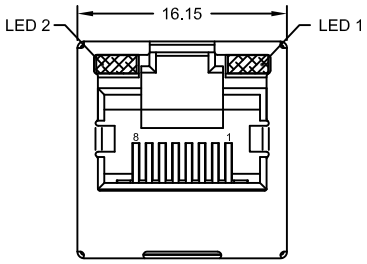
DRAWN	Ryan	DATE 23.11.2015
CHECK	Ronny	DATE 23.11.2015
APPROVE	Hogi	DATE 23.11.2015

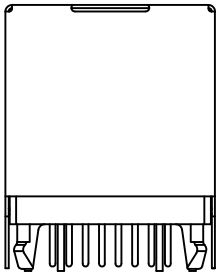
DWG. NO. 1442505
SHEET 1/1
REV. A
SERIES NO. MJT-188-M0SAB-9x/KxCS

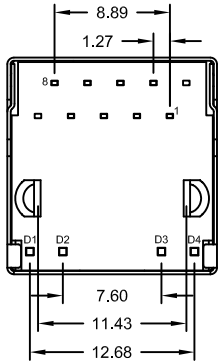
RJ 45 PCB Jack <8P8C>

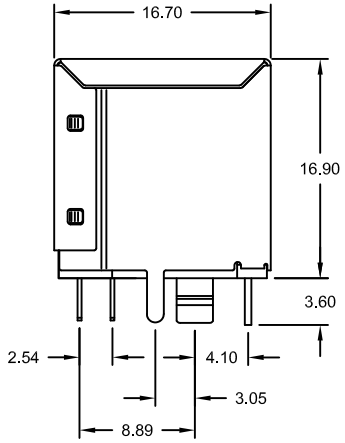
top entry type fully shielded with LED's
Type "AB" 10/100 Mbps 4 core TX Filtered

REV.	DESCRIPTION	DATE	DRAWN
A	New	02.12.2015	Cherry



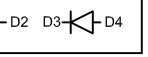


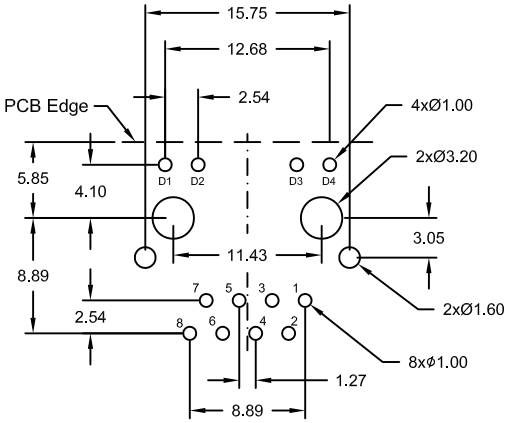




LED Schematic

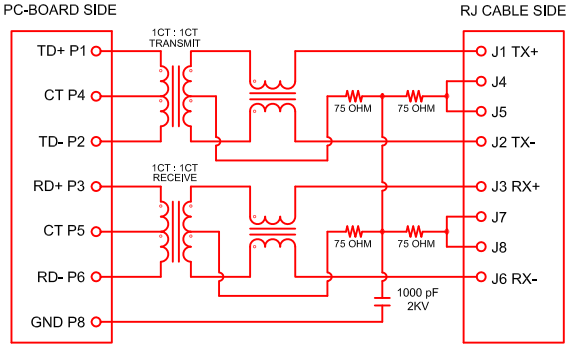
typical for single color LED





Recommended PCB Layout Top View
(Tolerance ±0.05)

Schematic: "E" Type



Replace "x" with
LED Color Options

PART NUMBER	GOLD PLATING CONTACT AREA
MJT-188-M0SE-95/KxCS	flash
MJT-188-M0SE-96/KxCS	6µ"
MJT-188-M0SE-97/KxCS	15µ"
MJT-188-M0SE-98/KxCS	30µ"
MJT-188-M0SE-9H/KxCS	50µ"

	LED Color Options	
	LED 2	LED 1
1	YELLOW	GREEN
2	NO LED	GREEN
3	GREEN	NO LED
4	GREEN	YELLOW
5	GREEN	GREEN
6	YELLOW	YELLOW
9	RED	NO LED

RoHS compliant

Specifications

Material

Housing: PBT UL 94V-0 (black)
Contact: Phosphor Bronze t=0.35mm
Plating: Sn on solder area;
Au flash on contact area
Shield: Brass; Ni plated

Storrage temperature: -40°C to +85°C
Operating temperature: 0°C to +70°C

Operating life: 750 cycles min.

Cavity comply with FCC Rules and Regulations Part 68, Subpart F

Electrical Characteristics

Test Notes: (25°C ±5°C)
1. TR: (100KHz 0.1V):
Pins: (P1-P2):(J1-J2)=1:1±3%
Pins: (P3-P6):(J3-J6)=1:1±3%
2. LX: (100KHz 100mV 8mA DC Bias)
Pins: (P1-P2):(P3-P6)=350µH min.
3. DCR:
Pins: (J1-J2):(J3-J6)=1.2Ω max.
4. HIPOT:
Pins: (P1,P2)to(J1,J2)=1500V AC for 60 Sec.
Pins: (P3,P6)to(J3,J6)=1500V AC for 60 Sec.
5. INSERTION LOSS:
-1.0dB max. at 1MHz to 100MHz
6. RETURN LOSS (100Ω ±5Ω):
-18dB min. at 1MHz to 30MHz
-16dB min. at 30MHz to 60MHz
-12dB min. at 60MHz to 80MHz
7. CROSS TALK:
-30dB min. at 1MHz to 100MHz
8. COMMON TO COMMON MODE REJECTION:
-30dB min. at 1MHz to 100MHz

E-tec Interconnect

UNIT	mm
SCALE	Free

GENERAL TOLERANCE	
X.° ±	X. ±
.X° ±	.X ±
.XX° ±	.XX ± 0.25
.XXX° ±	.XXX ±

DRAWN	Cherry	DATE 02.12.2015
CHECK	Ronny	DATE 02.12.2015
APPROVE	Hogi	DATE 02.12.2015

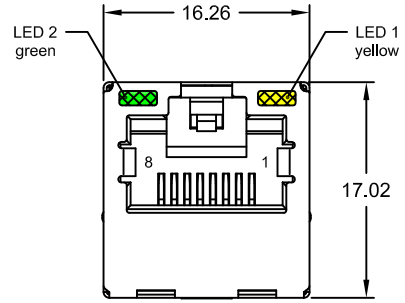
DWG. NO. 1442506 SHEET 1/1 REV. A

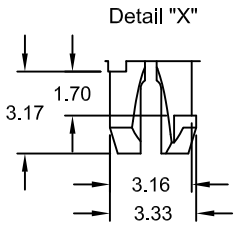
SERIES NO. MJT-188-M0SE-9x/KxCS

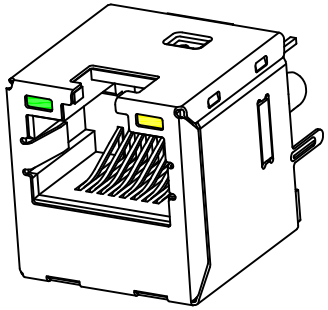
RJ 45 PCB Jack <8P8C>

top entry type fully shielded with LED's
Type "E" 10/100 Mbps 4 core TX Filtered

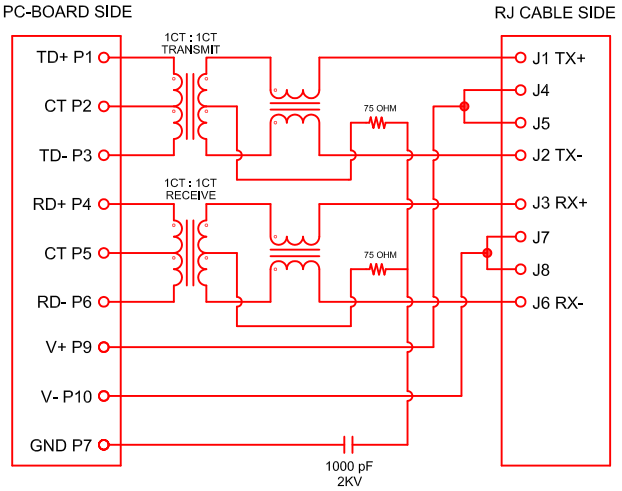
REV.	DESCRIPTION	DATE	DRAWN
A	New	30.08.2016	RH

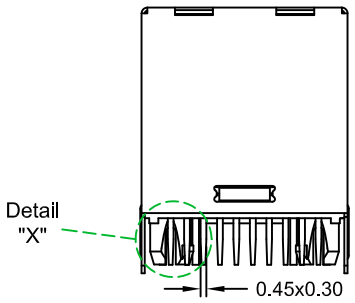


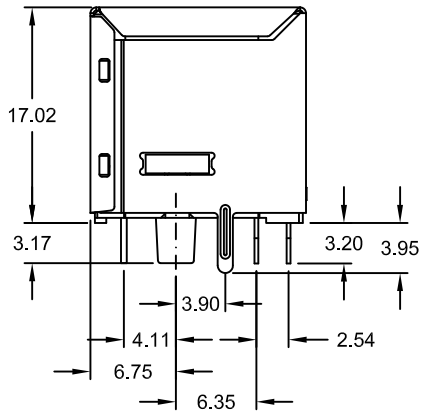


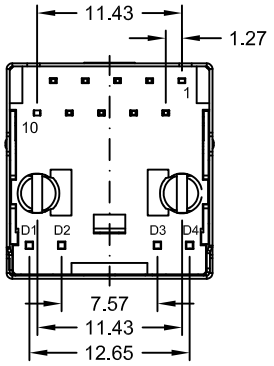


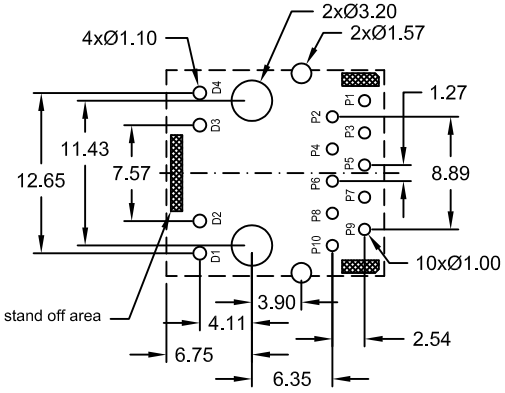
Schematic: "AF" Type









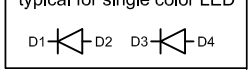


Recommended PCB Hole Layout
Top View
Tolerance ±0.05mm

PART NUMBER	GOLD PLATING CONTACT AREA
MJT-108-MG0SAF-96K4CS	6µ"
MJT-108-MG0SAF-97K4CS	15µ"
MJT-108-MG0SAF-98K4CS	30µ"
MJT-108-MG0SAF-9HK4CS	50µ"

LED Schematic

typical for single color LED



RoHS compliant

Specifications

Material

Housing: PBT UL 94V-0 (black)
Contact: Phosphor Bronze t=0.25mm
Plating: Sn/Au
Shield: Brass; Ni plated

Storrage temperature: -40°C to +125°C
Operating temperature: 0°C to +70°C

Operating life: 750 cycles min.

Cavity comply with FCC Rules and Regulations Part 68, Subpart F

Electrical Characteristics

Test Notes: (25°C ±5°C)
1. TR: (100KHz 0.1V):
   Pins: (P1-P3):(J1-J2)=1:1±3%
   Pins: (P4-P6):(J3-J6)=1:1±3%
2. LX: (100KHz 100mV 8mA DC Bias)
   Pins: (P1-P3):(P4-P6)=350µH min.
3. DCR:
   Pins: (J1-J2):(J3-J6)=1.2Ω max.
4. HIPOT:
   Pins: (P1,P3)to(J1,J2)=1500V AC for 60 Sec.
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5. INSERTION LOSS:
   -1.0dB max. at 1MHz to 100MHz
6. RETURN LOSS (100Ω ±5Ω):
   -18dB min. @ 1MHz to 30MHz, load 100Ω
   -16dB min. @ 30MHz to 60MHz, load 100Ω
   -12dB min. @ 60MHz to 80MHz, load 100Ω
7. CROSS TALK:
   -30dB min. @ 1MHz to 100MHz
8. COMMON TO COMMON MODE REJECTION:
   -30dB min. @ 1MHz to 100MHz

E-tec Interconnect

UNIT	mm
SCALE	Free

GENERAL TOLERANCE	
X.° ±	X. ±
.X° ±	.X ±
.XX° ±	.XX ± 0.25
.XXX° ±	.XXX ±

DRAWN	RH	DATE 30.08.2016
CHECK	Hogi	DATE 30.08.2016
APPROVE	Hogi	DATE 30.08.2016

DWG. NO. 1442507 SHEET 1/1 REV. A
SERIES NO. MJT-108-MG0SAF-9xKxCS

Top Entry PCB Jack

RJ45 <10P8C> fully shielded with LED
Schematic "AF" Type
10/100 Mbps 4 core TX Filter for PoE