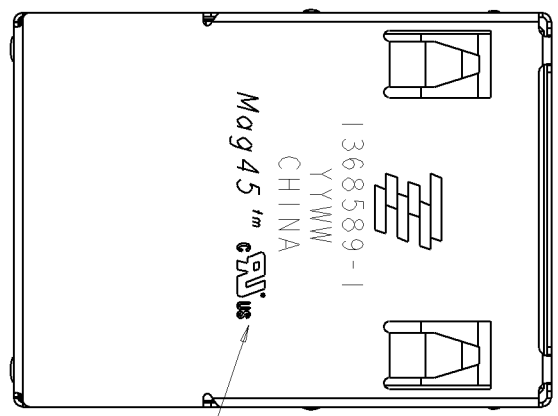
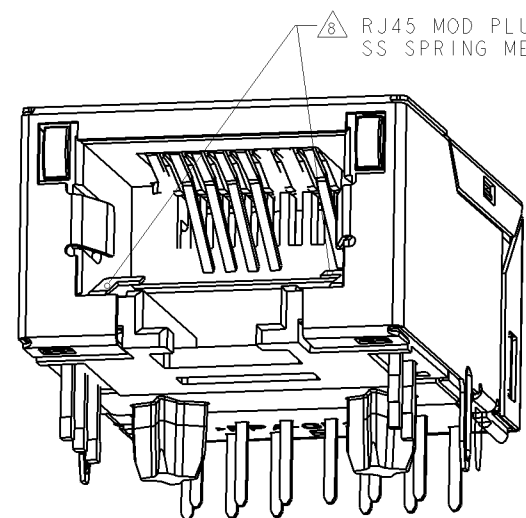


LOC	DIST	REVISIONS			
NO	REV	DESCRIPTION	DATE	BY	APPD
AA	00				
A		PER ECO-07-004766	01MAR2007	TY	TX
B		PER ECO-07-017033	23JUL2007	TY	TX
C		PER ECO-08-010020	11APR2008	RQ	TX
D		PER ECO-08-013010	22OCT2008	TY	TX



- MATERIALS:**
 - HOUSING: HIGH TEMPERATURE NYLON, BLACK, UL 94V-0
 - SHIELD: 0.20±0.02mm THICK, BRASS PREPLATED WITH 0.76µm MIN SEMI-BRIGHT NICKEL; POST-DIPPED WITH 2 µm MIN SAC 305 ALLOY LEAD FREE SOLDER (TIN PRIMARY, 3% SILVER, 0.5% COPPER)
 - CONTACT TAILS: 0.25mm THICK, PHOSPHOR BRONZE, 1.27 µm MIN OVERALL NICKEL UNDERPLATE, 3 µm MIN TIN PLATE
 - MOD JACK CONTACTS: 0.25mm THICK, PHOSPHOR BRONZE, 1.27 µm MIN OVERALL NICKEL UNDERPLATE, WITH 0.76µm MIN LOCALIZED GOLD PLATE AT PLUG INTERFACE
 - LIGHT EMITTING DIODE (LED): DIFFUSED EPOXY LENS, CARBON STEEL WIREFRAME PREPLATED WITH 2.03µm SILVER PLATE OVER 1.02µm NICKEL OVER 1.02µm COPPER UNDERPLATES; LEADS POST-PLATED WITH 3.05 µm Min TIN.
 - LIGHT PIPE: POLYETHER SULFONE
- RJ45 JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS PART 68, SUB-PART F.**
- MAGNETICS:**
 - APPLICATION: 10/100/1000 BASE-T
 - IMPEDANCE: 100 OHMS ±15%
 - TURNS RATIO (CHIP:CABLE): 1:1 ALL 4 PAIRS
 - OPEN CIRCUIT INDUCTANCE (OCL): 350µH (MIN) @100KHz, 0.1 VRMS
 - 8 mA DC BIAS FROM 0°C TO 70°C, ALL FOUR PAIRS.
 - ALL FOUR PAIRS BI-DIRECTIONAL
 - PERFORMANCE @25°C:

FREQUENCY	INSERTION LOSS (dB MAX)	RETURN LOSS (dB MIN) CIRCUIT IMPEDANCE = 100 OHMS ±15%	COMMON MODE REJECTION RATIO (dB MIN)	CROSSTALK ATTENUATION (dB MIN)
0.5 MHz-40.0 MHz	1.1	18.0	30	35
40.1 MHz-100.0 MHz		12-20 log(f/80) f IS FREQUENCY IN MHz		33-20 log(f/50) f IS FREQUENCY IN MHz

- ISOLATION VOLTAGE: COMPLIES WITH IEEE802.3.2002, PARA 40.6.1.1, ITEM a AND b
 - OPERATING TEMPERATURE: FROM 0°C TO 70°C

LED IS DRIVEN WITH CONSTANT CURRENT AT APPROX 20mA.
 LED COLOR: DOMINANT WAVELENGTH (λD): GREEN 568 nm TYP. at IF=20mA
 FORWARD VOLTAGE (VF): GREEN 2.2V TYP. at IF=20mA
 DOMINANT WAVELENGTH (λD): YELLOW 588 nm TYP. at IF=20mA
 FORWARD VOLTAGE (VF): YELLOW 2.1V TYP. at IF=20mA
 DOMINANT WAVELENGTH (λD): ORANGE 605 nm TYP. at IF=20mA
 FORWARD VOLTAGE (VF): ORANGE 2.1V TYP. at IF=20mA

LED 2 WILL EMULATE "YELLOW" LIGHT WHEN BOTH GREEN AND ORANGE DIODES ARE DRIVEN AT CONSTANT CURRENT (20 mA RECOMMENDED) TO INDICATE THE THIRD COLOR STATE.

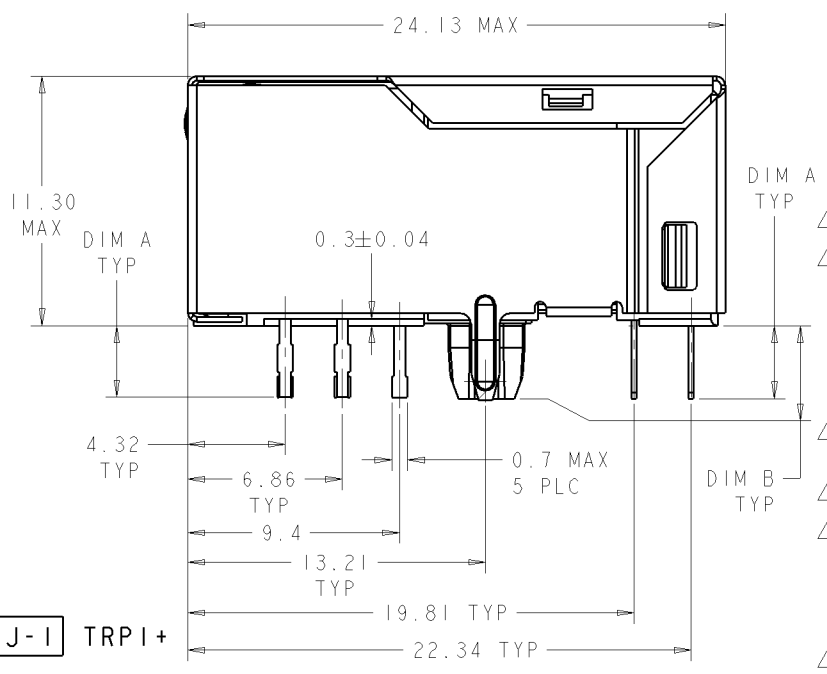
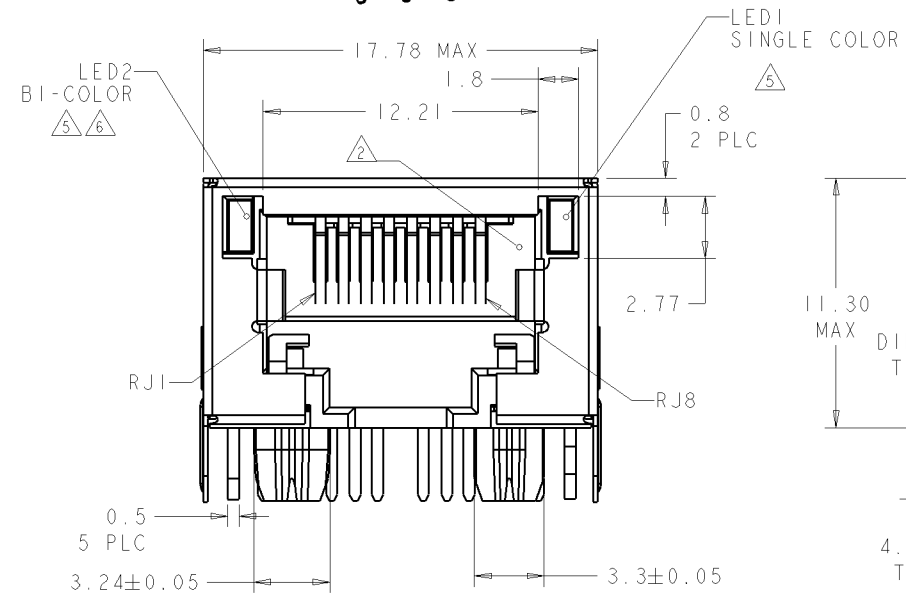
ALL DIMENSIONS ARE NOMINAL UNLESS OTHERWISE NOTED.

RJ45 MOD PLUG SELECTIVE - THIS CONNECTOR UTILIZES STEEL SPRING MEMBER WHICH PREVENTS THE INSERTION OF A RJ11 (6 POSITION) PLUG INTO THE JACK PORT, WHILE ALLOWING A RJ45 (8 POSITION) PLUG TO MATE FREELY.
 WARNING: THIS FEATURE WAS DEVELOPED FOR TYPICAL PLUG INSERTION FORCES. EXCESSIVE INSERTION FORCE MAY OVERCOME THE SELECTIVE FEATURES AND DAMAGE THE CONNECTOR.

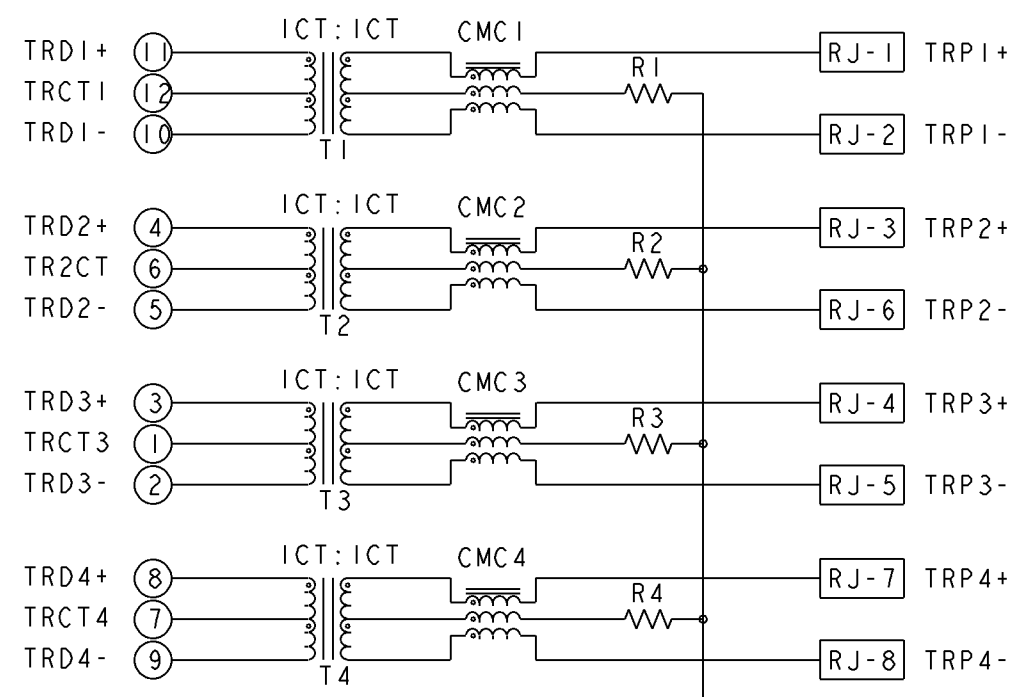
TRADEMARK, PART NUMBER, DATE CODE, COUNTRY OF ORIGIN, AND AGENCY APPROVAL MARKING IN APPROXIMATE LOCATION SHOWN

1368589-1 & 1368589-9 SHOWN UNLESS OTHERWISE NOTED.

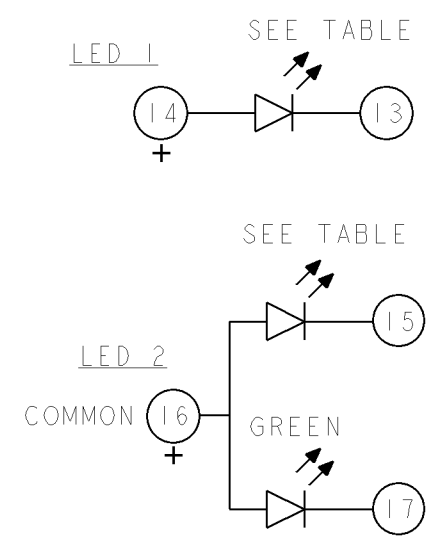
THESE PARTS ARE COMPLIANT WITH BOTH WAVE SOLDERING PROCESS PEAK SOLDERING TEMPERATURE 260°C MAX, 10 SECONDS MAX; AND IR REFLOW SOLDERING PROCESS PEAK SOLDERING TEMPERATURE 260°C MAX DURATION TIME 10 SECONDS MAX, OVER 230°C WITHIN 40- 60 SECONDS.



8G18 GIGABIT CIRCUIT



CI=1000PF, 3KV, ±10%, X7R DECOUPLING CAP
 R1-R4 = 75 OHMS, 1/16W, ±5% RESISTORS

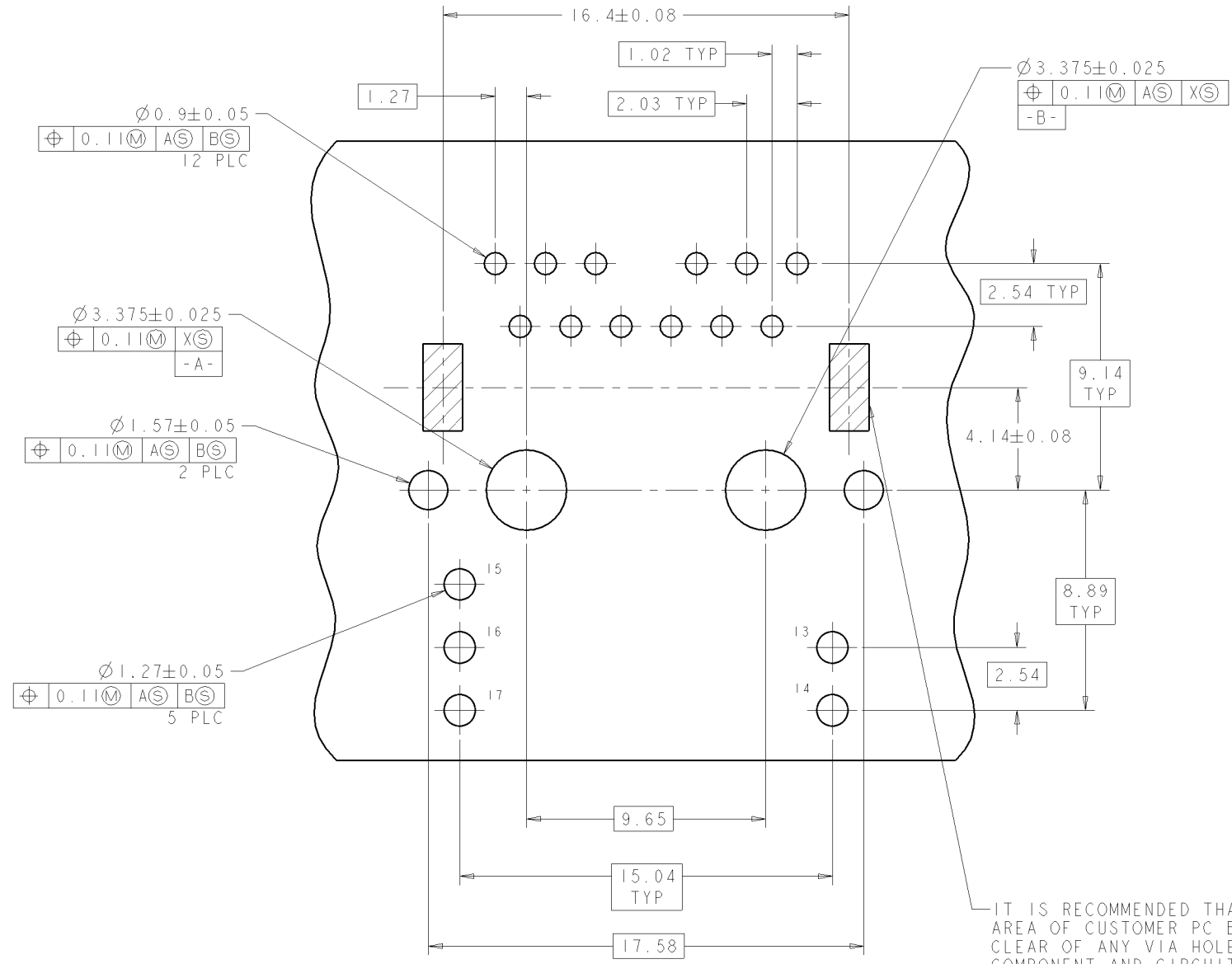


NO	FINISH	LED 1	LED 2	DIM B	DIM A	PART NO.
NO	G /YELLOW	GREEN		3.3	3.18	1368589-9
TOP AND SIDES	G /ORANGE	YELLOW		3.3	3.18	1368589-8
TOP AND SIDES	G /ORANGE	YELLOW		1.8	1.8	1368589-7
TOP ONLY	G /ORANGE	YELLOW		1.8	1.8	1368589-6
TOP AND SIDES	G /ORANGE	GREEN		3.3	3.18	1368589-5
NO	G /ORANGE	GREEN		1.8	1.8	1368589-4
NO	G /ORANGE	GREEN		3.3	3.18	1368589-3
NO	G /ORANGE	YELLOW		1.8	1.8	1368589-2
NO	G /ORANGE	YELLOW		3.3	3.18	1368589-1
GROUND TABS	LED 2	LED 1				

TYCO ELECTRONICS CORPORATION
 TOWER YU 27JUL2005
 CDR TERRY XIONG
 APD TERRY XIONG
 PRODUCT SPEC 108-2207
 APPLICATION SPEC 114-
 WEIGHT
 Tyco Electronics
 Transpower Changping China
 NAME: 1X1 MAG45(TM), MODULAR JACK 8G18 SERIES GIGABIT CIRCUIT SHIELDED, LEDS, TAB DOWN
 SIZE: A1
 CAGE CODE: 00779
 DRAWING NO: 1368589
 RESTRICTED TO: D
 SCALE: 1:1
 SHEET: 1 OF 2
 REV: D

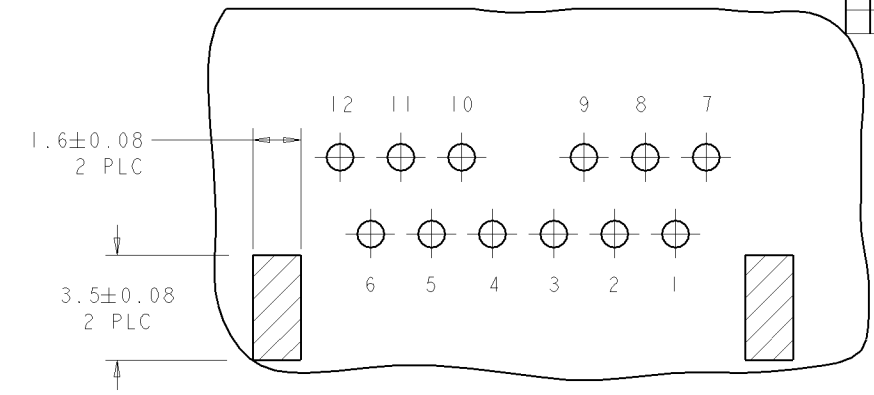
LOC	DIST	REV	DATE	BY	APPD
AA	00				

REVISIONS					
NO.	DATE	DESCRIPTION	BY	APPD	REV
1		SEE SHEET 1			

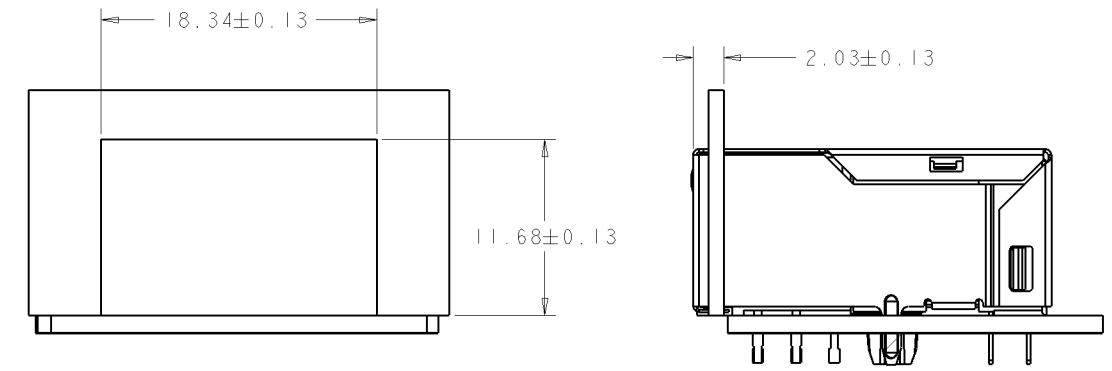


SUGGESTED PCB LAYOUT
(COMPONENT SIDE)

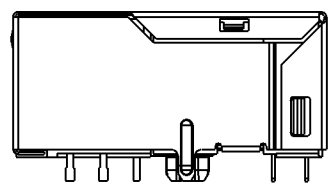
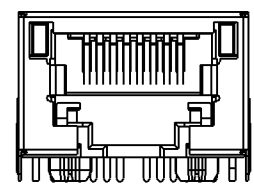
IT IS RECOMMENDED THAT SHADED AREA OF CUSTOMER PC BOARD BE CLEAR OF ANY VIA HOLE, COMPONENT AND CIRCUIT TRACE



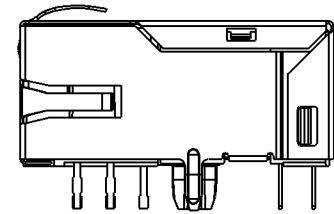
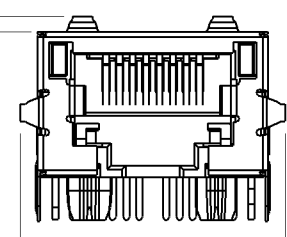
PIN DESIGNATIONS



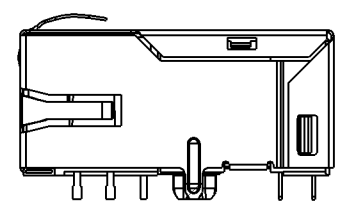
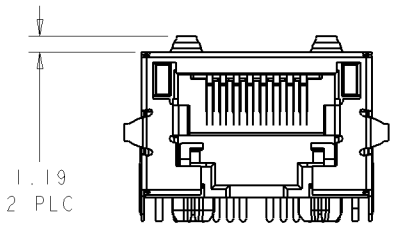
SUGGESTED PANEL OPENING



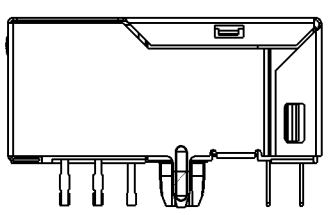
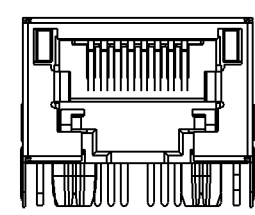
1368589-2
1368589-4



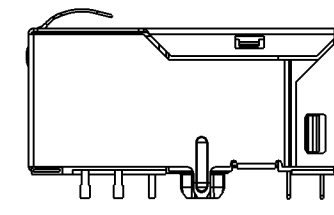
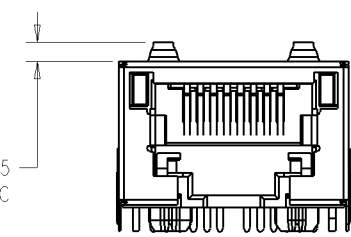
1368589-5
1368589-8



1368589-7



1368589-3



1368589-6

DIMENSIONS:		TOLERANCES UNLESS OTHERWISE SPECIFIED:		OWN: TOWER YU 27JUL2005		Tyco Electronics	
mm		0 PLC	±	0.25	CHK: TEDDY XIONG 27JUL2005	Tyco Electronics Transpower Changping China	
		1 PLC	±	0.25	APFD: TEDDY XIONG 27JUL2005	NAME: 1X1 MAG45(TM), MODULAR JACK	
		2 PLC	±	0.25	PRODUCT SPEC	8G18 SERIES GIGABIT CIRCUIT	
		3 PLC	±		APPLICATION SPEC	SHIELDED, LEDS, TAB DOWN	
		4 PLC	±		WEIGHT	SIZE: CAGE CODE: DRAWING NO: RESTRICTED TO	
		ANGLES	±	114°		A 00779 C=1368589	
MATERIAL:	FINISH:	CUSTOMER DRAWING		SCALE: 7:2	SHEET 2 OF 2	REV D	