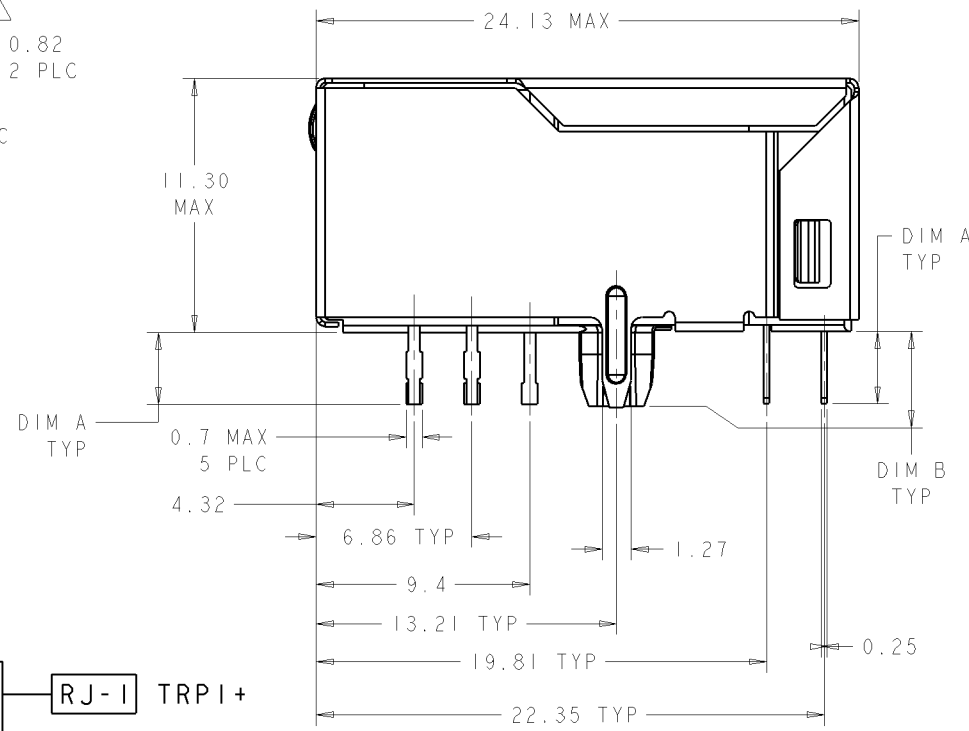
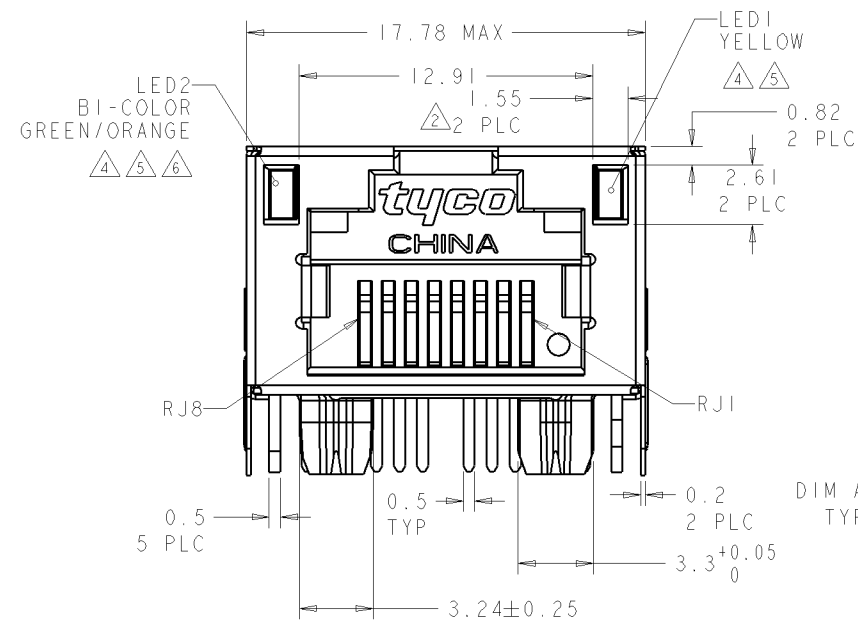
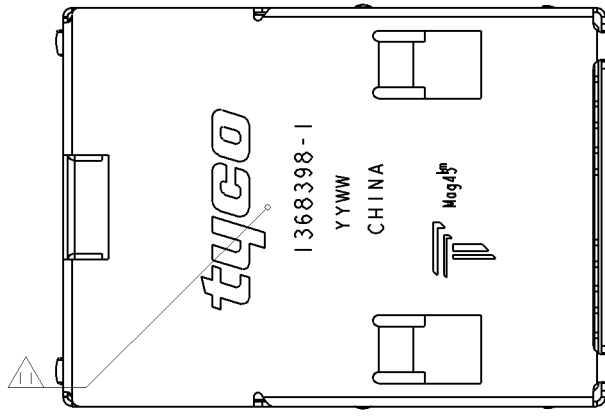
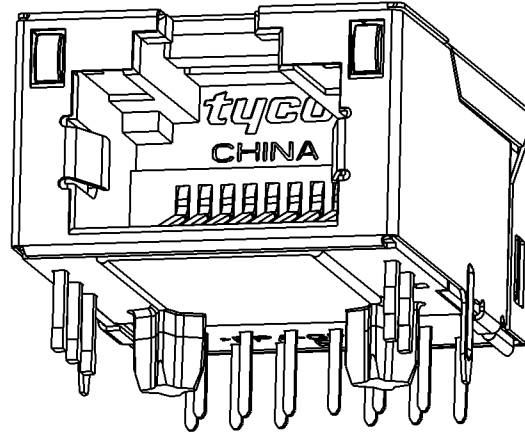
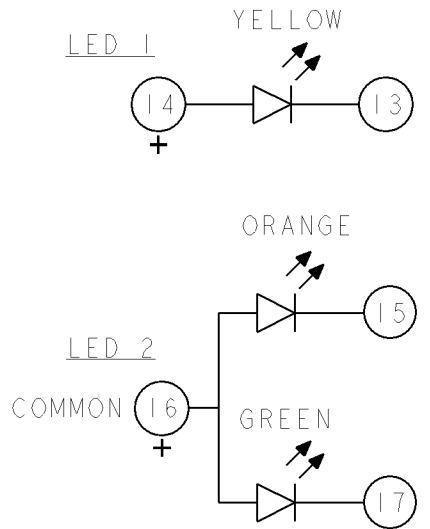
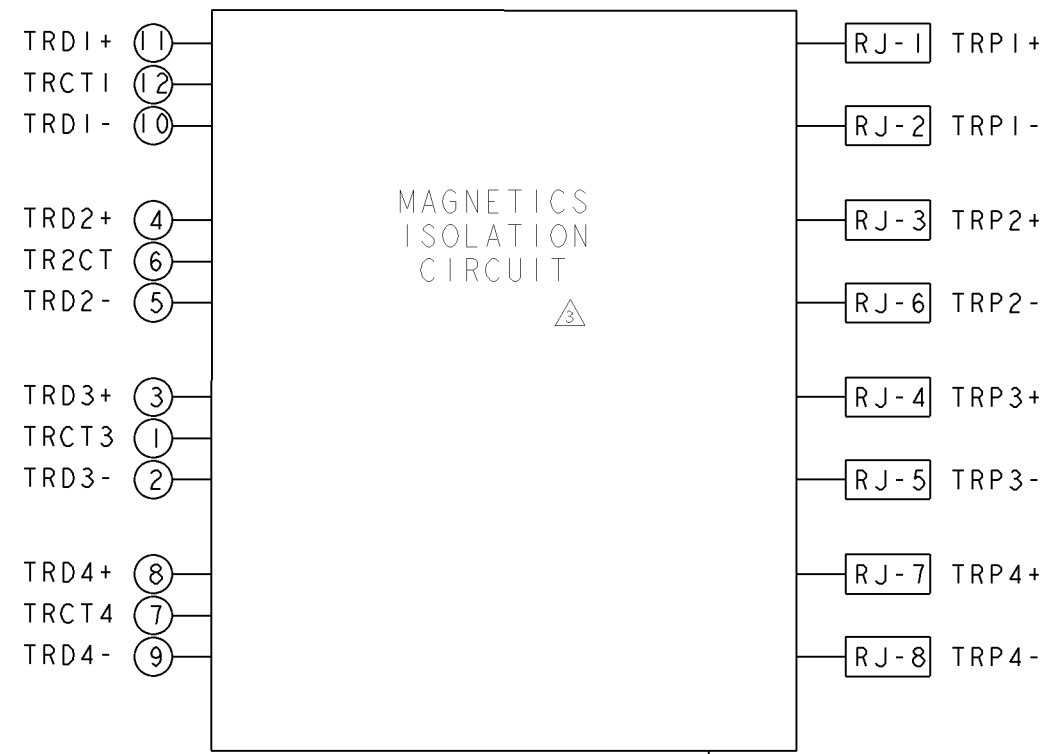


LOC	QTY	REV	DESCRIPTION	DATE	DWN	APPD
GP	00	A	PER ECO-06-003967	11APR2006	TY	TX
		B	PER ECO-06-020736	30AUG2006	TY	TX
		C	PER ECO-07-001075	16JAN2007	TY	TX



IG18 GIGABIT CIRCUIT



- △ MATERIALS:  
 -HOUSING: HIGH TEMPERATURE NYLON, BLACK, UL 94V-0  
 -SHIELD: 0.20mm THICK, BRASS PREPLATED WITH 1.27µm MIN SEMI-BRIGHT NICKEL; POST-DIPPED WITH 2µm 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, 3µm 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, 0.5mm X 0.5mm CARBON STEEL WIREFRAME LEADS PREPLATED WITH 2.03µm MIN. SILVER PLATE OVER 1.02µm MIN. NICKEL OVER 1.02µm MIN. COPPER UNDERPLATE; LEADS POST-PLATED WITH 3.05µm MIN. MATTE TIN.  
 -LIGHT PIPE: POLYCARBONATE

△ RJ45 JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS PART 68, SUB-PART F.

- △ MAGNETICS:  
 -IMPEDANCE: 100 OHMS  
 -TRANSMIT OPEN CIRCUIT INDUCTANCE (OCL): 350µH (MIN) @100KHZ, 0.1 VRMS WITH 8 mA DC BIAS.  
 -TURNS RATIO (CHIP:CABLE): TX 1:1, RX: 1:1  
 PERFORMANCE:  
 -TRANSMIT BIDIRECTIONAL ALL 4 PAIRS  
 -RECEIVE BIDIRECTIONAL ALL 4 PAIRS

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	1.3	18.0	30	35
40.0 MHz-100.0 MHz		12-20 log(f/80) f IS FREQUENCY IN MHZ		33-20 log(f/50) f IS FREQUENCY IN MHZ

ALL MAGNETIC ELECTRICAL CHARACTERISTICS RATED @ 25°C  
 \* CROSSTALK SPECIFICATION IS PRELIMINARY.

DIELECTRIC (ISOLATION VOLTAGE):  
 -2250 VDC (1 mA CUTOFF CURRENT) FOR 60 SECONDS DURATION BETWEEN CABLE CONTACTS AND PCB CONTACTS (INCLUDING SHIELD).  
 -1500 VRMS (10 mA CUTOFF CURRENT) FOR 60 SECONDS DURATION BETWEEN CABLE CONTACTS AND PCB CONTACTS (INCLUDING SHIELD).  
 -ALL BRIDGED ON EITHER SIDE OF MAGNETICS PACKAGE FOR RJ-45 CONTACTS.  
 OPERATING TEMPERATURE: FROM 0° TO +70°C.

△ LED COMPLIANT WITH IEC60825-1 SAFETY OF LASER PRODUCTS. WHEN OPERATED UP TO 20mA.

△ LED PEAK WAVELENGTH: GREEN = 565±5nm  
 YELLOW = 591±5nm  
 ORANGE = 607±5nm

△ 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 STATES.

△ ALL DIMENSIONS NOMINAL UNLESS OTHERWISE NOTED.

8. 1368398-1 SHOWN UNLESS OTHERWISE NOTED.

△ RJ45 MOD PLUG SELECTIVE - THIS CONNECTOR UTILIZES STAINLESS 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.

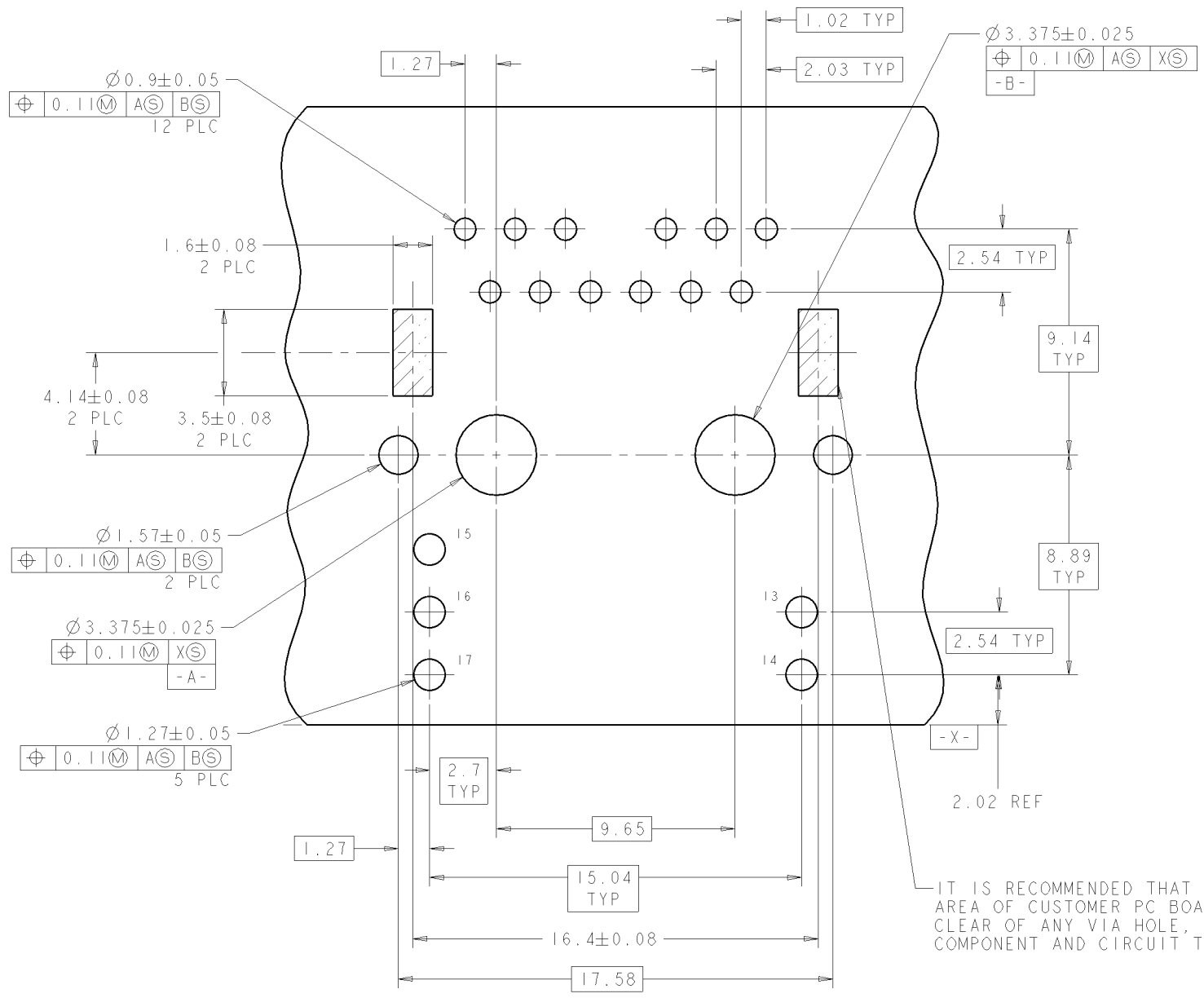
△ APPLIES ONLY TO 1368398-3 AND 1368398-4.

△ TYCO & TRANSPOWER LOGO, PART NUMBER, DATE CODE, PLACE OF ORIGIN, AGENCY LOGO TO BE MARKED IN APPROXIMATE LOCATION AS SHOWN.

YES	NO	1.8	1.8	1368398-5
YES	TOP AND SIDES	3.3	3.18	1368398-4
YES	TOP AND SIDES	1.8	1.8	1368398-3
YES	TOP ONLY	1.8	1.8	1368398-2
NO	NO	3.3	3.18	1368398-1
RJ11 SELECTIVE CAPABILITY	GROUND TABS	DIM B	DIM A	PART NO.

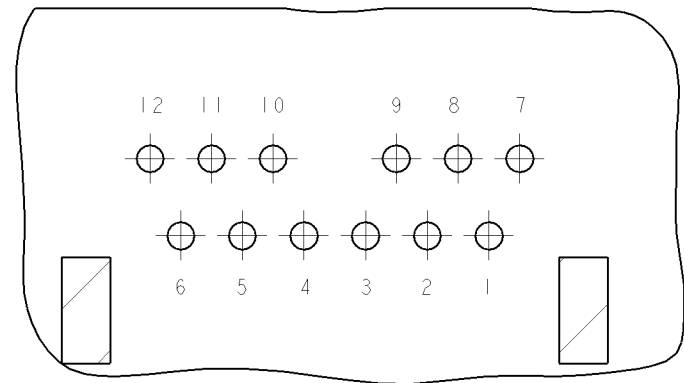
DIMENSIONS: mm 		TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ± 1 PLC ±0.25 2 PLC ±0.25 3 PLC ± 4 PLC ± ANGLES ±		DWN: ERIC BRIANT 15MAY2003 CWR: N REESER 9FEB2004 APVD: N REESER 9FEB2004 PRODUCT SPEC: 108-2207 APPLICATION SPEC: 114- WEIGHT: - CUSTOMER DRAWING: NTS		Tyco Electronics Harrisburg, PA 17105-3608 NAME: 1X1 MAG45(TM), MODULAR JACK, IG18 SERIES GIGABIT CIRCUIT, SHIELDED, LEDS, SELECTIVE CAPABILITY SIZE: A   00779   C=1368398 SHEET 1 OF 2 REV C	
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LOC	DIST	REVISIONS			
GP	00	REV	DATE	BY	APPD
		1			
		2			

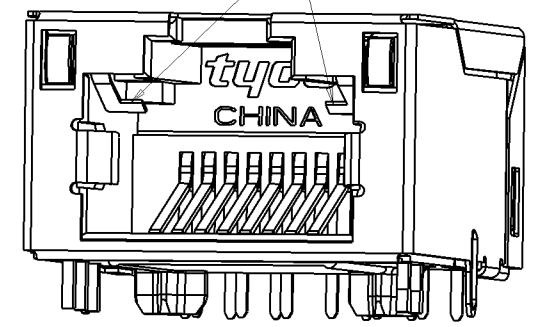


SUGGESTED PCB LAYOUT  
(COMPONENT SIDE)

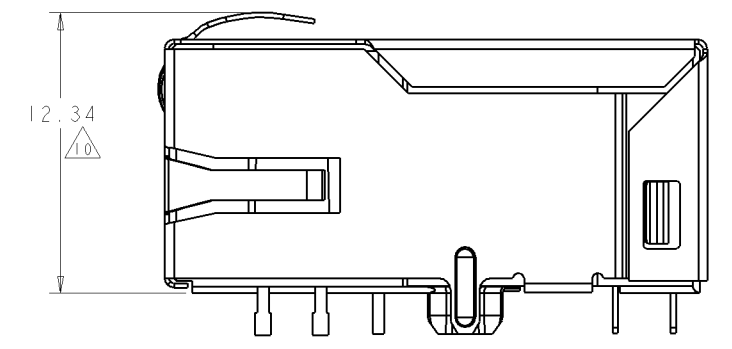
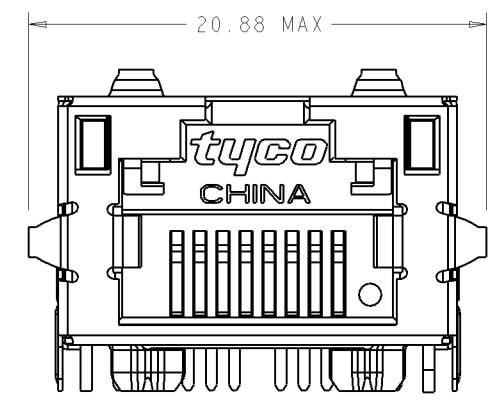
IT IS RECOMMENDED THAT SHADED AREA OF CUSTOMER PC BOARD BE CLEAR OF ANY VIA HOLE, COMPONENT AND CIRCUIT TRACE



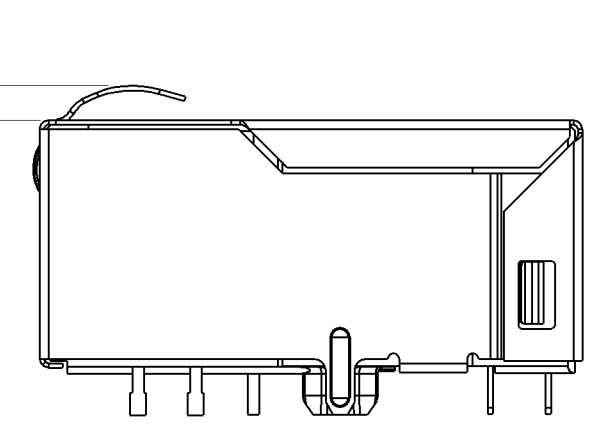
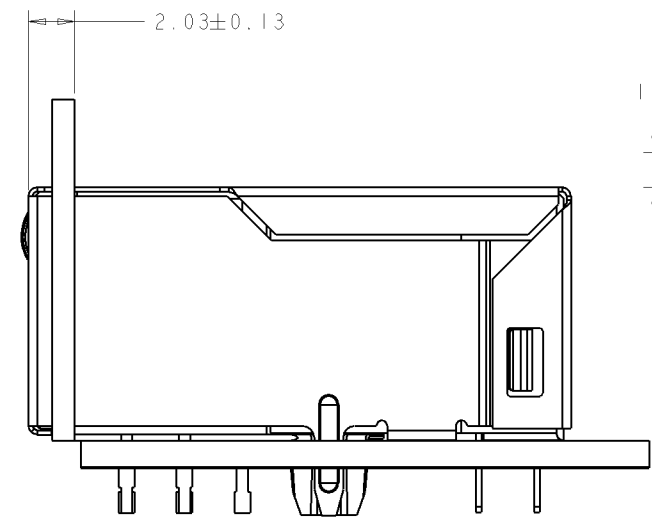
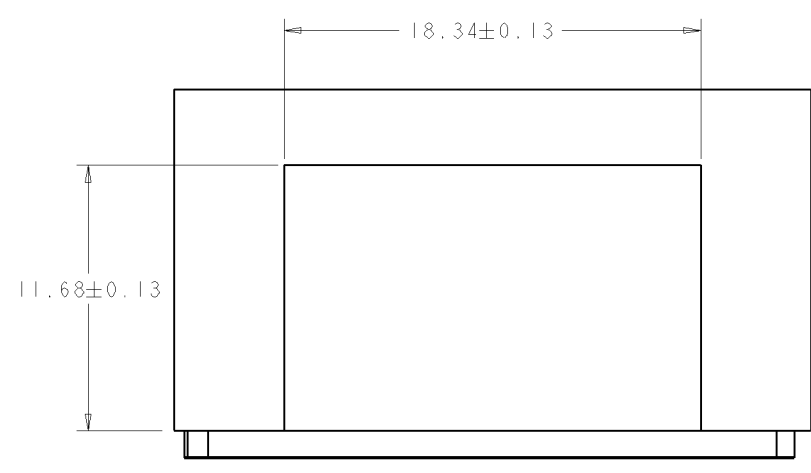
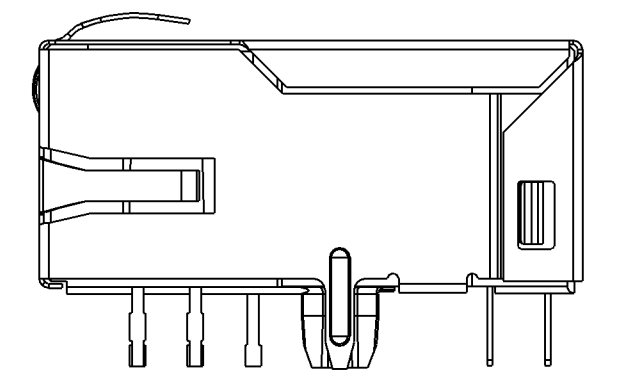
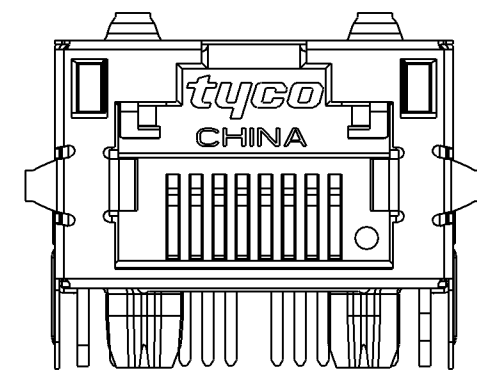
RJ45 MOD PLUG SELECTIVE SS SPRING MEMBER



1368398-5



1368398-3



1368398-2

1368398-4

DIMENSIONS:		TOLERANCES UNLESS OTHERWISE SPECIFIED:		DWN		tyco	
mm				ERIC BRIANT	15MAY2003	Eric	Tyco Electronics
	0 PLC	±		N REESER	9FEB2004	Electronics	Harrisburg, PA 17105-3608
	1 PLC	±0.25		APVD			
	2 PLC	±0.25		N REESER	9FEB2004		
	3 PLC	±		PRODUCT SPEC			
	4 PLC	±		APPLICATION SPEC			
	ANGLES	±					
MATERIAL				WEIGHT		SIZE	CAGE CODE
						A	00779
				CUSTOMER DRAWING		DRAWING NO	C=1368398
						RESTRICTED TO	
						SCALE	NTS
						SHEET	2 OF 2
						REV	C