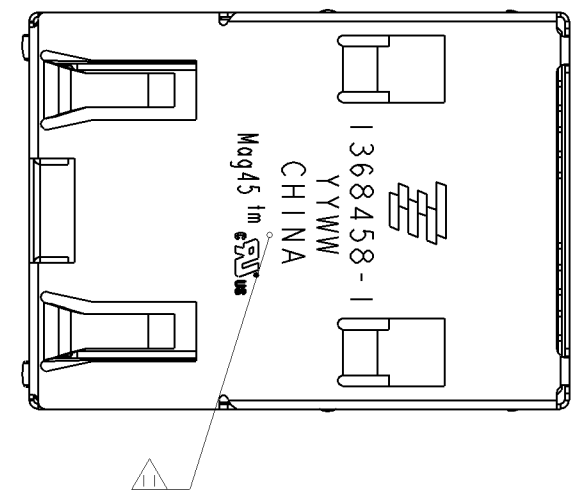
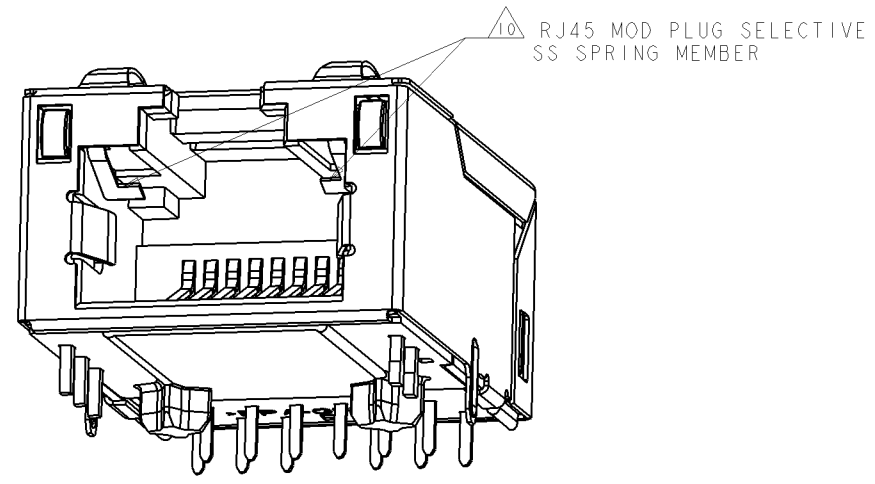


LOC	DIST	REV	DESCRIPTION	DATE	OWN	APVD
GP	00	D	PER ECO-08-013009	17JUN2008	TY	TX



- 1 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

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

- 3 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:

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-30 MHz	1.3	18	33	43
30.1 MHz-60 MHz		18-20 log(f/30) f IS FREQUENCY IN MHZ		
60.1 MHz-80 MHz		12		38

ALL MAGNETIC ELECTRICAL CHARACTERISTICS RATED @ 25°C

DIELECTRIC (ISOLATION VOLTAGE):
 -2250 VDC (1 mA CUTOFF CURRENT) FOR 60 SECONDS DURATION BETWEEN CABLE CONTACTS AND PCB CONTACTS (INCLUDING SHIELD).
 -1500 VRMS (10mA 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.

4 THE MAGNETICS ARE ASYMMETRICAL, AND THEREFORE ARE NOT AUTO-MDI/MDIX CAPABLE.

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

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

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

8 ALL DIMENSIONS NOMINAL UNLESS OTHERWISE NOTED.

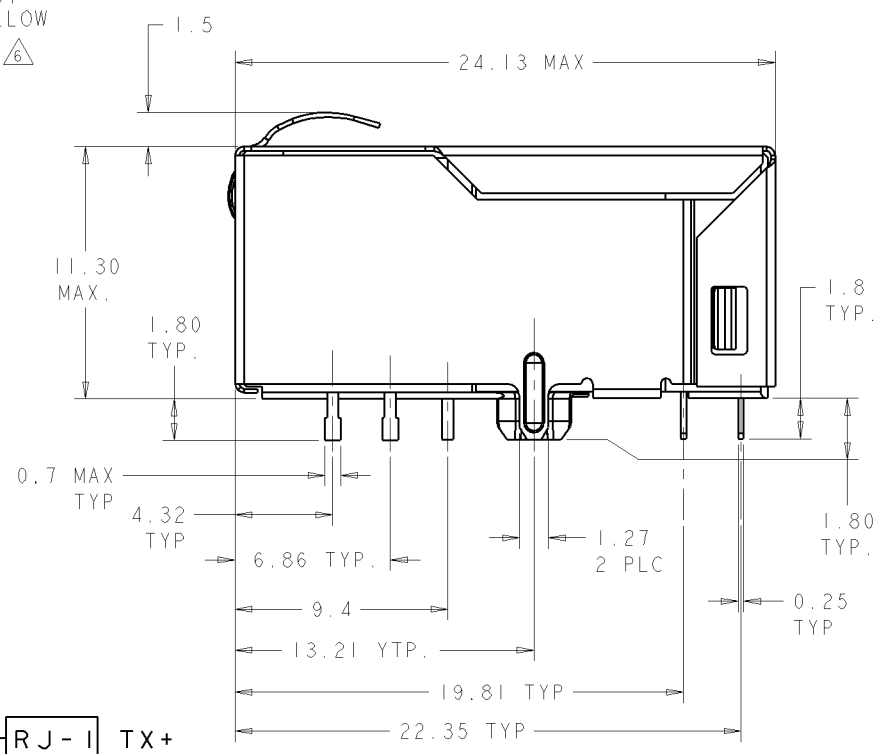
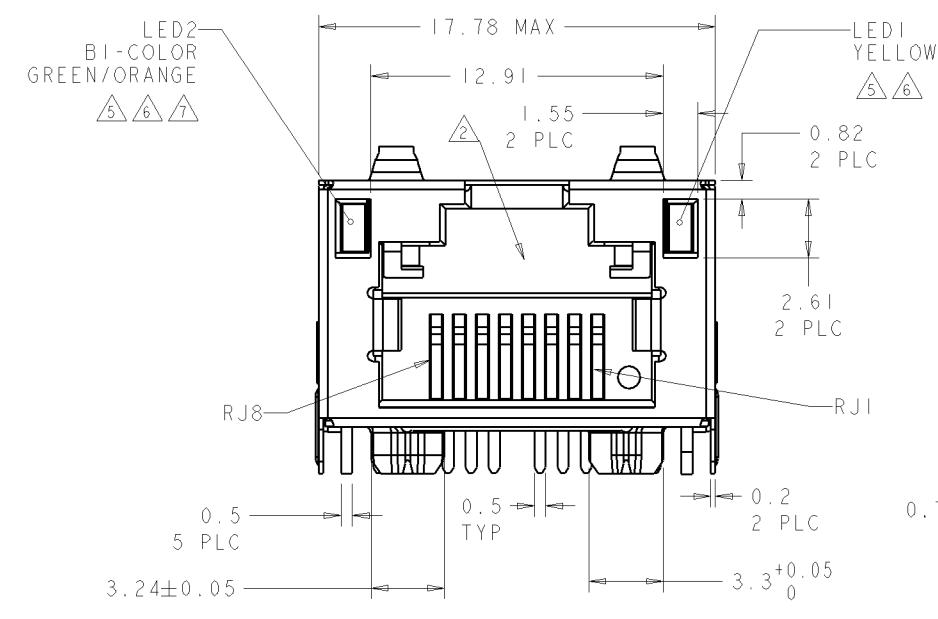
9. 1368458-1 SHOWN UNLESS OTHERWISE NOTED.

10 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.

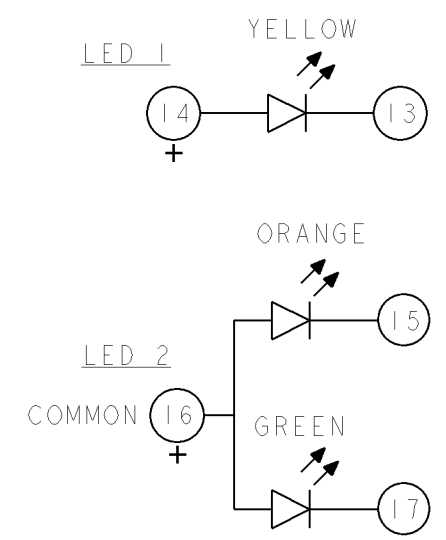
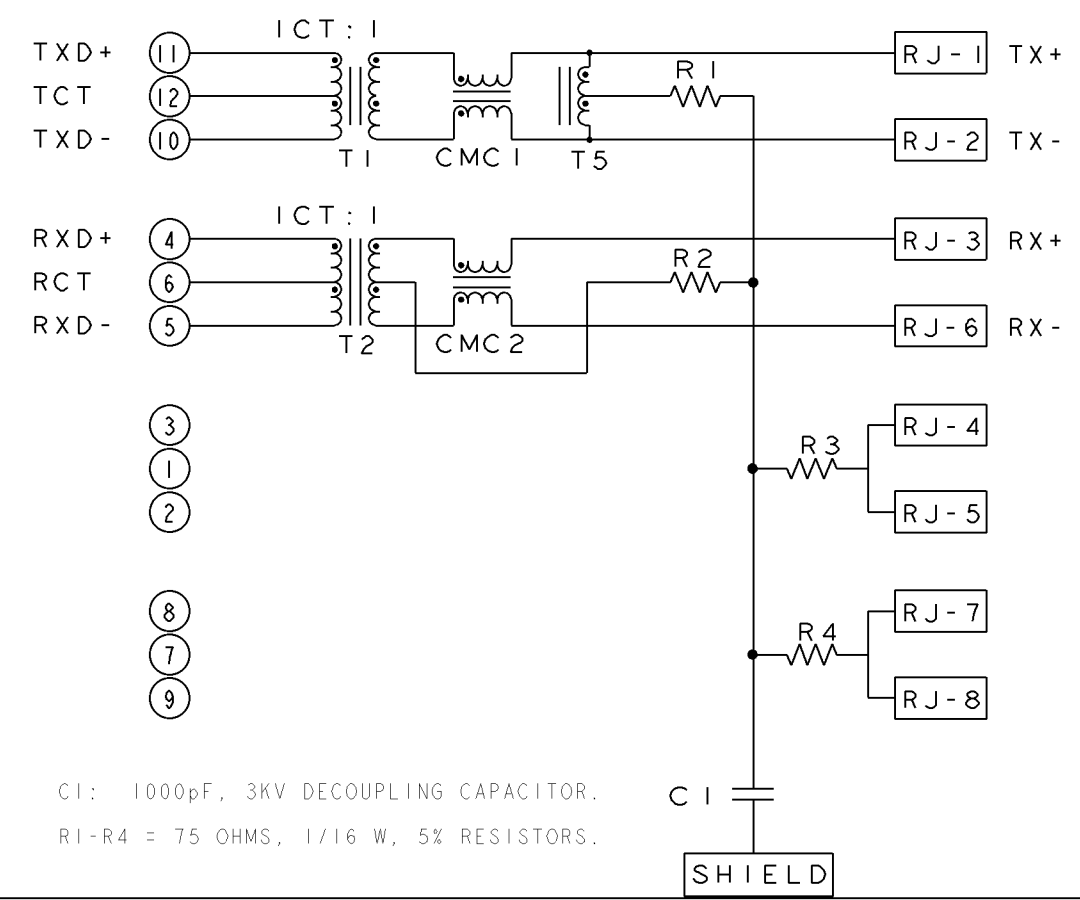
WARNING: THIS FEATURE WAS DEVELOPED FOR TYPICAL PLUG INSERTION FORCES. EXCESSIVE INSERTION FORCE MAY OVERCOME THE SELECTIVE FEATURES AND DAMAGE THE CONNECTOR.

11 TYCO ELECTRONICS LOGO, PART NUMBER, DATE CODE, PLACE OF ORIGIN TO BE MARKED IN APPROXIMATE LOCATION AS SHOWN.

12 APPLIES ONLY TO 1368458-2.



114 10/100 BASE-T CIRCUIT

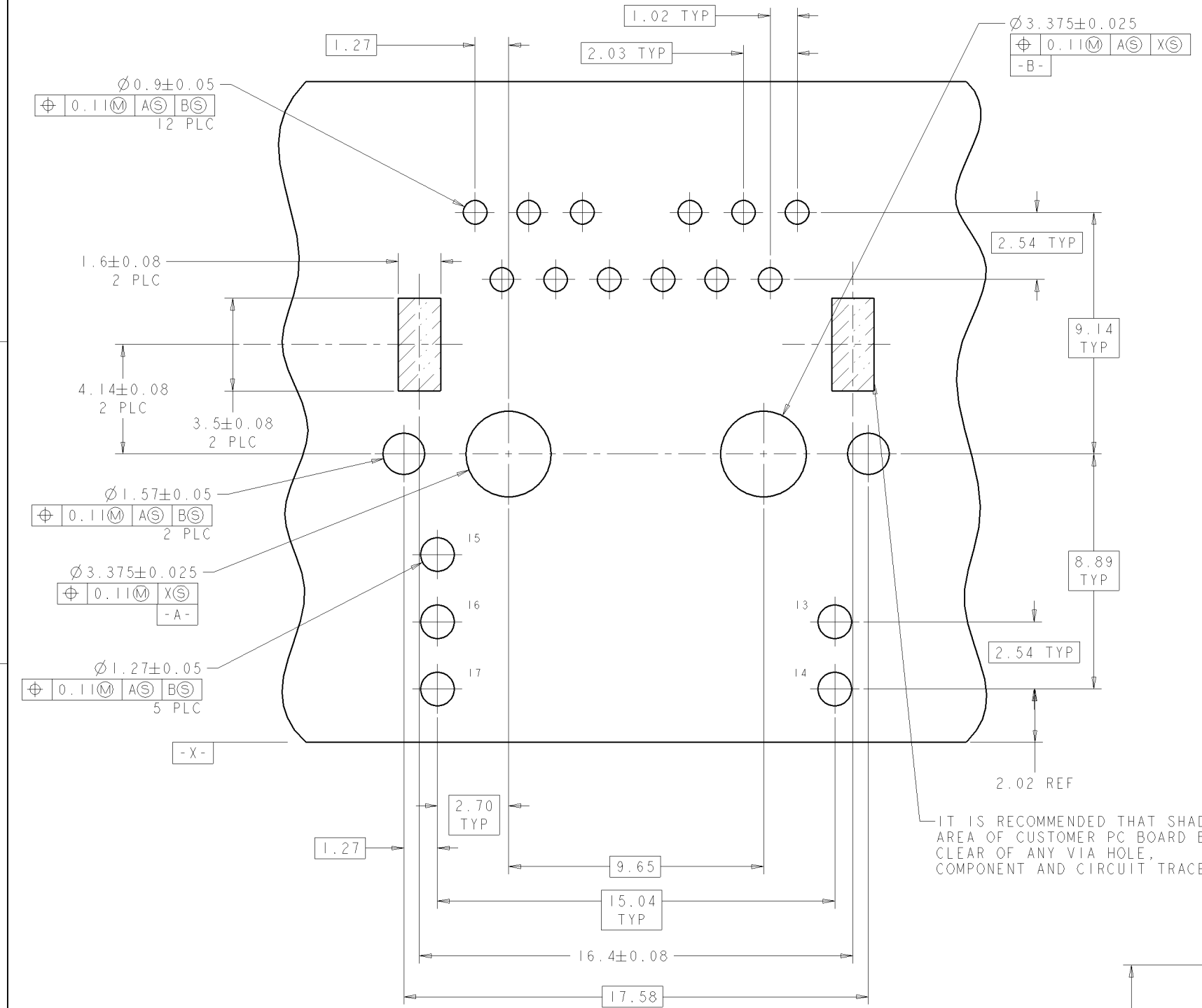


C1: 1000pF, 3KV DECOUPLING CAPACITOR.
 R1-R4 = 75 OHMS, 1/16 W, 5% RESISTORS.

TOP AND SIDES	1368458-2
TOP ONLY	1368458-1
GROUND TABS	PART NO.

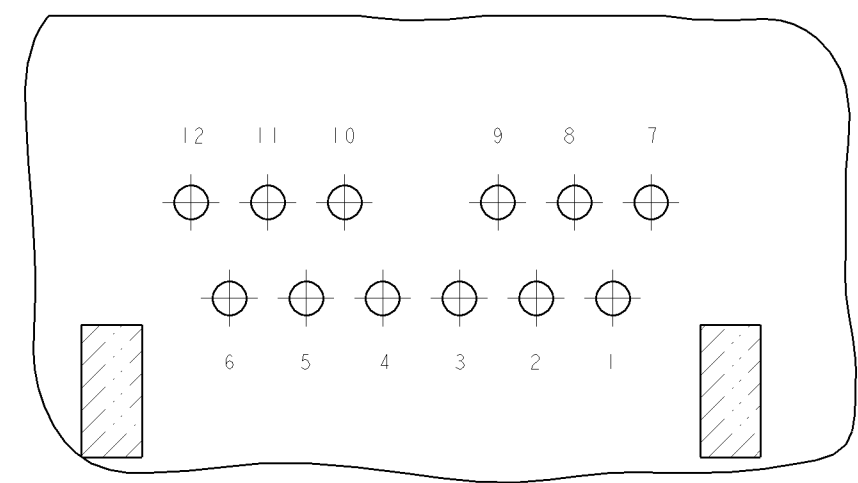
TYCO ELECTRONICS CORPORATION		DWM VILC SLACK 16SEP2003		tyco Tyco Electronics	
HARRISBURG, PA 17105-3608		CWM RANDY SIMMONS 16SEP2003		Harrisburg, PA 17105-3608	
APVD J REESER 6FEB2004		NAME		1X1 MAG45(TM), MODULAR JACK, 114 SERIES 10/100 CIRCUIT SHIELDED, LEDS, SELECTIVE CAPABILITY	
PRODUCT SPEC		APPLICATION SPEC		SIZE CASE CODE DRAWING NO RESTRICTED TO	
114-		A1 00779 C-1368458		SCALE NTS SHEET 1 OF 2 REV D	
MATERIAL		WEIGHT		CUSTOMER DRAWING	

LOC	DIST	REV	DESCRIPTION	DATE	OWN	APPD
GP	00		SEE SHEET 1			

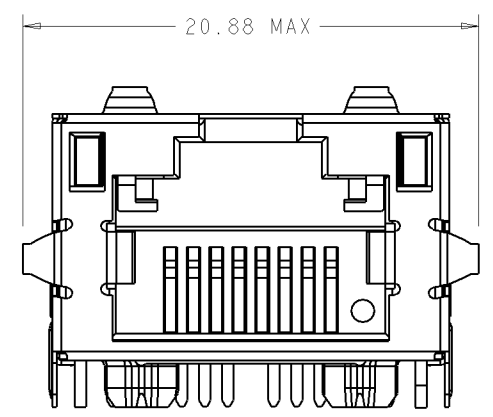


SUGGESTED PCB LAYOUT
(COMPONENT SIDE)

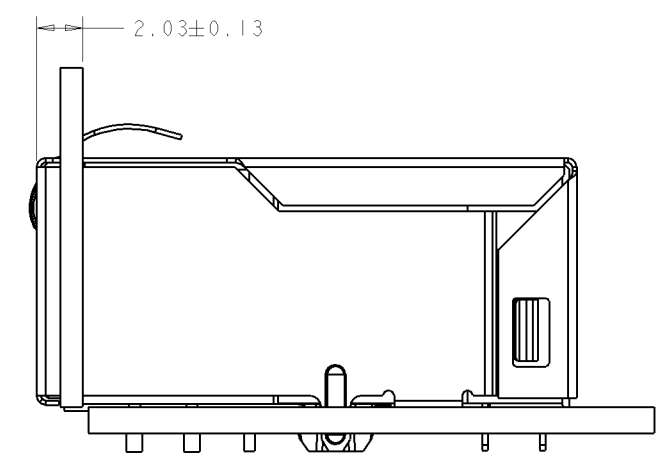
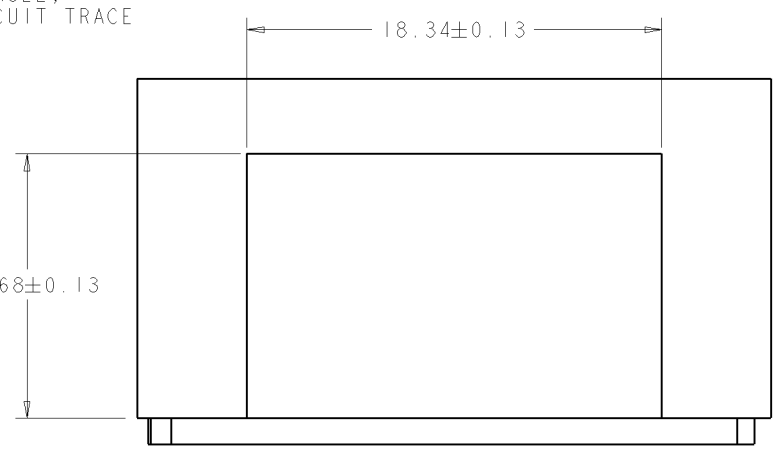
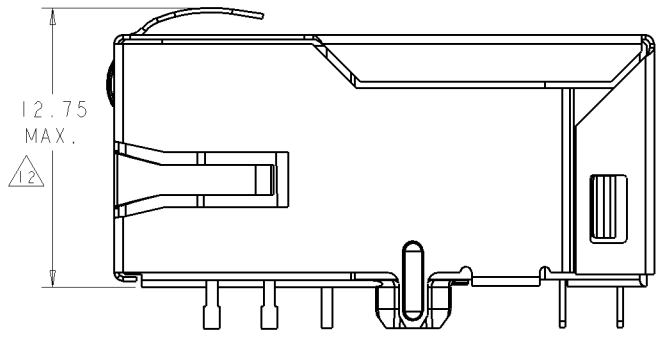
IT IS RECOMMENDED THAT SHADED AREA OF CUSTOMER PC BOARD BE CLEAR OF ANY VIA HOLE, COMPONENT AND CIRCUIT TRACE



PIN DESIGNATIONS



1368458-2



SUGGESTED PANEL OPENING

DIMENSIONS: mm TOLERANCES UNLESS OTHERWISE SPECIFIED: Ø PLC ±.25 PLC ±.25 A PLC ±. ANGLES ±. FINISH -		DWG VJC SLACK 16SEP2003 CHK RANDY SIMMONS 16SEP2003 APVD J. REESER 6FEB2004 PRODUCT SPEC - APPLICATION SPEC - WEIGHT - CUSTOMER DRAWING	tyco Tyco Electronics Harrisburg, PA 17105-3608 NAME IX1 MAG45(TM), MODULAR JACK, I14 SERIES 10/100 CIRCUIT SHIELDED, LEDS, SELECTIVE CAPABILITY SIZE CASE CODE DRAWING NO. A1 00779 C-1368458 RESTRICTED TO: - SCALE NTS SHEET 2 OF 2 REV D
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