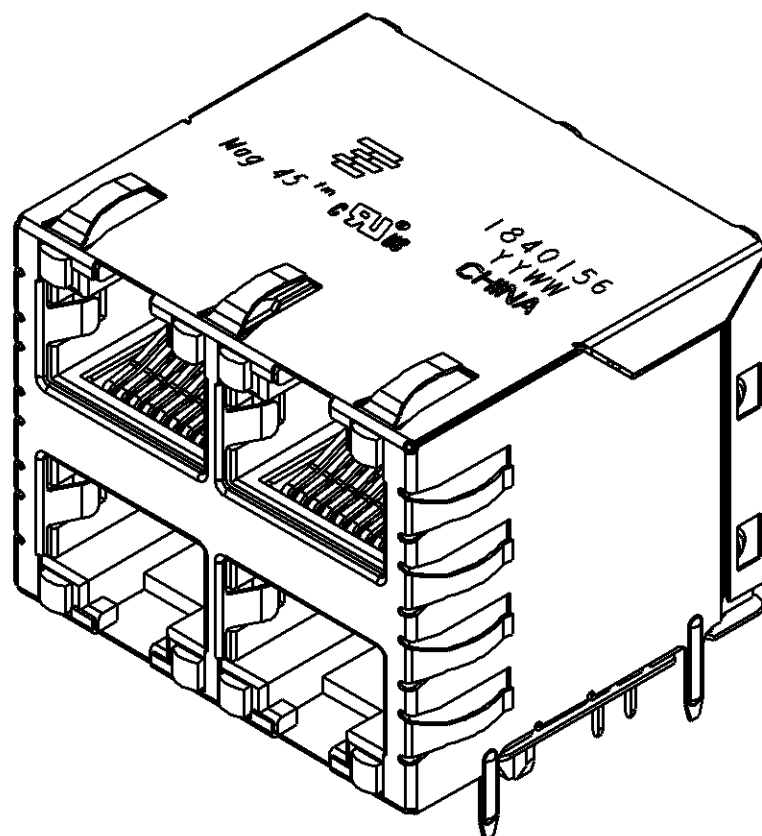
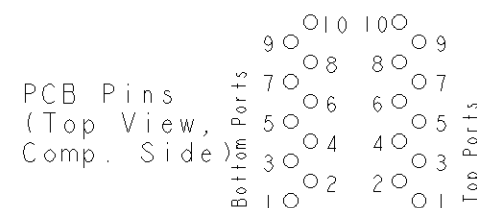




Pin Designations

(Repeat for each vertical pair of ports.)

RJ Cable
Contacts

Top Ports

RJ-45

RJ-45

Bottom Ports

RJ-45

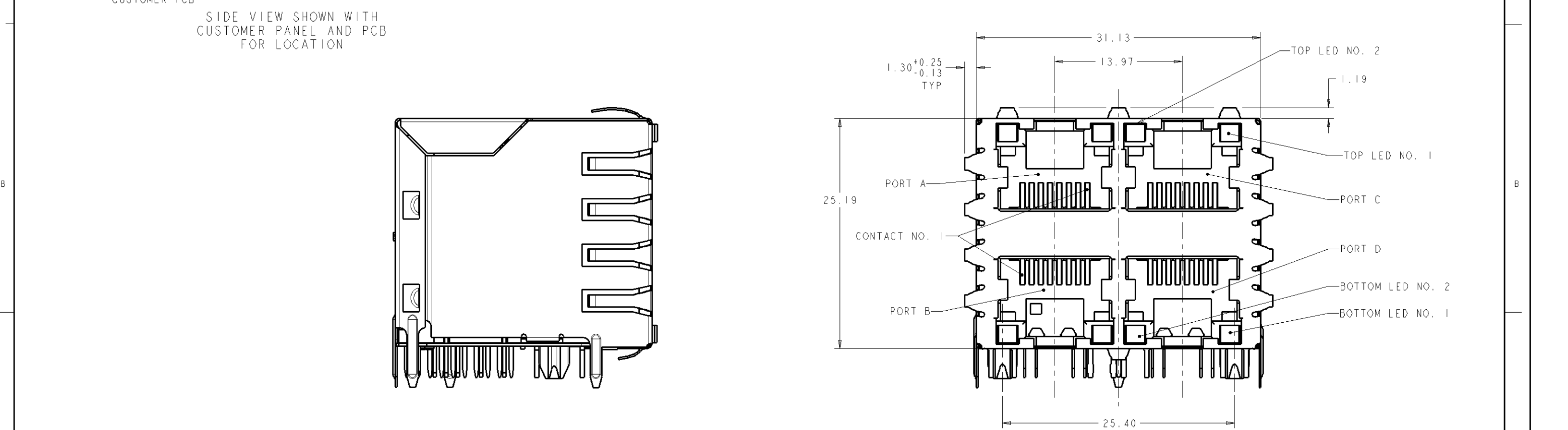
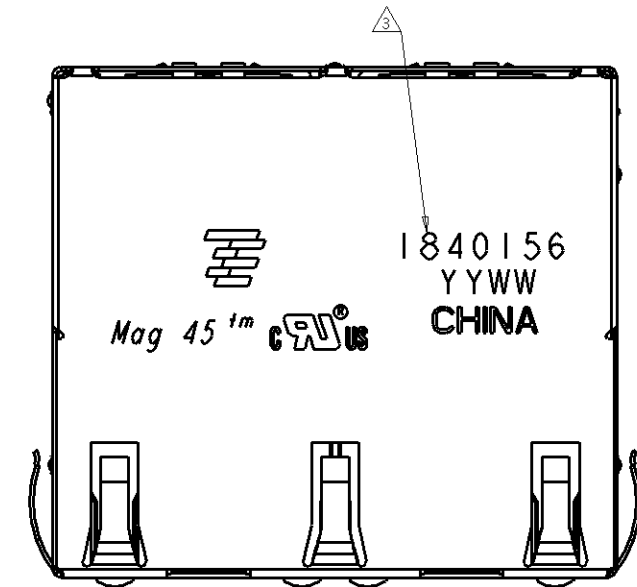
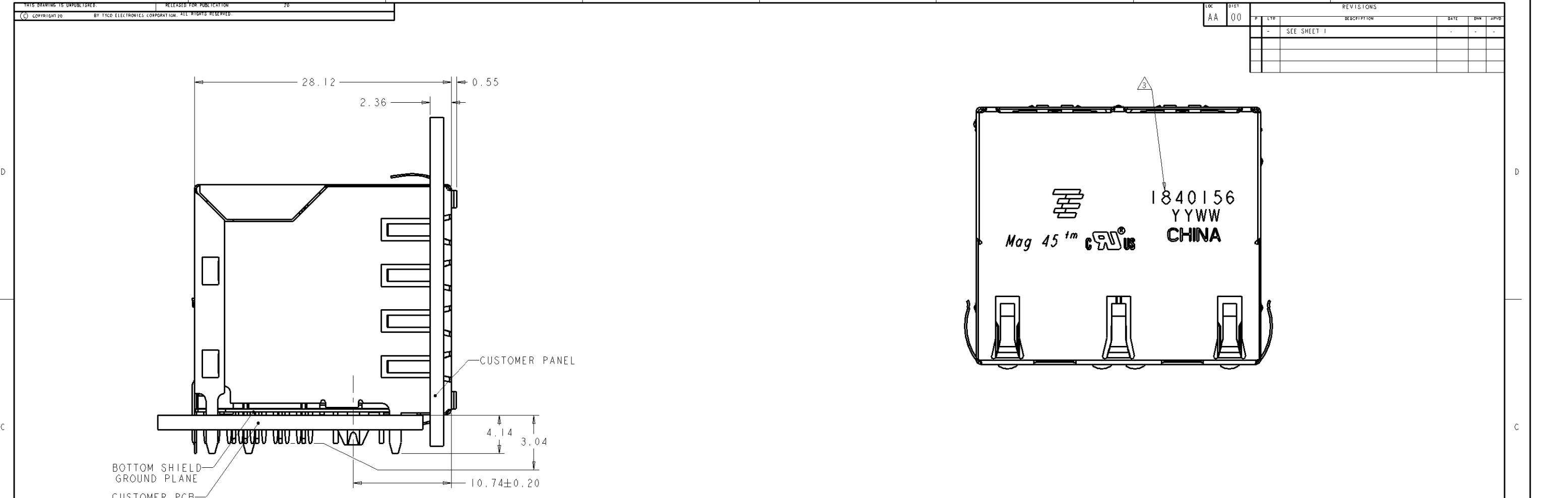
RJ-45

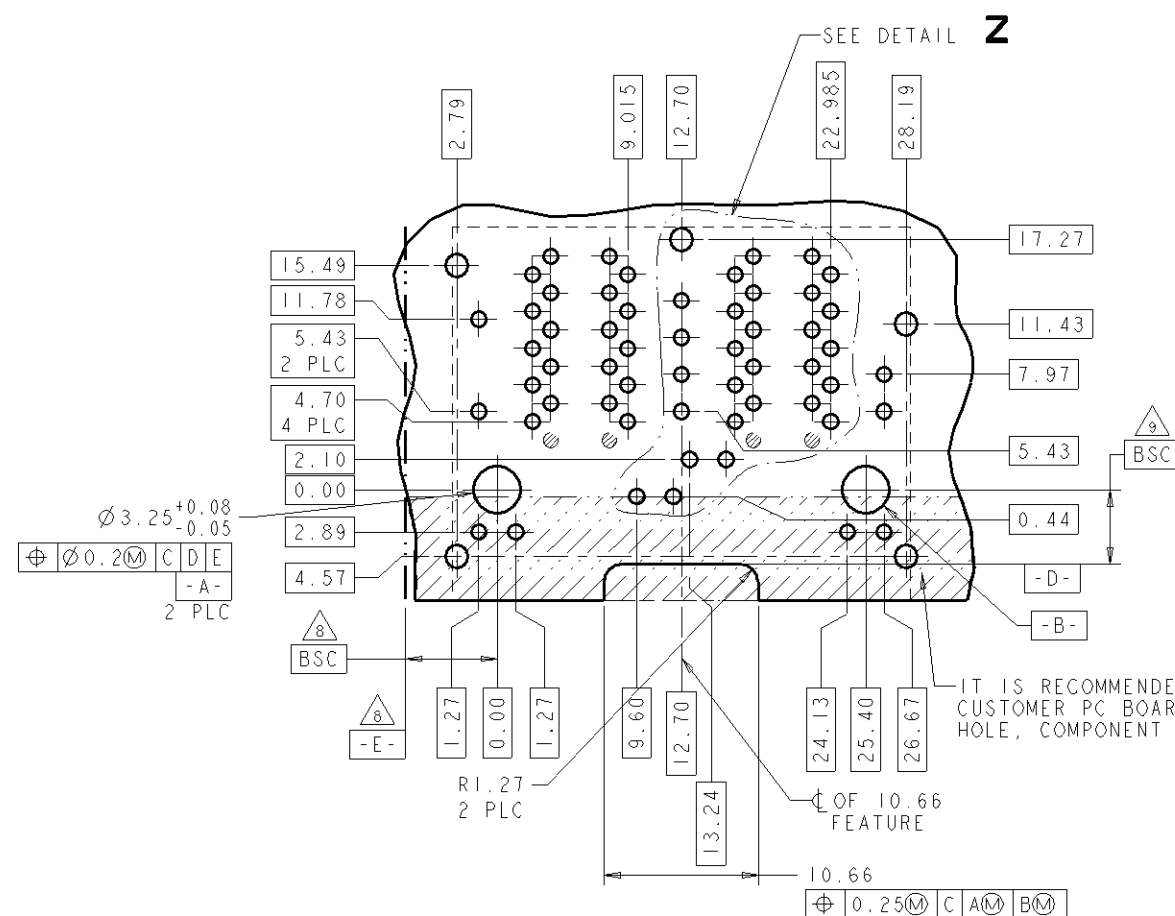
C1 = 1000 pF, 2kV X7R DECOUPLING CAPACITOR
C2 - C3 = 50V, 470pF $\pm 10\%$, X7R CAPACITORS
R1 - R4 = 75 Ohms, 1/16 W. $\pm 5\%$ Resistors

1. MATERIALS:
PLASTIC HOUSING: BLACK, THERMOPLASTIC
FLAMMABILITY RATING UL 94V-0
SHIELD: BRASS, PREPLATED WITH 0.76um MIN SEMI-BRIGHT NICKEL,
POST DIPPED WITH 2.54um MIN SAC SOLDER ON SOLDER TAILS,
CONTACTS: PHOSPHOR BRONZE, 1.27um MIN OVERALL NICKEL
UNDERPLATE WITH SELECT 1.27um MIN GOLD AT MATING INTERFACE
AND 2.54um MIN MATTE TIN ON SOLDER TAILS.
LED: DIFFUSED EPOXY LENS, CARBON STEEL LEAD FRAME TAILS OF LED
ARE PREPLATED WITH 2.03um MIN SILVER OVER 1.02um MIN NICKEL
UNDERPLATE OVER 1.02um MIN COPPER UNDERPLATE. POST-PLATED WITH
2.54um MIN MATTE TIN AND/OR SAC SOLDER DIP OR PURE TIN SOLDER DIP
- △ MAGNETICS
APPLICATION: 10/100/1000 BASE-T
IMPEDANCE: 100 OHMS
TURNS RATIO (CHIP: CABLE): 1:1 ALL FOUR PAIRS
OPEN CIRCUIT INDUCTANCE (OCL): 350uH MIN @100kHz, 0.1VRMS,
8mADC BIAS FROM 0°C TO 70°C, ALL FOUR PAIRS
ALL FOUR PAIRS BI-DIRECTIONAL
PERFORMANCE @ 25°C:
INSERTION LOSS (IL): 1.1dB MAX FROM 0.5MHz TO 100MHz
RETURN LOSS (RL): 18dB MIN FROM 0.5MHz TO 40MHz
12-20LOG(f/80)dB MIN FROM 40.1MHz TO 100MHz
CROSSTALK ATTENUATION: 35dB MIN FROM 0.5MHz TO 40MHz
33-20LOG(f/50)dB MIN FROM 40.1MHz TO 100MHz
COMMON MODE REJECTION RATIO (CMRR): 30dB MIN FROM 0.5MHz TO 100MHz
ISOLATION VOLTAGE: COMPLIES WITH IEEE802.3 2002, PARA 40.6.1.1, ITEM b.
- △ TYCO ELECTRONICS LOGO, PART NUMBER, DATE CODE, COUNTRY OF ORIGIN AND AGENCY
APPROVAL MARKING IN APPROXIMATE LOCATION SHOWN.
4. THESE PARTS ARE RECOMMENDED FOR WAVE SOLDERING PROCESS. PEAK WAVE SOLDERING
TEMPERATURE IS 265°C MAX, 10 SECONDS MAX.
- △ INDICATED MAGNETIC CONNECTIONS ARE SYMMETRIC AND SUPPORT AUTO-MDIX.
6. RJ45 CAVITY CONFORMS TO FCC RULES AND REGULATION PART 68 SUBPART F
7. LEDS ARE DRIVEN WITH CONSTANT CURRENT AT APPROX 20mA
LED COLOR: DOMINANT WAVELENGTH (λD): GREEN 568 nm TYP. @ IF=20mA
FORWARD VOLTAGE (VF): GREEN 2.2V TYP. @ IF=20mA
DOMINANT WAVELENGTH (λD): YELLOW 588 nm TYP. @ IF=20mA
FORWARD VOLTAGE (VF): YELLOW 2.1V TYP. @ IF=20mA
- △ DATUM AND BASIC DIMENSION ESTABLISHED BY CUSTOMER.
- △ BASIC DIMENSION ESTABLISHED BY CUSTOMER, BUT NOT TO BE GREATER THAN 5.08.
10. OPERATING TEMPERATURE: 0°C TO +70°C.

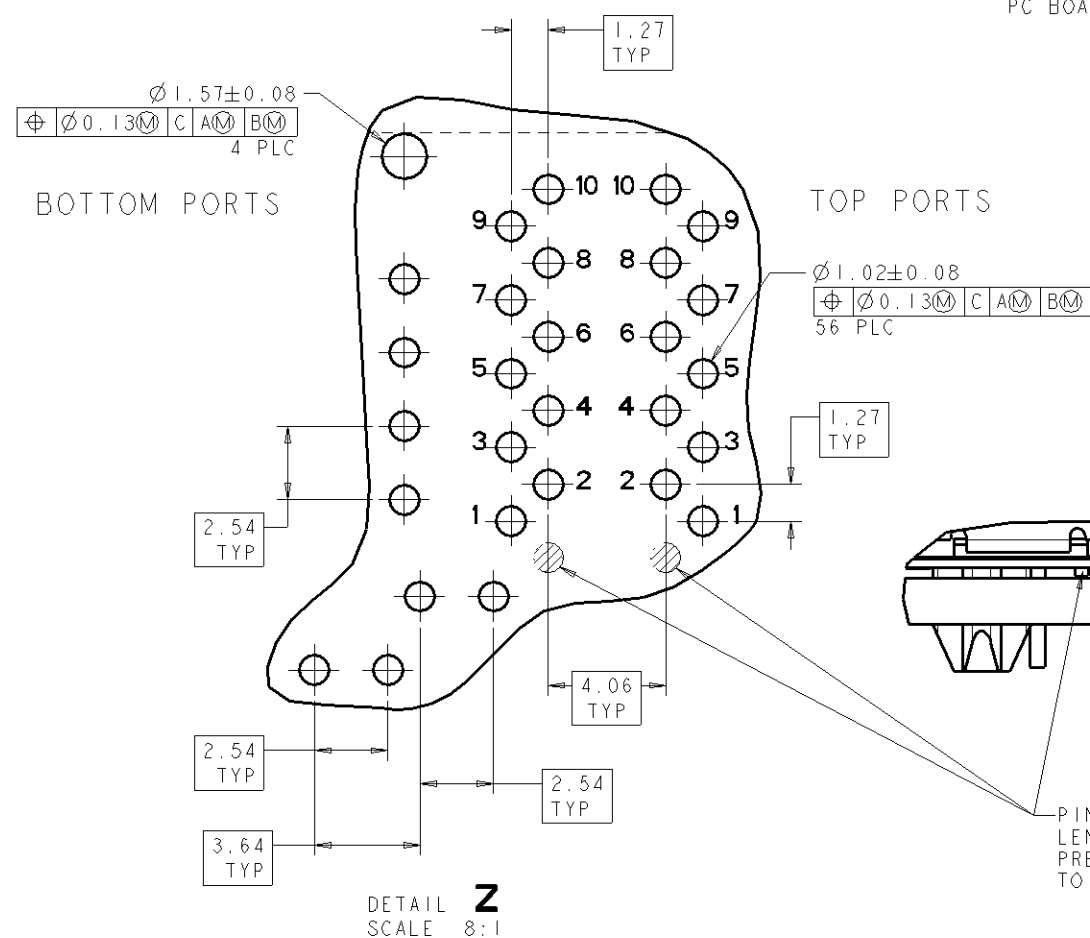
GRN/YEL	GRN/YEL	GRN/YEL	GRN/YEL	1840156-4
GREEN	YELLOW	GREEN	YELLOW	1840156-3
YELLOW	GREEN	GREEN	YELLOW	1840156-2
GREEN	GREEN	GREEN	GREEN	1840156-1
BOTTOM LED NO. 2	BOTTOM LED NO. 1	TOP LED NO. 2	TOP LED NO. 1	PART NUMBER

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DRAWING TITLE: KKE YU		REV: 12JUL2006			
BY: ERIC GE		DATE: 12JUL2006			
CHECKED BY: TERRY XIONG		DATE: 12JUL2006			
DESCRIPTION: MAG45(TM), GIGABIT S8G16 CIRCUIT W/ LEDS, WAVE PANEL, GROUND SHIELD CONTACT PIN 2		PRODUCT SPEC: 108-2100			
APPLICATION SPEC: -		SIZE: -		CAGE CODE: DRAWING NO: -	
MATERIAL: -		WEIGHT: -		RESTRICTED TO: -	
FINISH: -		CUSTOMER DRAWING: -		SCALE: 1	
SEE NOTES		SEE NOTES		SHEET 1 OF 1 REV C	

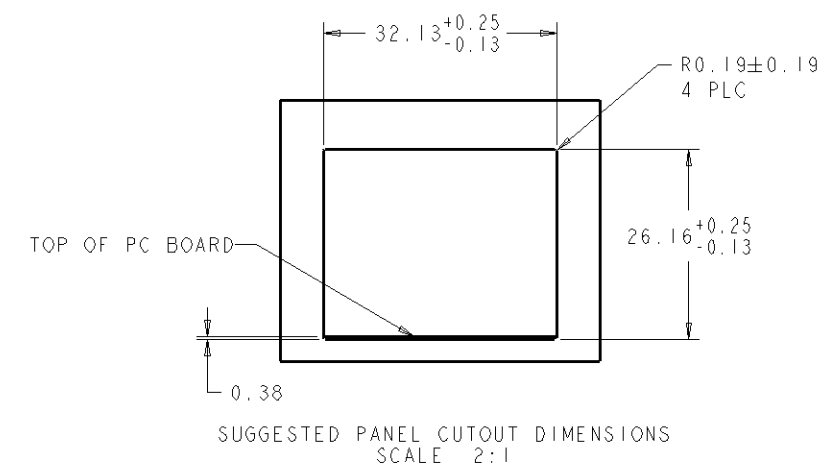




PC BOARD LAYOUT VIEWD FROM COMPONENT SIDE

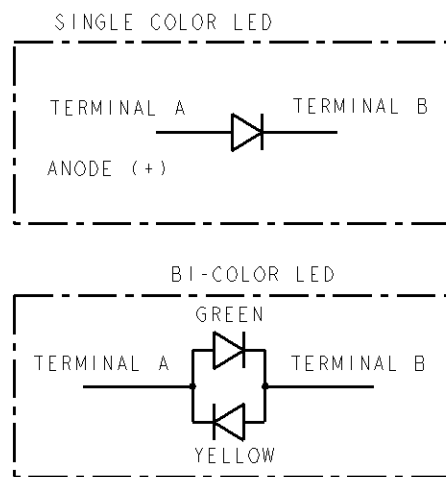
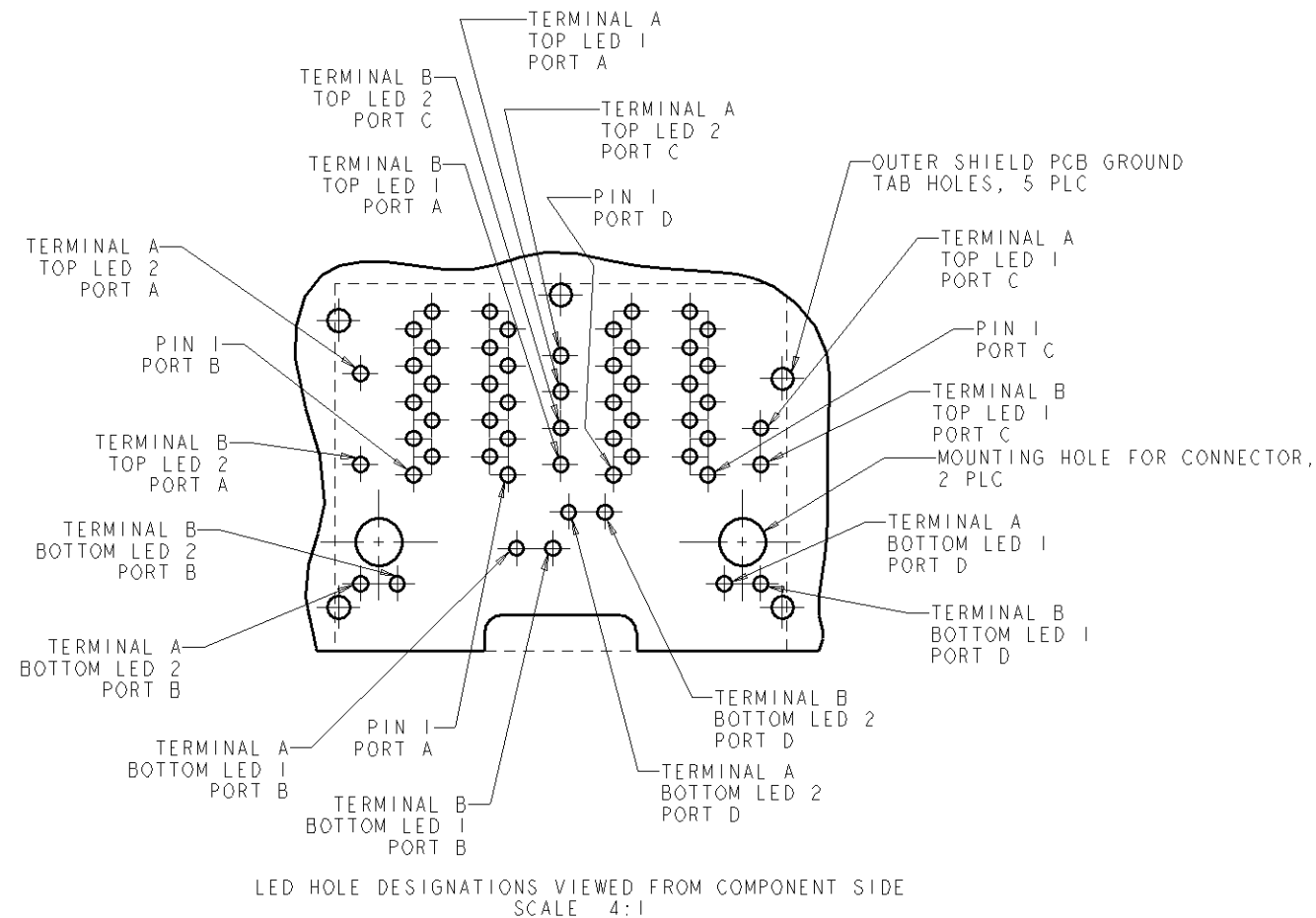


—PIN #0 ON MODULE JACK IS A STUB PIN WITH
LENGTH SIMILAR TO PCB STANDOFF HEIGHT
PRECAUTIONS SHOULD BE TAKEN IN PCB DESIGN
TO GUARD AGAINST SHORTING TRACES TO STUB PINS



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DIMENSIONS: mm		(OTHERS SPECIFIED, OTHERWISE, UNLESS OTHERWISE SPECIFIED)		NAME: 2X2 MAG45(TM), 616ABT S8G16 CIRCUIT W/ LEADS, WAVE PANEL, GROUND SHIELD CONTACT PIN 2	
		0 PLIC ±0.25 1 PLIC ±0.25 2 PLIC ±0.25 3 PLIC ±0.25 4 PLIC ±0.25 ANGLES ±0.25		PRODUCT SPEC: 108-2100 APPLICATION SPEC: - WEIGHT: -	
MATERIAL: SEE NOTES		FINISH: SEE NOTES		SIZE: A1 CASE CODE: 00779 DRAWING NO: 1840156	
CUSTOMER DRAWING		SCALE: 1:1		SHEET: 3 OF 4 REV: 1	

REV. NO.		REV. DATE		REV. BY		REV. DATE		REV. BY	
AA	00								
LTD		DESCRIPTION		DATE		DWN		APVD	
-		SEE SHEET 1							



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				KIKE YOU					
				ERIC GE		12JUL2006			
DIMENSIONS				TOLERANCES UNLESS OTHERWISE SPECIFIED:		Tyco Electronics		Tyco Electronics	
(mm)						Chongqing, GD, China			
				0 PLC ±0.25		NAME		MAG45(TM), GIGABIT SGB16 CIRCUIT	
				1 PLC ±0.25		APVD		W/ LEDS, WAVE PANEL, GROUND SHIELD	
				2 PLC ±0.25		TODDY XIONG		CONTACT PIN 2	
				3 PLC ±0.25		PRODUCT SPEC			
				4 PLC ±0.25		-			
				5 PLC ±0.25		APPLICATION SPEC			
				6 PLC ±0.25		-			
				7 PLC ±0.25		SIZE		CASE CODE DRAWING NO	
				8 PLC ±0.25		A1		00779 C=1840156	
				9 PLC ±0.25		WEIGHT		-	
				10 PLC ±0.25		CUSTOMER DRAWING			
				11 PLC ±0.25		SCALE		A:1 SHEET 1 OF 1	
				12 PLC ±0.25		REV		C	
MATERIAL				FINISH		SCALE		A:1 SHEET 1 OF 1	
SEE NOTES				SEE NOTES		SCALE		A:1 SHEET 1 OF 1	
						REV		C	