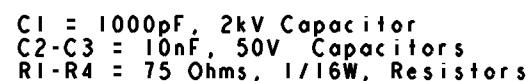


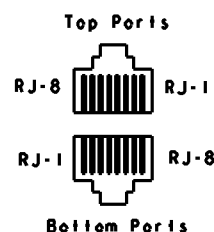


Top and Bottom Ports



(Repeat for each vertical pair of ports.)

RJ Cable Contacts



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
ALL PC BOARDS: HIGH TEMP PCB, TG>170°C.

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,
8mA DC BIAS FROM 0°C TO 70°C, ALL FOUR PAIRS
ALL FOUR PAIRS BI-DIRECTIONAL
DIELECTRIC (ISOLATION VOLTAGE): 2250 VDC 60 SECONDS, 1mA.
PERFORMANCE @ 25°C: PLEASE SEE TABLE ON SHEET 5.

4 TYCO ELECTRONICS LOGO AND AGENCY APPROVAL LOGO,
TO BE LOCATED IN APPROXIMATE AREA SHOWN.

5. OPERATING TEMP: FROM 0°C TO +70°C.

△6 RJ45 CAVITY CONFORMS TO FCC RULES AND REGULATION PART 68 SUBPART E.

△7 INDICATED MAGNETIC CONNECTIONS ARE SYMMETRICAL AND SUPPORT AUTO-MDI/MDIX

8 DATUM AND BASIC DIMENSION ESTABLISHED BY CUSTOMER.

△9 BASIC DIMENSION ESTABLISHED BY CUSTOMER, BUT MAY NOT BE GREATER THAN 5.08mm.

10 LEDs ARE DRIVEN WITH CONSTANT CURRENT AT APPROX 20mA

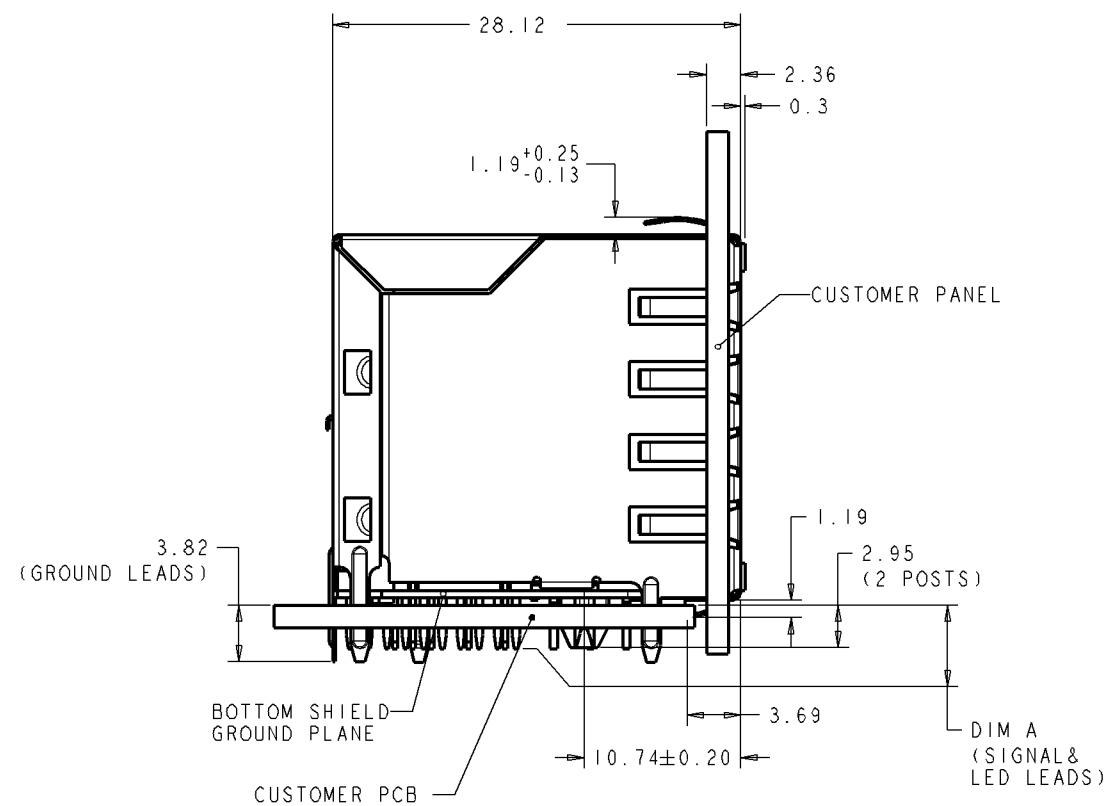
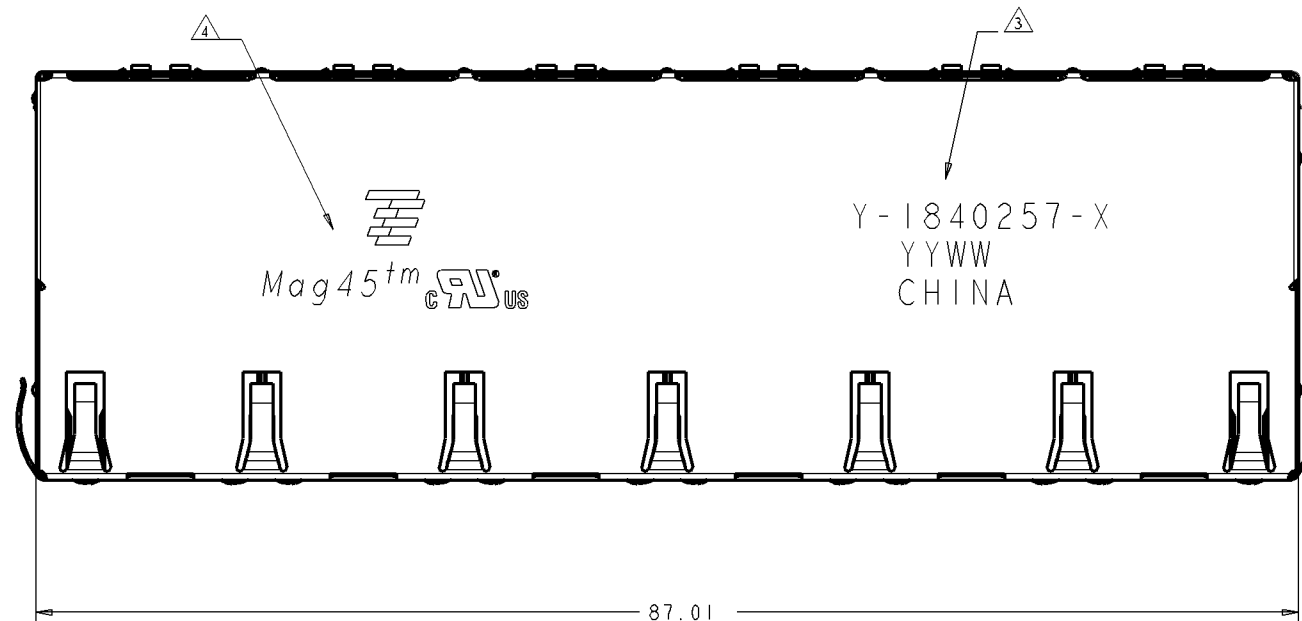
LED COLOR: DOMINANT WAVELENGTH (λD): GREEN 568 nm TYP. @ IF=20mA
FORWARD VOLTAGE (VF): GREEN 2.2V TYP. @ IF=20mA
DOMINANT WAVELENGTH (λD): YELLOW 588 nm TYP. @ IF=20mA
FORWARD VOLTAGE (VF): YELLOW 2.1V TYP. @ IF=20mA
DOMINANT WAVELENGTH (λD): ORANGE 605 nm TYP. @ IF=20mA
FORWARD VOLTAGE (VF): ORANGE 2.1V TYP. @ IF=20mA

11. THE PARTS ARE RECOMMENDED FOR WAVE SOLDERING PROCESS,
PEAK TEMPERATURE 260°C MAX. 10 SECONDS MAX.

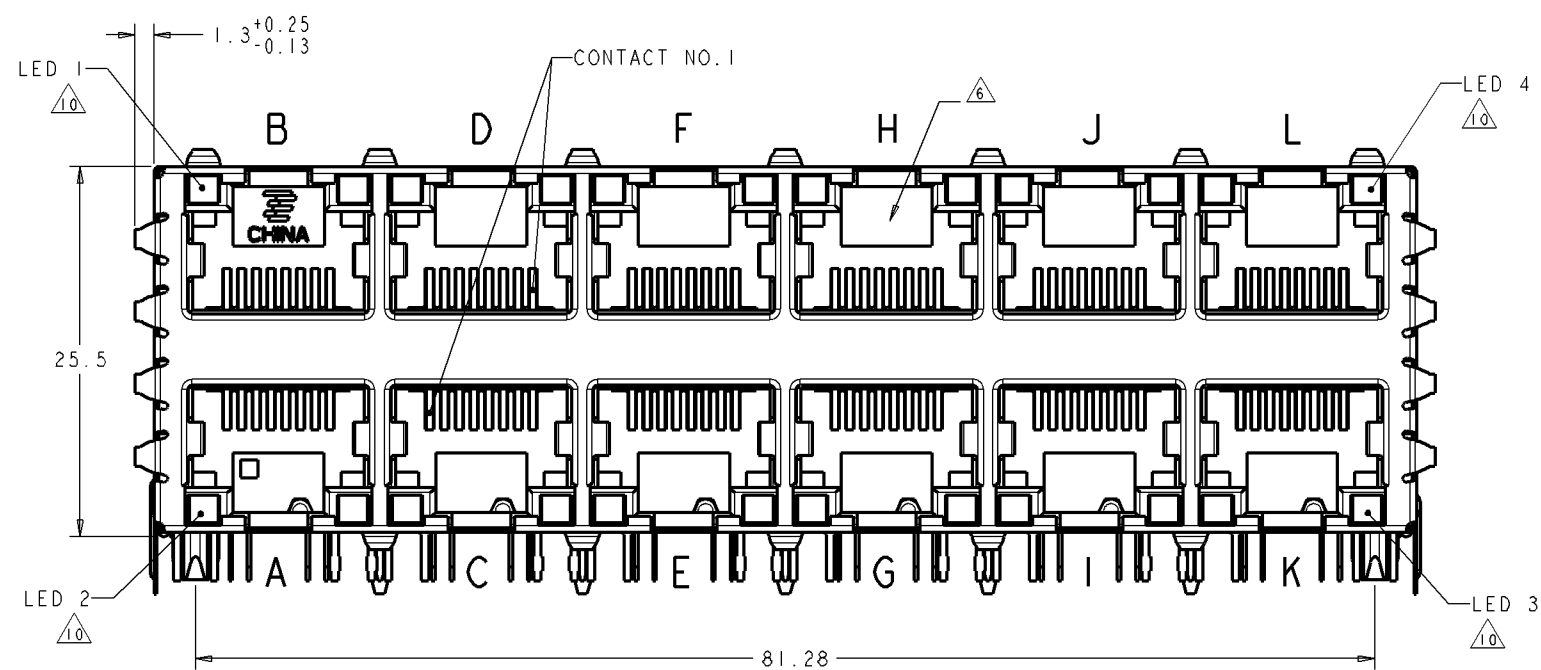
3.04	GRN/ORA	GREEN	GRN/ORA	GREEN	2-1840257-1
3.04	GREEN	GRN/YEL	GREEN	GRN/YEL	2-1840257-1
3.04	GRN/ORA	GRN/ORA	GRN/ORA	GRN/ORA	2-1840257-1
3.04	GREEN	GRN/ORA	GREEN	GRN/ORA	2-1840257-1
3.04	GRN/YEL	GREEN	GRN/YEL	GREEN	2-1840257-1
3.04	GRN/YEL	GRN/YEL	GRN/YEL	GRN/YEL	2-1840257-1
3.04	GREEN	YELLOW	GREEN	YELLOW	2-1840257-1
3.04	YELLOW	GREEN	GREEN	YELLOW	2-1840257-1
3.04	GREEN	GREEN	GREEN	GREEN	2-1840257-1
4.45	GRN/ORA	GREEN	GRN/ORA	GREEN	1-1840257-1
4.45	GREEN	GRN/YEL	GREEN	GRN/YEL	1-1840257-1
4.45	GRN/ORA	GRN/ORA	GRN/ORA	GRN/ORA	1-1840257-1
4.45	GREEN	GRN/ORA	GREEN	GRN/ORA	1-1840257-1
4.45	GRN/YEL	GREEN	GRN/YEL	GREEN	1-1840257-1
4.45	GRN/YEL	GRN/YEL	GRN/YEL	GRN/YEL	1-1840257-1
4.45	GREEN	YELLOW	GREEN	YELLOW	1-1840257-1
4.45	YELLOW	GREEN	GREEN	YELLOW	1-1840257-1
4.45	GREEN	GREEN	GREEN	GREEN	1-1840257-1
3.56	GRN/ORA	GREEN	GRN/ORA	GREEN	1840257-9
3.56	GREEN	GRN/YEL	GREEN	GRN/YEL	1840257-8
3.56	GRN/ORA	GRN/ORA	GRN/ORA	GRN/ORA	1840257-7
3.56	GREEN	GRN/ORA	GREEN	GRN/ORA	1840257-6
3.56	GRN/YEL	GREEN	GRN/YEL	GREEN	1840257-5
3.56	GRN/YEL	GRN/YEL	GRN/YEL	GRN/YEL	1840257-4
3.56	GREEN	YELLOW	GREEN	YELLOW	1840257-3
3.56	YELLOW	GREEN	GREEN	YELLOW	1840257-2
3.56	GREEN	GREEN	GREEN	GREEN	1840257-1

DIM A		LED 2		LED 3		LED 1		LED 4		PART NUMBER	
*THIS DRAWING IS THE PROPERTY OF TYCO ELECTRONICS. IT IS TO BE USED FOR THE SPECIFIC QUANTITY AND APPLICATION ONLY. IT IS NOT TO BE REPRODUCED OR COPIED IN ANY FORM OR BY ANY MEANS. ANY UNAUTHORIZED REPRODUCTION OR USE IS PROHIBITED. IT SHOULD BE CONTACTED FOR THE LATEST REVISION.						Date <u>Jan SDEC2007</u> by <u>Dennis Chen SDEC2007</u>		 Tyco Electronics Changping, China			
DIMENSIONS: mm 						TO DIMENSIONS UNLESS OTHERWISE SPECIFIED		NAME <u>X26 MAG45(TM), GIGABIT S8656 CIRCUIT</u> PRODUCT SPEC <u>WAVE PANEL, ROUND SHIELD, W/LEDS</u> <u>108-104004</u> APPLICATION SPEC <u>HI-TRG PCB</u>			
MATERIAL 						FINISH 		SIZE CASE CODE DRAWING NO <u>A100779</u> <u>C=1840257</u>		RESTRICTION -	
WEIGHT -						CUSTOMER DRAWING SCALE NTS SHEET 1 OF 5 REV					

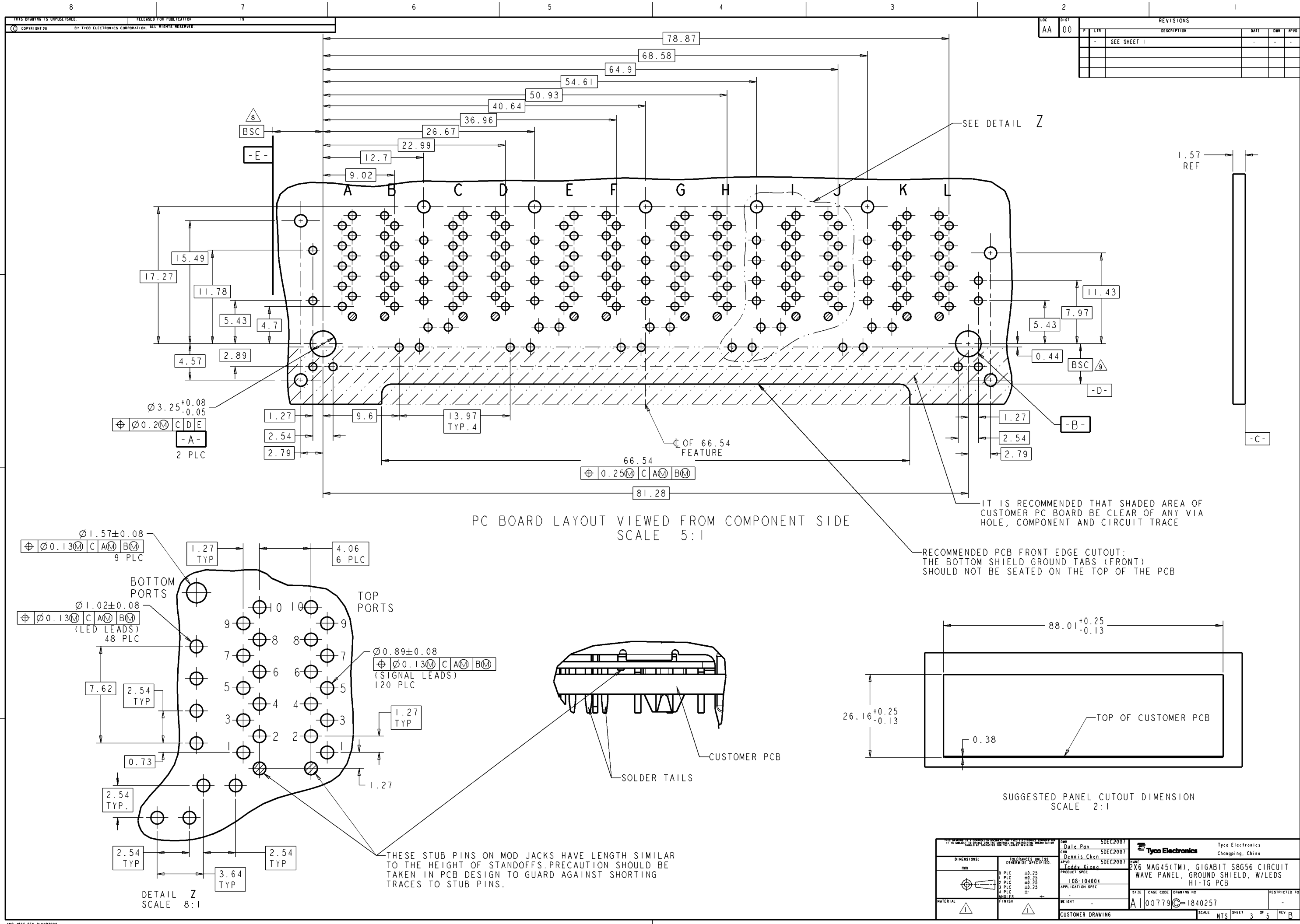
LOC	DIST	REVISIONS			
		REV	DESCRIPTION	DATE	APP'D
AA	00	-	SEE SHEET 1	-	-



SIDE VIEW SHOWN WITH
PANEL AND PCB
FOR LOCATION



TYPICAL DIMENSIONS: 100% DIMENSIONS UNLESS OTHERWISE SPECIFIED		DATE: SDEC2007	Tyco Electronics	
DIMENSIONS: mm		CHK: Dennis Chen	Tyco Electronics	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APP'D: Teddy Kiang	2X6 MAG45(TM), GIGABIT S8G56 CIRCUIT	
0.150 ±0.25		PRODUCT SPEC	WAVE PANEL, GROUND SHIELD, W/LED	
0.150 ±0.25		APPLICATION SPEC	HI-TG PCB	
0.150 ±0.25		SIZE: CASE CODE: DRAWING NO.	A100779C-1840257	
0.150 ±0.25		REIGHT: -	RESTRICTED TO: -	
0.150 ±0.25		CUSTOMER DRAWING	SCALE: NTS SHEET 2 OF 5 REV B	



THIS DRAWING IS UNPUBLISHED
RELEASED FOR PUBLICATION
BY TYCO ELECTRONICS CORPORATION. ALL RIGHTS RESERVED.

LOC		REV		DATE		BY		CHK		APP	
AA	00										
REVISIONS											
DESCRIPTION				DATE		BY		CHK		APP	
SEE SHEET 1											

PC BOARD LAYOUT VIEWED FROM COMPONENT SIDE
SCALE 5:1

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

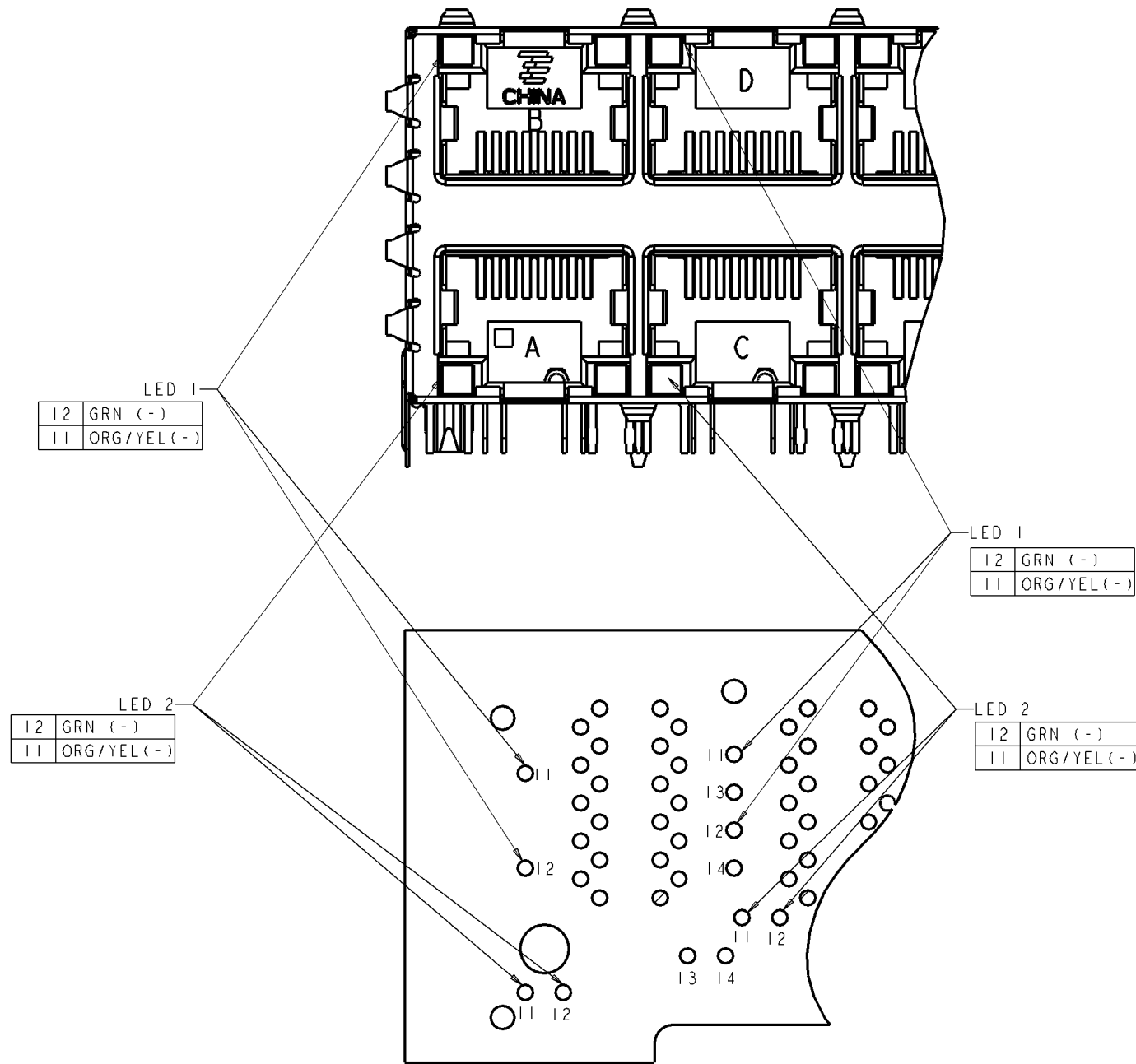
RECOMMENDED PCB FRONT EDGE CUTOUT:
THE BOTTOM SHIELD GROUND TABS (FRONT)
SHOULD NOT BE SEATED ON THE TOP OF THE PCB

SUGGESTED PANEL CUTOUT DIMENSION
SCALE 2:1

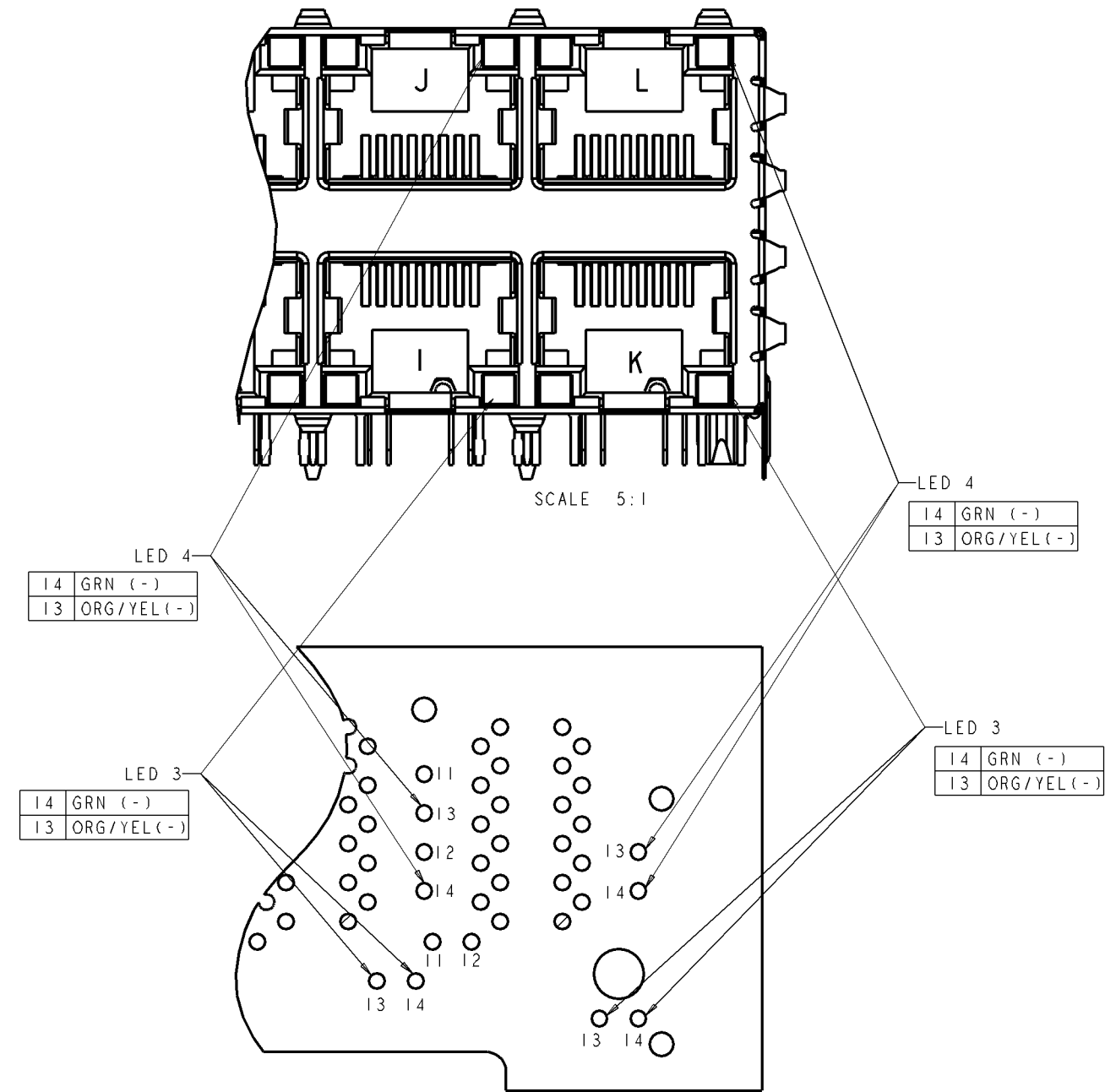
THESE STUB PINS ON MOD JACKS HAVE LENGTH SIMILAR
TO THE HEIGHT OF STANDOFFS. PRECAUTION SHOULD BE
TAKEN IN PCB DESIGN TO GUARD AGAINST SHORTING
TRACES TO STUB PINS.

TYCO ELECTRONICS CORPORATION 10000 WILLOW CREEK DRIVE CHANGING, CHINA		DATE: 01/01/2007 CHK: Dennis Chen APP: Teddy Kiang		NAME: 2X6 MAG45(TM), GIGABIT S8G56 CIRCUIT WAVE PANEL, GROUND SHIELD, W/LEDS HI-TG PCB	
DIMENSIONS: mm		TOLERANCES UNLESS OTHERWISE SPECIFIED:		SIZE: 100779 CAGE CODE: 1840257	
MATERIAL:		FINISH:		RESTRICTED TO:	
CUSTOMER DRAWING		SCALE: NTS		SHEET 3 OF 5	

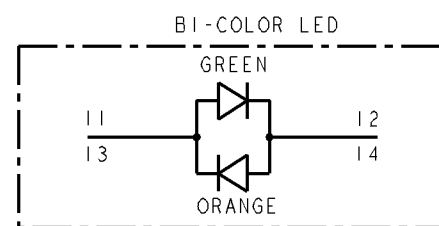
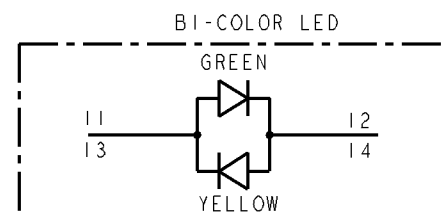
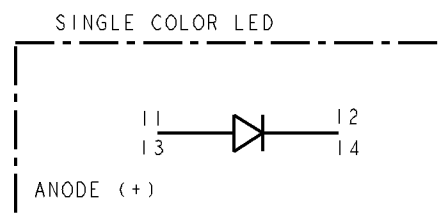
REVISEMENTS		DATE	BY	APPD
AA	00			
SEE SHEET 1				



LED 1 & 2 TERMINAL PIN OUT
VIEWED FROM COMPONENT SIDE



LED 3 & 4 TERMINAL PIN OUT
VIEWED FROM COMPONENT SIDE



TYPICAL DIMENSIONS: UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS (INCHES)		DATE	SDEC2007	Tyco Electronics	
DIMENSIONS:		CHK	SDEC2007	Tyco Electronics	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APPRO	SDEC2007	Tyco Electronics	
0.130 ±0.25		NAME	2X6 MAG45(TM), GIGABIT S8G56 CIRCUIT	Tyco Electronics	
0.130 ±0.25		PRODUCT SPEC	WAVE PANEL, GROUND SHIELD, W/LEDS	Tyco Electronics	
0.130 ±0.25		APPLICATION SPEC	HI-TG PCB	Tyco Electronics	
0.130 ±0.25		SIZE	CAGE CODE	DRAWING NO	RESTRICTED TO
0.130 ±0.25		SCALE	NTS	4	REV B
0.130 ±0.25		CUSTOMER DRAWING			

TRANSMISSION PERFORMANCE AT 25°C

FREQUENCY [MHz]	INSERTION LOSS [dB max.]		RETURN LOSS [dB min.]		CROSSTALK NEXT[dB min.]	
	LIMITS	TYPICAL	LIMITS	TYPICAL	LIMITS	TYPICAL
0.1-0.9	-0.4	-0.2	-27	-32	-66	-77
1.0-9.9	-(0.4+0.1*log(F))	-0.2	-27	-(32-2*log(F))	-(66-21*log(F))	-(77-15*log(F))
10.0-49.9	-(0.5+0.3*log(F/10))	-(0.2+0.35*log(F/10))	-(27-17*log(F/10))	-(30-13*log(F/10))	-(45-16*log(F/10))	-(24-29*log(F/200))
50.0-79.9	-(1+1.4*log(F/80))	-(0.75+1*log(F/100))	-(27-17*log(F/10))	-(6-25*log(F/200))	-(25-30*log(F/100))	-(24-29*log(F/200))
80.0-99.9	-(1.3+3*log(F/100))	-(0.75+1*log(F/100))	-(27-17*log(F/10))	-(6-25*log(F/200))	-(25-30*log(F/100))	-(24-29*log(F/200))
100.0-200	-(4+9*log(F/200))	-(2+4*log(F/200))	-(1-30*log(F/200))	-(6-25*log(F/200))	-(20-1.65*log(F/200))	-(24-29*log(F/200))

FREQUENCY [MHz]	CM-DM [dB min.]		DM-CM [dB min.]		CMR [dB min.]	
	LIMITS	TYPICAL	LIMITS	TYPICAL	LIMITS	TYPICAL
0.1-0.9	-48	-60	-54.5	-65	-38	-45
1.0-9.9	-(48-12*log(F))	-(60-8*log(F))	-(54.5-14.5*log(F))	-(65-15*log(F))	-38	-45
10.0-49.9	-(36-21*log(F/10))	-(52-25*log(F/10))	-25	-(65-15*log(F))	-(57-23*log(F))	-(45-5*log(F/10))
50.0-79.9	-(18-11*log(F/100))	-(52-25*log(F/10))	-25	-39.5	-27	-(45-5*log(F/10))
80.0-99.9	-(18-11*log(F/100))	-(52-25*log(F/10))	-25	-39.5	-(27-14.5*log(F/80))	-(45-5*log(F/10))
100.0-199.9	-(8.7-15.5*log(F/400))	-(27-15*log(F/100))	-(9-23*log(F/500))	-(39.5-16*log(F/100))	-(27-14.5*log(F/80))	-(40-26.75*log(F/100))
200.0-399.9	-(8.7-15.5*log(F/400))	-(27-15*log(F/100))	-(9-23*log(F/500))	-(39.5-16*log(F/100))	-(21.5-39*log(F/200))	-(40-26.75*log(F/100))
400.0-1000.0	-(4.5-10.5*log(F/1000))	-18	-(6-10*log(F/1000))	-(39.5-16*log(F/100))	-10	-24

IF IT IS NECESSARY TO SHOW THE DIMENSIONS OF THE COMPONENTS, THE DIMENSIONS SHOULD BE SPECIFIED IN THE DRAWING.

OTHERWISE SPECIFY IN THE DRAWING.

DIMENSIONS:

mm

TOLERANCES UNLESS OTHERWISE SPECIFIED:

0 PLC ±0.25

1 PLC ±0.25

2 PLC ±0.25

3 PLC ±0.25

4 PLC ±0.25

ANGLES ±°

FINISH

MATERIAL

DATE

01/01/2007

CHK

Dennis Chen

APP'D

Teddy Kiang

PRODUCT SPEC

108-104004

APPLICATION SPEC

-

WEIGHT

-

CUSTOMER DRAWING

SCALE

NTS

SHEET

5

OF

5

REV

B

NAME

2X6 MAG45(TM), GIGABIT S8G56 CIRCUIT

WAVE PANEL, GROUND SHIELD, W/LEDs

HI-TG PCB

SIZE

CAGE CODE

DRAWING NO

00779

1840257

RESTRICTED TO

-

Tyco Electronics

Tyco Electronics

Changping, China