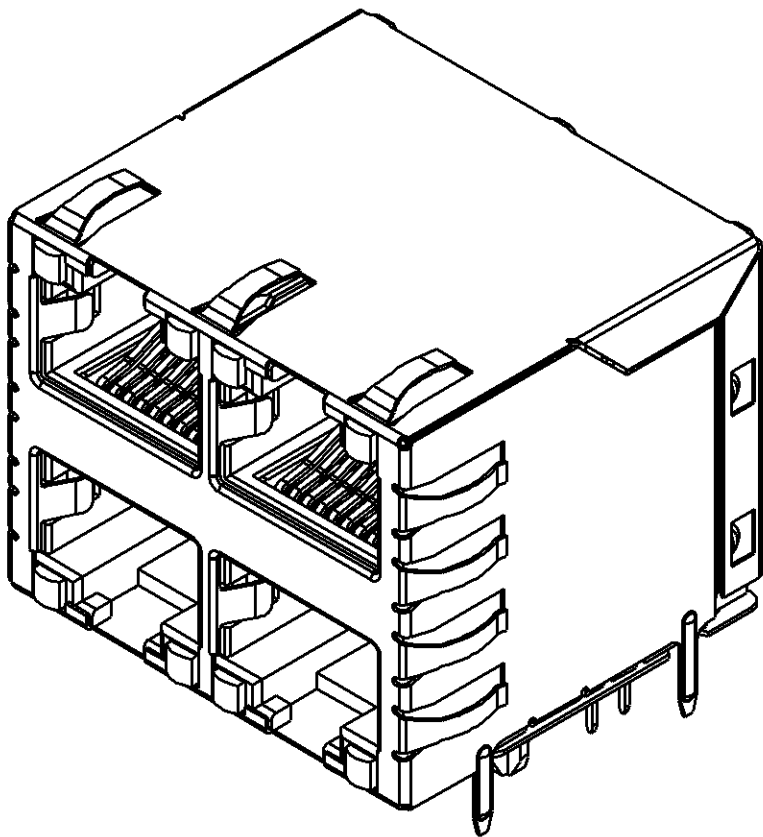
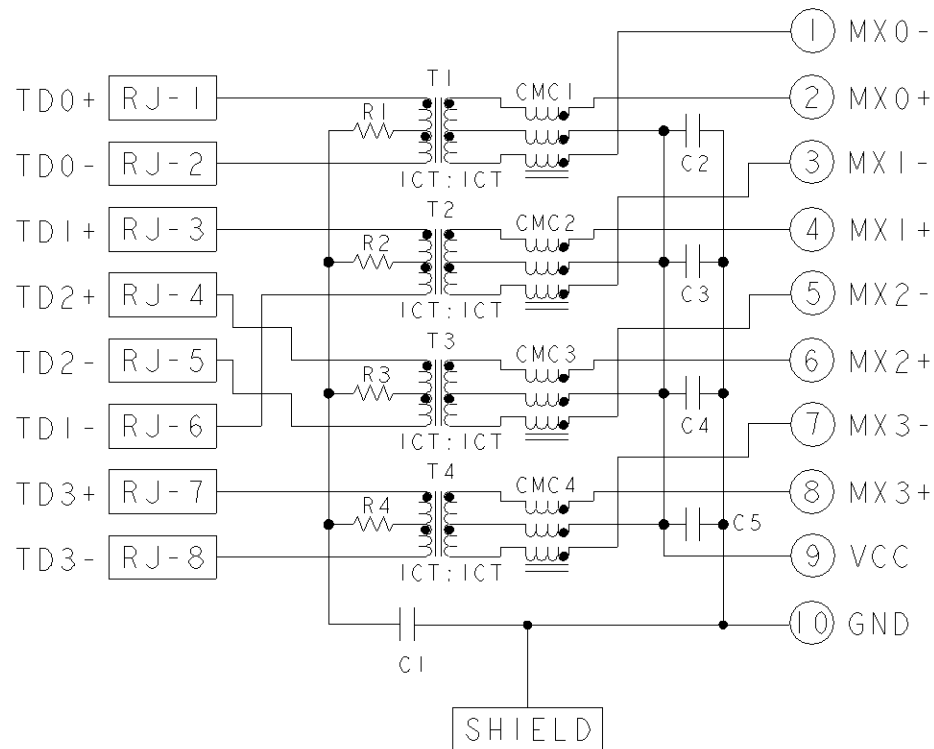


REVISIONS				
REV	DATE	DESCRIPTION	BY	APP'D
B	ECO-08-012525		OL	TX
C	ECO-08-022232		PL	TX
D	ECO-11-019412		PP	LJ



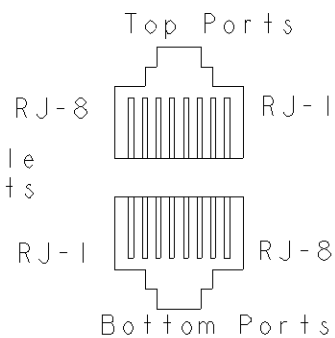
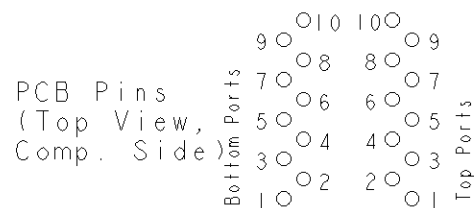
S8G16 GIGABIT CIRCUIT

TOP AND BOTTOM PORTS



Pin Designations

(Repeat for each vertical pair of ports.)

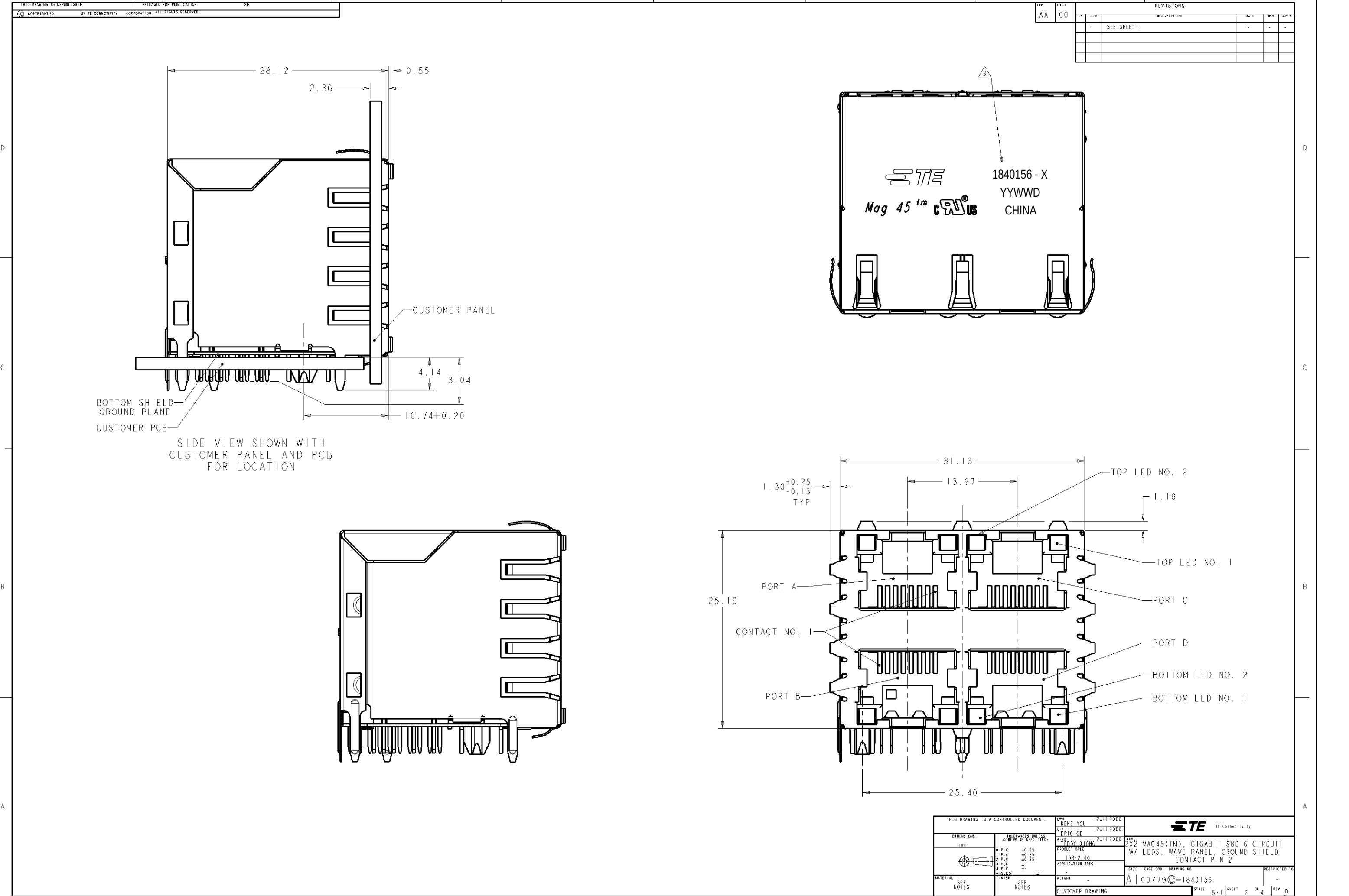


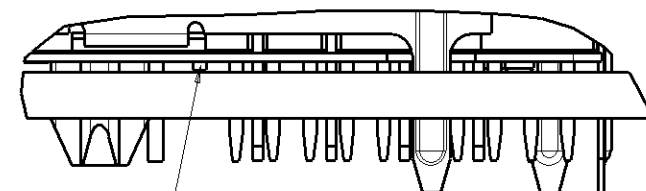
C1 = 1000 pF, 2kV X7R DECOUPLING CAPACITOR
C2 - C3 = 50V, 470pF $\pm 10\%$, X7R CAPACITORS
R1 - R4 = 75 Ohms, 1/16 W, $\pm 5\%$ Resistors

- 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.
- TE CONNECTIVITY LOGO, PART NUMBER, DATE CODE, COUNTRY OF ORIGIN, AGENCY APPROVAL
MARKING LOGO LOCATED IN THE APPROXIMATE AREA SHOWN. DATE CODE YY IS YEAR, WW IS
WORK WEEK, D IS DAY OF WEEK, WITH SUNDAY=1
- 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.
- RJ45 CAVITY CONFORMS TO FCC RULES AND REGULATION PART 68 SUBPART F
- 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.
- OPERATING TEMPERATURE: 0°C TO +70°C.

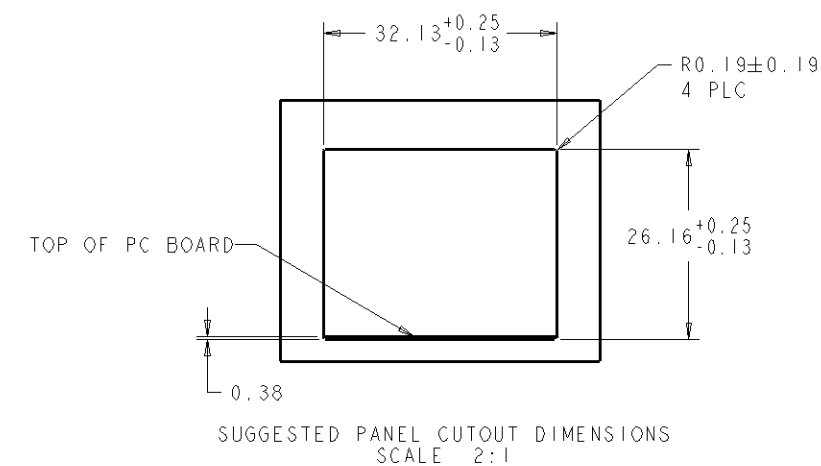
GRN/YEL	GRN/YEL	GRN/YEL	GRN/YEL	1840156-4
GREEN	YELLOW	GREEN	YELLOW	1840156-3
YELLOW	GREEN	GREEN	YELLOW	1840156-2
GREEN	GREEN	GREEN	GREEN	1840156-1
BOTTOM LED NO. 2	BOTTOM LED NO. 1	TOP LED NO. 2	TOP LED NO. 1	PART NUMBER

THIS DRAWING IS A CONTROLLED DOCUMENT. OWN: KEKE YOU 12JUL2006 CAR: ERIC GE 12JUL2006 APPRO: TUDY XIONG 12JUL2006				
DIMENSIONS: mm	OTHER PARTS SPECIFIED: 0 PLC 40 25 1 PLC 40 25 2 PLC 40 25 3 PLC 40 25 4 PLC 40 25 5 PLC 40 25 6 PLC 40 25 7 PLC 40 25 8 PLC 40 25 9 PLC 40 25 10 PLC 40 25	NAME: 2X2 MAG45(TM), GIGABIT S8G16 CIRCUIT PRODUCT SPEC: W/ LEDS, WAVE PANEL, GROUND SHIELD APPLICATION SPEC: CONTACT PIN 2	SIZE: CAGE CODE: DRAWING NO: 100-2100 A100779C=1840156	RESTRICTED TO: CUSTOMER DRAWING
MATERIAL: SEE NOTES	FINISH: SEE NOTES	WEIGHT: -	SCALE: 4:1	SHEET 1 OF 4 REV D





—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



THIS DRAWING IS A CONTROLLED DOCUMENT.		DWG KIKI YOU	12JUL2006		
		CAD ERIC GE	12JUL2006		
DIMENSIONS		OTHER DIMENSIONS: TOLERANCES UNLESS OTHERWISE SPECIFIED:		NAME LLOYD XIONG	DATE 12JUL2006
ITEM		QTY		PRODUCT SPEC	
				108-2100	
MATERIAL		FINISH		APPLICATION SPEC	
SEE NOTES		SEE NOTES		SIZE	CAGE CODE DRAWING NO
				A1	00779C=1840156
CUSTOMER DRAWING		WEIGHT		-	RESTRICTED TO
		SCALE		A : 1	SHEET 3 OF REV

LED HOLE DESIGNATIONS VIEWED FROM COMPONENT SIDE
SCALE 4:1

