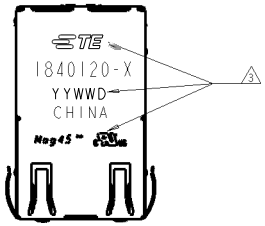
LOC	DIST
AA	00

REVISIONS

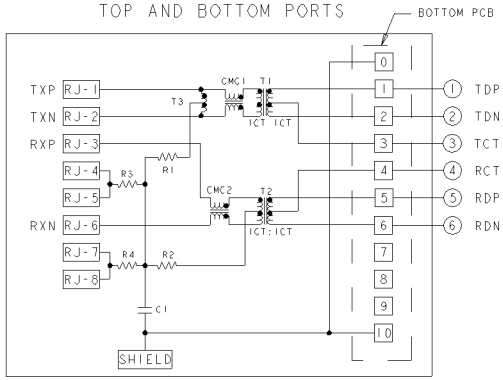
P	LTR	DESCRIPTION	DATE	DWN	APVD
	A	NEW RELEASE	30DEC2005	CG	PD
	B	ECO-08-022984	30DEC2008	RG	KL
	C	ECO-11-019412	20JUN2011	PP	LJ

S814 MAGNETIC CIRCUIT STACKED 2 7



VIEW R
SCALE 3:1

TOP AND BOTTOM PORTS



C1 = 1000pF, 2kV, ±10%, X7R DECOUPLING CAP.
R1-R4 = 75 OHMS, 1/16 W, ±5% RESISTORS

1 MATERIALS:
PLASTIC HOUSING: BLACK, THERMOPLASTIC FLAMMABILITY RATING UL 94V-0
SHIELD: BRASS, PLATED WITH 0.76 µm SEMI-BRIGHT NICKEL, POST DIPPED WITH 2.54 µm MIN SAC SOLDER ON SOLDER TAILS
CONTACTS: PHOSPHOR BRONZE, 1.27 µm MIN OVERALL NICKEL UNDER PLATE WITH SELECT 1.27 µm MIN GOLD AT MATING INTERFACE AND 2.54 µm MIN MATTE TIN ON SOLDER TAILS.
LED: DIFFUSED EPOXY LENS, CARBON STEEL LEAD FRAME
LEADS PREPLATED WITH 2.03 µm MIN SILVER OVER 1.02 µm MIN NICKEL UNDERPLATE OVER 1.02 µm MIN COPPER UNDERPLATE. POST-PLATED WITH 2.54 µm MIN MATTE TIN AND/OR SAC SOLDER DIP OR PURE TIN SOLDER DIP
INTERNAL MAGNETICS PC BOARD: HIGH TEMP PCB, TG > 170°C

2 MAGNETICS
APPLICATION: 10/100 BASE-T
IMPEDANCE: 100 OHMS
TURNS RATIO (CHIP:CABLE): TX = 1:1, RX = 1:1
OPEN CIRCUIT INDUCTANCE (OCL): 350µH MIN @100kHz, 0.1VRMS, 8mADC BIAS FROM 0°C TO 70°C, TX AND RX
PERFORMANCE @ 25°C:
INSERTION LOSS (IL): 1.1dB MAX FROM 0.5MHz TO 100MHz
RETURN LOSS (RL): 18dB MIN FROM 0.5MHz TO 30MHz
18-20LOG(f/30)dB MIN FROM 30.1MHz TO 60MHz
12dB MIN FROM 60.1MHz TO 80MHz
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 23.5.1.1, ITEM b.

3 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

4. OPERATING TEMPERATURE: FROM 0° C TO + 70° C.

5 RJ45 CAVITY CONFORMS TO FCC RULES AND REGULATION PART 68 SUBPART F.

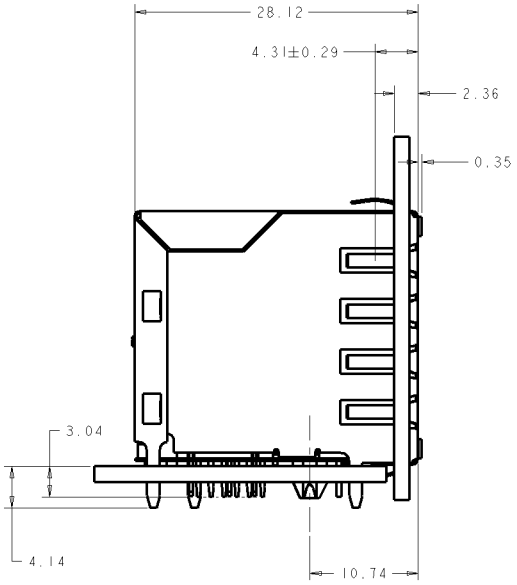
6. LED'S COMPLIANT WITH IEC60825-1 SAFETY OF LASER PRODUCTS WHEN OPERATED AT CURRENT OF 20 mA MAX.
LED IS DRIVEN WITH CONSTANT CURRENT AT APPROX 20mA.
LED COLOR:

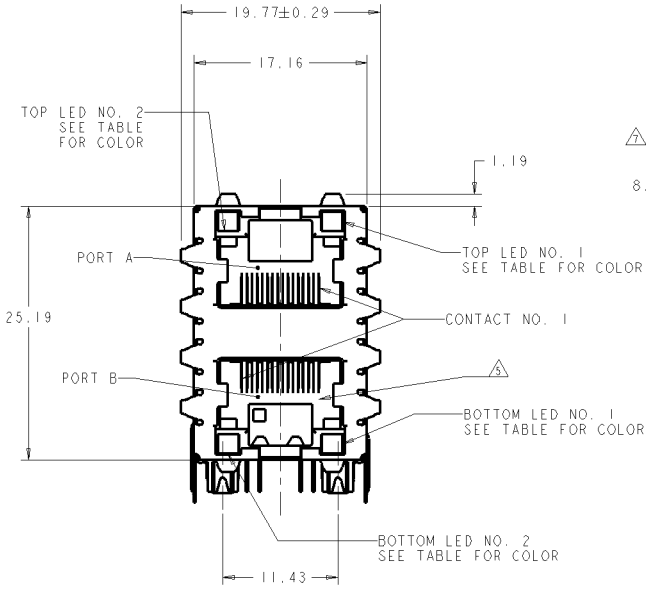
DOMINANT WAVELENGTH (λD): GREEN 568 nm TYP @IF=20mA
FORWARD VOLTAGE (VF): GREEN 2.2V TYP @ IF=20mA

DOMINANT WAVELENGTH (λD): YELLOW 588 nm TYP @IF=20mA
FORWARD VOLTAGE (VF): YELLOW 2.1V TYP @ IF=20mA

7 INDICATED CONNECTIONS ARE FOR NIC CONFIGURATION. THE MAGNETICS ARE ASYMMETRICAL AND DO NOT SUPPORT AUTO-MDI/MDIX.

8. THESE PARTS ARE RECOMMENDED FOR WAVE SOLDERING PROCESS, PEAK SOLDERING TEMPERATURE IS 260 °C MAX, 10 SECONDS MAX.





GRN/YEL	GRN/YEL	GRN/YEL	GRN/YEL	1840120-4
GREEN	YELLOW	GREEN	YELLOW	1840120-3
YELLOW	GREEN	GREEN	YELLOW	1840120-2
GREEN	GREEN	GREEN	GREEN	1840120-1
BOTTOM LED NO. 2	BOTTOM LED NO. 1	TOP LED NO. 2	TOP LED NO. 1	PART NO.

THIS DRAWING IS A CONTROLLED DOCUMENT.
DIMENSIONS: mm [INCHES]
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 ±1°
MATERIAL: 1
FINISH: 1

DRN C. GILLETTE 30DEC2005
CHK P. D'AMATO 03JAN2006
APVD S. FLICKINGER 03JAN2006
PRODUCT SPEC 108-2100
APPLICATION SPEC -
WEIGHT -

TE connectivity

NAME INTEGRATED MAGNETIC STACKED MODULAR JACK, 2X1 W/LEDS, 10/100 ETHERNET, RJ45, GROUND SHIELD, HT PCB

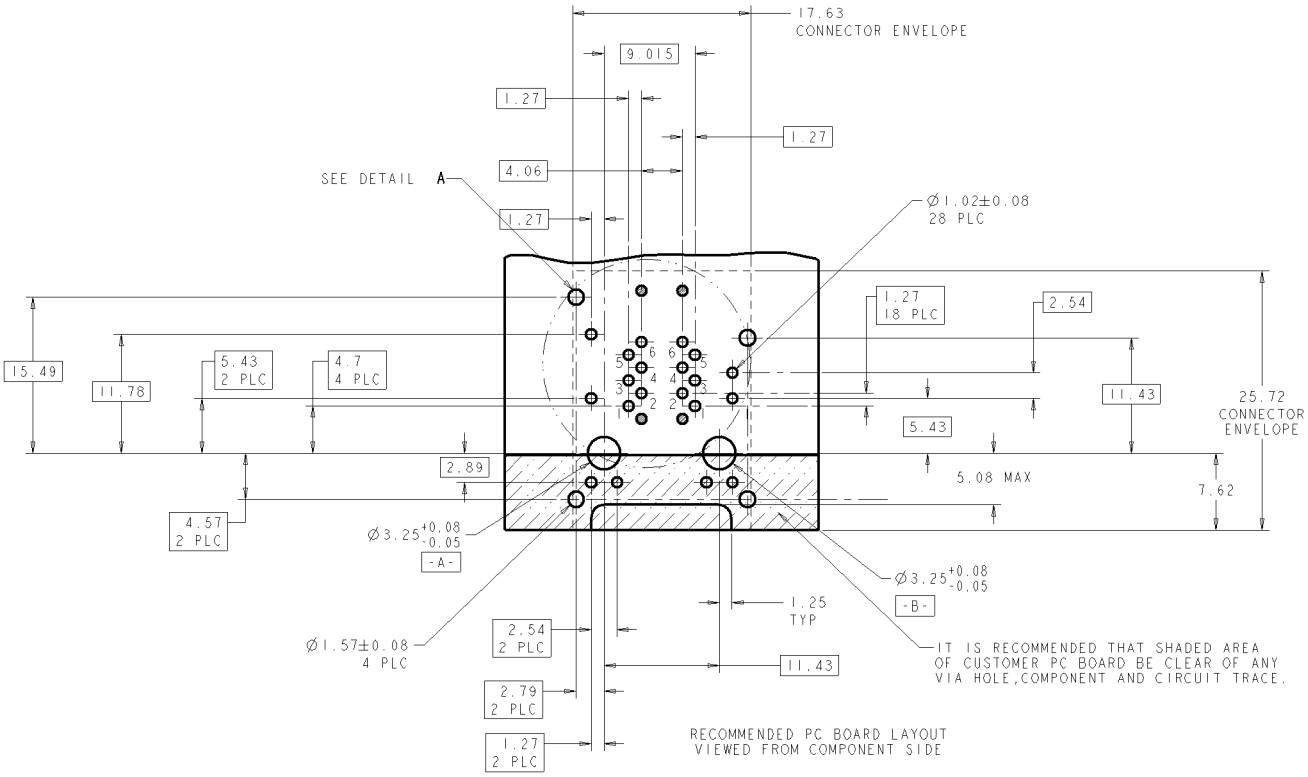
SIZE A1 | CAGE CODE 00779 | DRAWING NO C-1840120 | RESTRICTED TO -

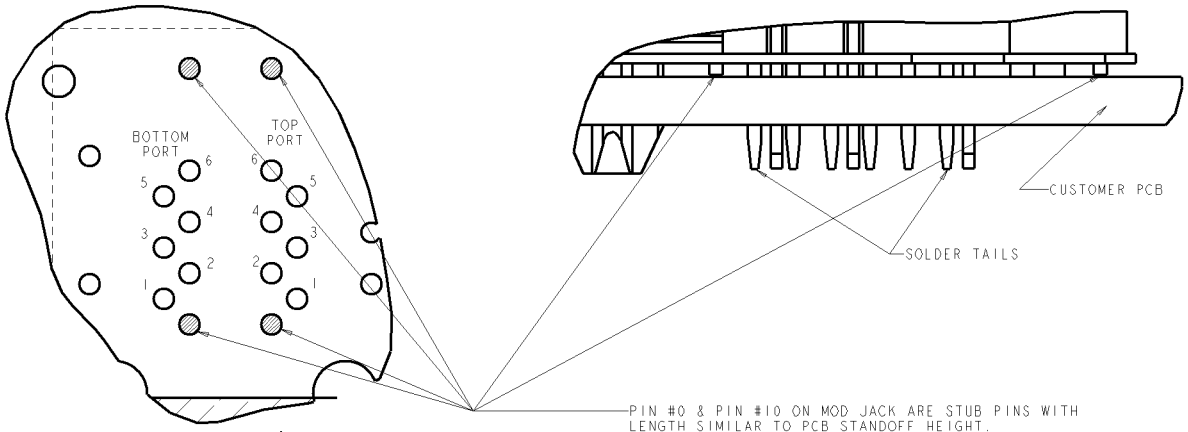
CUSTOMER DRAWING | SCALE NTS | SHEET 1 OF 3 | REV C

LOC	DIST
AA	00

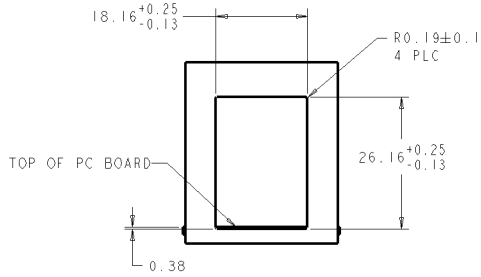
REVISIONS

P	LTR	DESCRIPTION	DATE	DWN	APVD
	-	SEE SHEET 1	-	-	-





DETAIL A
SCALE 8:1



SUGGESTED PANEL CUTOUT DIMENSIONS
SCALE 2:1

THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS: mm [INCHES]

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 ±1°

MATERIAL: -

FINISH: -

DRN C GILLETTE 30DEC2005
CHK P D'AMATO 03JAN2006
APVD S FLICKINGER 03JAN2006
PRODUCT SPEC 108-2100
APPLICATION SPEC -
WEIGHT -

CUSTOMER DRAWING

TE connectivity

NAME: INTEGRATED MAGNETIC STACKED MODULAR JACK, 2X1 W/LEDS, 10/100 ETHERNET, RJ45, GROUND SHIELD, HT PCB

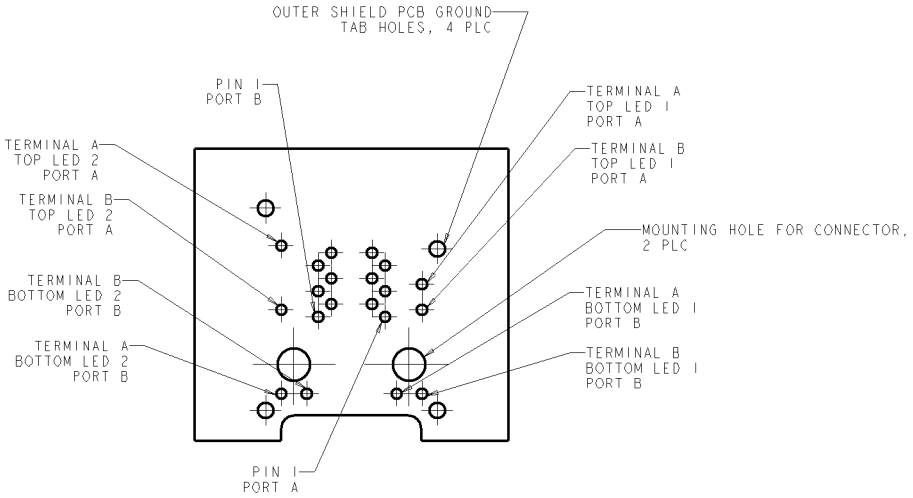
SIZE	CAGE CODE	DRAWING NO	RESTRICTED TO
A1	00779	C-1840120	-

SCALE NTS SHEET 2 OF 3 REV C

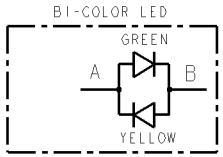
LOC	DIST
AA	00

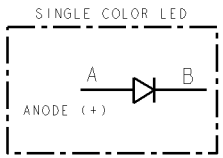
REVISIONS

P	LTR	DESCRIPTION	DATE	DWN	APVD
	-	SEE SHEET 1	-	-	-



LED HOLE DESIGNATIONS VIEWED FROM COMPONENT SIDE
SCALE 4:1





THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS: mm [INCHES]

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 ±1°

MATERIAL -

FINISH -

DRN C GILLETTE 30DEC2005
CHK P D'AMATO 03JAN2006
APVD S FLICKINGER 03JAN2006

PRODUCT SPEC 108-2100

APPLICATION SPEC -

WEIGHT -

CUSTOMER DRAWING

TE connectivity

NAME INTEGRATED MAGNETIC STACKED MODULAR JACK, 2X1 W/LEDS, 10/100 ETHERNET, RJ45, GROUND SHIELD, HT PCB

SIZE	CAGE CODE	DRAWING NO	RESTRICTED TO
A1	00779	C-1840120	-

SCALE NTS SHEET 3 OF 3 REV C