

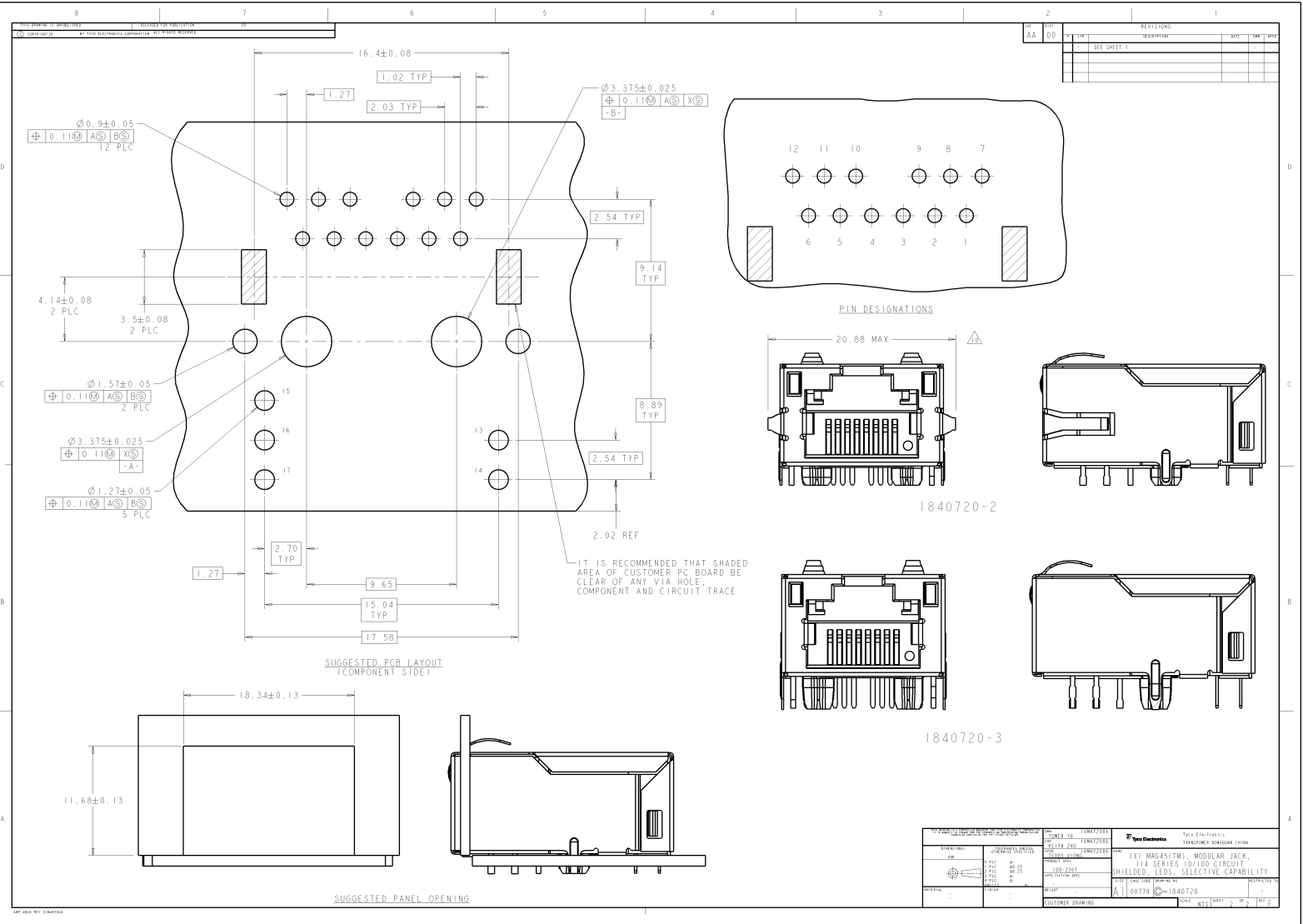
REV	DATE	DESCRIPTION	BY	CHK	APP
1	08-27-08	114 SERIES 10/100 CIRCUIT	WANG	UL	TX
2	08-27-08	SHIELDED LEDS, SELECTIVE CAPABILITY	WANG	UL	TX

- △ MATERIALS:
 - HOUSING: HIGH TEMPERATURE NYLON, BLACK, UL 94V-0
 - SHIELD: 0.20mm THICK, BRASS PREPLATED WITH 0.76 μm MIN SEMI-BRIGHT NICKEL; POST-DIPPED WITH 2 μm 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, 2 μm MIN TIN PLATE
 - MOD JACK CONTACTS: 0.25mm THICK, PHOSPHOR BRONZE, 1.27 μm MIN OVERALL NICKEL UNDERPLATE, WITH 0.76 μm 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 2.03 μm MIN. SILVER PLATE OVER 1.02 μm MIN. NICKEL OVER 1.02 μm MIN. COPPER UNDERPLATE; LEADS POST-PLATED WITH 3.05 μm MIN. MATTIE TIN.
 - LIGHT PIPE: POLYETHER SULFONE
- △ RJ45 JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS PART 68, SUB-PART F.
- △ MAGNETICS:
 - APPLICATION: 10/100 BASE-T
 - IMPEDANCE: 100 OHMS
 - TURNS RATIO (CHIP CABLE): TX ≤ 1:1, RX = 1:1
 - OPEN CIRCUIT INDUCTANCE (OCL): 350 μH (MIN) @ 100KHz, 0.1 VRMS WITH 8 mA DC 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): 18 dB 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 FORM 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 a OR b
- △ OPERATING TEMPERATURE: FROM 0°C TO +70°C.

- △ 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
- △ LED WILL EMULATE "YELLOW" LIGHT WHEN BOTH GREEN AND ORANGE DIODES ARE DRIVEN AT CONSTANT CURRENT (20mA RECOMMENDED) TO INDICATE THE THIRD COLOR STATE.
- △ ALL DIMENSIONS NOMINAL UNLESS OTHERWISE NOTED.
- △ 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.
- △ TYCO ELECTRONICS LOGO, PART NUMBER, DATE CODE, PLACE OF ORIGIN, AGENCY LOGO TO BE MARKED IN APPROXIMATE LOCATION AS SHOWN.
- △ APPLIES ONLY TO 1840720-2
- 11 1840720-1 SHOWN UNLESS OTHERWISE SPECIFIED
- 12. THESE PARTS ARE COMPLIANT WITH BOTH WAVE SOLDERING PROCESS PEAK SOLDERING TEMPERATURE 260°C MAX, 10 SECONDS MAX; AND IR REFLOW SOLDERING PROCESS PEAK SOLDERING TEMPERATURE 260°C MAX DURATION TIME 10 SECONDS MAX, OVER 230°C WITHIN 40-60 SECONDS;

LED 1	LED 2	GROUND TABS	DIM B	DIM A	PART NO.
GREEN	ORANGE/GREEN	TOP ONLY	3.3	3.18	1840720-9
GREEN	GREEN/YELLOW	TOP ONLY	3.3	3.18	1840720-5
YELLOW	ORANGE/GREEN	TOP ONLY	3.3	3.18	1840720-3
YELLOW	ORANGE/GREEN	TOP AND SIDE	1.8	1.8	1840720-2
YELLOW	ORANGE/GREEN	TOP ONLY	1.8	1.8	1840720-1

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REV		REV		REVISIONS	
NO.	DATE	BY	CHK	DESCRIPTION	DATE
AA	00			SEE SHEET 1	

1840720-2 1840720-3		181 MAG45(TM) MODULAR JACK 114 SERIES 10/100 CIRCUIT SHIELDED, LEAD, SELECTIVE CAPABILITY	
CUSTOMER DRAWING		DATE 11/16/07 PAGE 2 OF 2	