



**MATERIALS:**  
HOUSING - THERMOPLASTIC PET POLYESTER FLAMMABILITY RATING UL 94V-0  
SHIELD - .010" THICK, C26800 BRASS PREPLATED WITH 30μINCH SEMI-BRIGHT NICKEL. SOLDER TABS POST DIPPED WITH 100μINCH MIN SAC SOLDER.  
MOD JACK CONTACTS - 0.0157 x 0.018" PHOSPHOR BRONZE, 50μINCH MIN OVERALL NICKEL UNDERPLATE, WITH SELECT 50μINCH MIN HARD GOLD FINISH PLATE  
SOLDER TABS WITH 100μINCH MIN MATTE TIN AND/OR SAC SOLDER DIP.  
LIGHT EMITTING DIODE(LED) - DIFFUSED EPOXY LENS, .020" x .020" CARBON STEEL WIREFRAME LEADS PRE-PLATED WITH 80μINCH SILVER OVER 40μINCH NICKEL UNDERPLATE OVER 40μINCH COPPER UNDERPLATE. POST-PLATED WITH 100μINCH MIN MATTE TIN AND/OR SAC SOLDER DIP OR PURE TIN SOLDER DIP.

**RJ45 JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS PART 68, SUB PART F.**

**MAGNETICS**  
-IMPEDANCE: 100 OHMS  
-TURNS RATIO (CHP-CABLE): TX = 11, RX = 11  
-OPEN CIRCUIT INDUCTANCE (OCL): 350μH MIN @ 100MHz, 0.1V RMS, BRNDC BIAS FROM -40°C TO +85°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  
18-20dBi/30dB MIN FROM 30 MHz TO 60MHz  
12dB MIN FROM 60 MHz TO 80MHz  
CROSSTALK ATTENUATION: 35dB MIN FROM 0.5MHz TO 40MHz  
33-20\*dBi/35dB MIN FROM 40 MHz TO 100MHz  
COMMON MODE REJECTION RATIO (CMRR): 35dB MIN FROM 0.5MHz TO 100MHz  
-ISOLATION VOLTAGE. COMPLIES WITH IEEE802.3 2002, PARA 23.5.1.1, ITEM b.

**4. OPERATING TEMPERATURE FROM -40° TO +85°C INDUSTRIAL TEMPERATURE RATED.**

**INDICATED CONNECTIONS ARE FOR NIC CONFIGURATION. THE MAGNETICS ARE ASYMMETRIC, AND ARE NOT AUTO-MDI/MDIX CAPABLE.**

**LEDS WITHOUT BUILT-IN RESISTOR**  
LEDS ARE DRIVEN WITH CONSTANT CURRENT AT APPROX 20 mA  
LED COLOR: DOMINANT WAVELENGTH (AD): GREEN 568 nm TYP @ IF=20 mA  
FORWARD VOLTAGE (VF): GREEN 2.1V TYP @ IF=20 mA  
DOMINANT WAVELENGTH (AD): YELLOW 588 nm TYP @ IF=20 mA  
FORWARD VOLTAGE (VF): YELLOW 2.1V TYP @ IF=20 mA  
DOMINANT WAVELENGTH (AD): ORANGE 605 nm TYP @ IF=20 mA  
FORWARD VOLTAGE (VF): ORANGE 2.1V TYP @ IF=20 mA

**TYCO ELECTRONICS LOGO, PART NUMBER, DATE CODE, COUNTRY OF ORIGIN AND AGENCY APPROVAL MARKING IN APPROXIMATE LOCATION SHOWN.**

**8. THE PART IS RECOMMENDED FOR WAVE SOLDERING PROCESS. PREHEAT TEMPERATURE IS 120°C TO 160°C, 120 SECONDS TO 180 SECONDS, PEAK WAVE SOLDERING TEMPERATURE IS 260°C MAX, 10 SECONDS MAX.**

GREEN	YELLOW	5-6605317-8
LED1	LED2	PART NUMBER

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DATE	REV	BY	CHK	APP
108-2100	1			

1X1 M4645(M), MODULAR JACK, 4N2P10 INDUSTRIAL TEMP SCHEMATIC, 314ETP10 CIRCUIT, SHIELDED, DECOUPLING CAPACITOR, WITH LEDS

CUSTOMER DRAWING