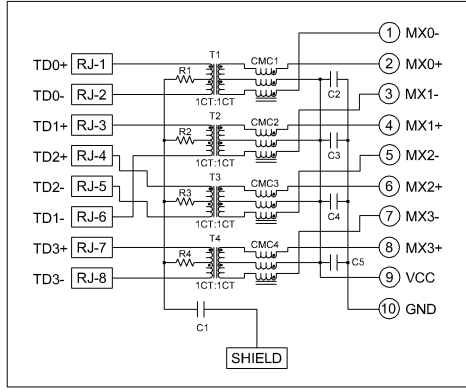


S8G31 GIGABIT CIRCUIT

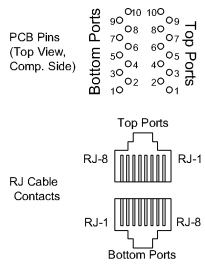
Top and Bottom Ports



C1=1000pF, 2kV
 C2-C5=470pF, 10%, 50V
 R1-R4=75 ohm, 1/16W

Pin Designations

(Repeat for each vertical pair of ports.)



- MATERIALS:**
- HOUSING: THERMOPLASTIC, BLACK, 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, PLATED WITH 1.27um MIN OVERALL NICKEL UNDERPLATE, SELECTIVE 1.27um MIN GOLD AT MATING INTERFACE AND 2.54um MIN MATTE TIN ON SOLDER TAILS.
 - LED: DIFFUSED EPOXY LENS, CARBON STEEL LEAD FRAME LEADS, PREPLATED WITH 2.03um MIN SILVER OVER 1.02um MIN NICKEL OVER 1.02um MIN COPPER UNDERPLATE, POST PLATED WITH 2.54um MIN MATTE TIN AND/OR 2.54um MIN SAC SOLDER DIP OR PURE TIN SOLDER DIP.

- MAGNETICS:**
- APPLICATION: 10/100/1000 BASE-T
 - IMPEDANCE: 100ohms
 - 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
 - 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.

PART NUMBER, DATE CODE AND COUNTRY OF ORIGIN ARE LOCATED IN THE APPROXIMATE AREA SHOWN.

TYCO ELECTRONICS LOGO AND AGENCY APPROVAL LOGO ARE LOCATED IN THE APPROXIMATE AREA SHOWN.

RJ45 CAVITIES CONFORM TO FCC RULES AND REGULATIONS PART 68 SUBPART F.

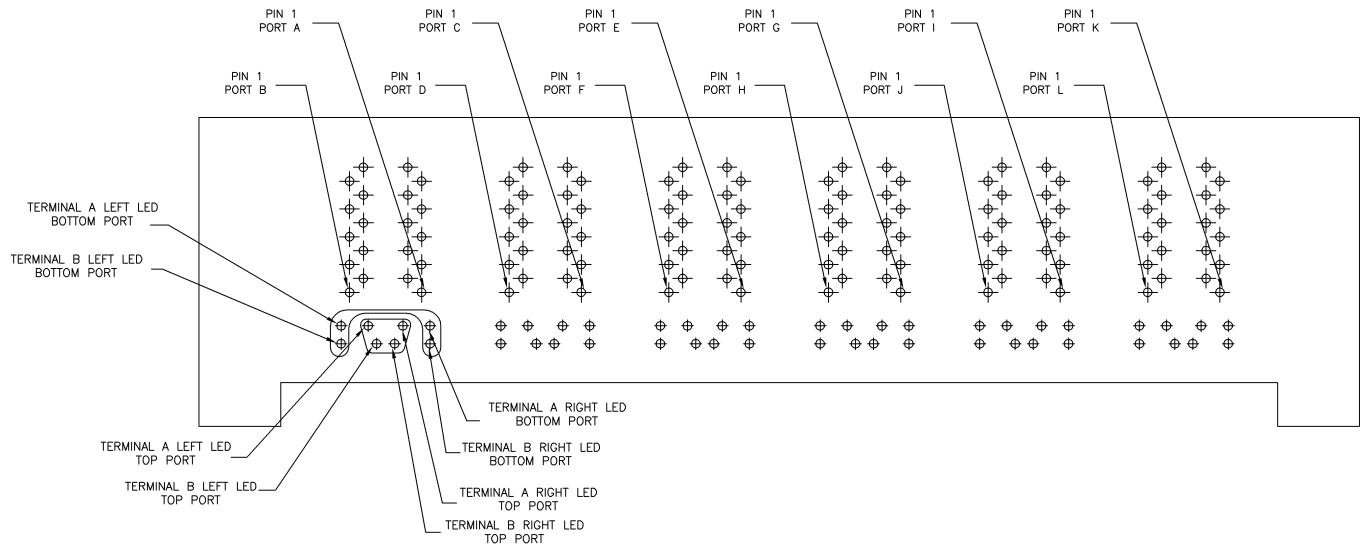
LED IS DRIVEN WITH CONSTANT CURRENT AT APPROX 20mA
 LED COLOR: DOMINANT WAVELENGTH (λD):
 GREEN 568 nm TYP at IF=20mA
 YELLOW 588 nm TYP at IF=20mA
 FORWARD VOLTAGE (VF):
 GREEN 2.2V TYP at IF=20mA
 YELLOW 2.1V TYP at IF=20mA

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

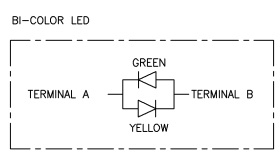
OPERATING TEMPERATURE: FROM 0°C TO 70°C

THE PART IS RECOMMENDED FOR WAVE SOLDERING PROCESS, PEAK TEMPERATURE 260 °C MAX. 10 SECONDS MAX.

YELLOW/GREEN		YELLOW/GREEN		YELLOW/GREEN		YELLOW/GREEN		1840310-4	
TOP LEFT LED		TOP RIGHT LED		BOTTOM LEFT LED		BOTTOM RIGHT LED		PART NO.	
THIS DRAWING IS A CONTROLLED DOCUMENT. THE FOLLOWING INFORMATION IS REQUIRED FOR IDENTIFICATION:									
DATE	REV	BY	CHK	APP	DATE	REV	BY	CHK	APP
108-104004					108-104004				
CUSTOMER DRAWING					CUSTOMER DRAWING				



LED HOLE DESIGNATIONS VIEWED FROM COMPONENT SIDE
SCALE 5:1



THIS DRAWING IS A CONTROLLED DOCUMENT.		DATE	SCALE	REVISED BY	TYPE	REVISIONS
DATE	SCALE	REVISED BY	TYPE	REVISIONS	DATE	BY
10/10/10	1:1	100779	A	1	10/10/10	100779
CUSTOMER DRAWING		SCALE 1:1		SHEET 4 OF 4		