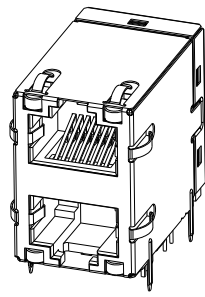
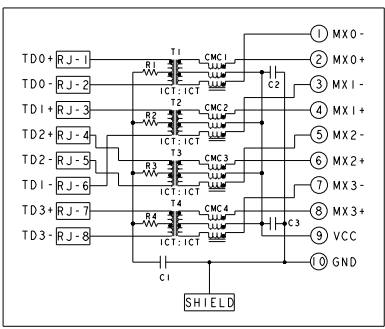


| REVISONS |                 |          |       |
|----------|-----------------|----------|-------|
| REV. NO. | DESCRIPTION     | DATE     | BY    |
| 1        | INITIAL RELEASE | 20020111 | GT KZ |
| 2        | SEE SHEET 5     | 18020111 | TR KZ |
| 3        | ECO-11-021808   | 18020111 | GT KZ |
| 4        | ECO-11-024292   | 18020111 | TR KZ |



S8G56ET GIGABIT CIRCUIT  
TOP AND BOTTOM PORTS



C1 = 1000pF, 2kV CAPACITOR  
C2 - C3 = 10nF, 50V CAPACITORS  
R1-R4 = 75 Ohms, 1/16 W, 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.
- MAGNETICS  
APPLICATION: 10/100/1000 BASE-T, EXTENDED TEMP  
IMPEDANCE: 100 OHMS  
TURNS RATIO (CHIP:CABLE): 1:1 ALL FOUR PAIRS  
OPEN CIRCUIT INDUCTANCE (OCL): 350uH MIN @100kHz, 0.1VRMS  
8mADC BIAS FROM -40°C TO +85°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: 2250VDC (MAX) FOR 60 SECONDS WITH A RISE TIME OF 500V/SEC AND WITH ALL PORTS CONNECTED
- PART NUMBER, DATE CODE AND COUNTRY OF ORIGIN ARE LOCATED IN APPROXIMATE AREA SHOWN. DATE CODE: "YY" IS YEAR, "WW" IS WORK WEEK, "D" IS DAY OF WEEK, WITH SUNDAY=1
- TE CONNECTIVITY LOGO AND AGENCY APPROVAL LOGO ARE LOCATED IN APPROXIMATE AREA SHOWN.
- OPERATING TEMP: FROM -40°C TO +85°C.
- RJ45 CAVITY CONFORMS TO FCC RULES AND REGULATION PART 68 SUBPART F.
- INDICATED MAGNETIC CONNECTIONS ARE SYMMETRICAL AND SUPPORT AUTO-MD1/MDIX.
- DATUM AND BASIC DIMENSION ESTABLISHED BY CUSTOMER.
- BASIC DIMENSION ESTABLISHED BY CUSTOMER, BUT MAY NOT BE GREATER THAN 5.08mm.
- 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=20 mA  
FORWARD VOLTAGE (VF): YELLOW 2.1V TYP. @ IF=20 mA
- THE PARTS ARE RECOMMENDED FOR WAVE SOLDERING PROCESS, PEAK TEMPERATURE 260°C MAX, 10 SECONDS MAX.

| 3.04  | GREEN        | YELLOW       | GREEN     | YELLOW    | 1-1840643-3 |
|-------|--------------|--------------|-----------|-----------|-------------|
| 2.50  | GREEN        | YELLOW       | GREEN     | YELLOW    | 1840643-3   |
| DIM A | BOTTOM LED 2 | BOTTOM LED 1 | TOP LED 2 | TOP LED 1 | PART NUMBER |

THIS DRAWING IS A CONTROLLED DOCUMENT

TE Connectivity

2X1 MAG56(TM) GIGABIT S8G56ET CIRCUIT, GROUND SHIELD, WITH LEDS

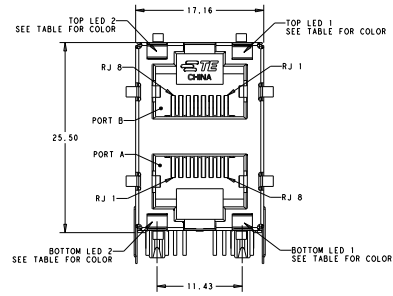
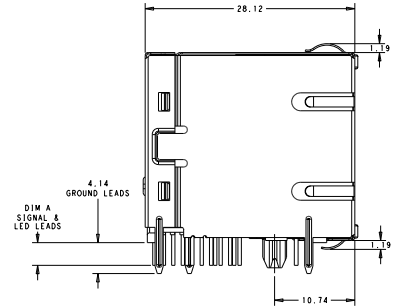
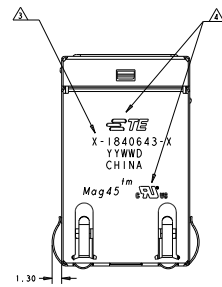
1840643

1840643

CUSTOMER DRAWING

|                            |                         |   |   |   |   |   |   |
|----------------------------|-------------------------|---|---|---|---|---|---|
| 8                          | 7                       | 6 | 5 | 4 | 3 | 2 | 1 |
| THIS DRAWING IS UNAPPROVED | RELEASED FOR PRODUCTION |   |   |   |   |   |   |
| © 2018 STMicroelectronics  | TE CONNECTIVITY         |   |   |   |   |   |   |

| REV | DATE | DESCRIPTION | BY | CHK | APP |
|-----|------|-------------|----|-----|-----|
| AA  | 00   | SEE SHEET 1 |    |     |     |

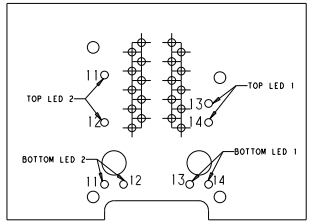


|                                       |  |  |      |    |     |     |
|---------------------------------------|--|--|------|----|-----|-----|
| THIS DRAWING IS A CONTROLLED DOCUMENT |  | REVISIONS  | DATE | BY | CHK | APP |
| DRAWN BY: J. J. J.                    |  | AA   | 00   |    |     |     |
| CHECKED BY: J. J. J.                  |  |  |      |    |     |     |
| DATE: 2018-04-04                      |  | DESCRIPTION  |      |    |     |     |
| PART NUMBER: X-1840643                |  | 2X1 MAG45(1M) GIGABIT SGM66ET CIRCUIT, GROUND SHIELD, WITH LEADS |      |    |     |     |
| CUSTOMER DRAWING                      |  | A 100773 1840643   |      |    |     |     |
| SCALE: 1:1                            |  | SHEET 2 OF 4   |      |    |     |     |

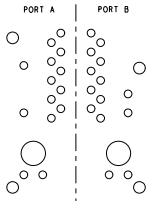
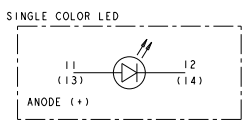
4885 12/11/11



| REVISONS |             | DATE | BY | CHK | APP |
|----------|-------------|------|----|-----|-----|
| 1        | SEE SHEET 1 | -    | -  | -   | -   |
|          |             |      |    |     |     |
|          |             |      |    |     |     |



LED HOLE DESIGNATIONS  
VIEWED FROM COMPONENT SIDE



PORT ASSIGNMENT  
COMPONENT SIDE VIEW

|                                       |                               |   |                           |
|---------------------------------------|-------------------------------|---|---------------------------|
| THIS DRAWING IS A CONTROLLED DOCUMENT |                               | DRAWN BY: J. J. J. J.<br>CHECKED BY: J. J. J. J.<br>DATE: 11/11/11            | 18 Connectivity           |
| SITUATION:<br>18 CONNECTIVITY         | REFERENCE:<br>18 CONNECTIVITY | PRODUCT CODE:<br>18-184064  | PART NUMBER:<br>18-184064 |
| MATERIAL:<br>18 CONNECTIVITY          | CUSTOMER DRAWING:<br>A100773  | TITLE:<br>2X1 MAG5617M1 GIGABIT S8G56ET<br>CIRCUIT, GROUND SHIELD, WITH LEADS | DRAWN BY:<br>J. J. J. J.  |