1. MATERIALS:
   - PLASTIC HOUSING: BLACK, THERMOPLASTIC FLAMMABILITY RATING UL 94V-0
   - SHIELD: BRASS PREPARED WITH 0.75um MIN TWO-BRIGHT NICKEL
   - POST DIPPED WITH 2.5um MIN SAC SOLDER ON SOLDER TAILS
   - CONTACTS: PHOSPHOR BRONZE, 1.27um MIN OVERALL NICKEL
   - UNDERPLATE WITH SELECTED 1.27um MIN ON MATTING INTERFACE
   - AND 0.5um MIN ON MATTE TIN ON SOLDER TAILS
   - LED: DIFFUSED(TEMPERED CARBON STEEL) LEAD FRAME TAILS OF LED
   - ARE PREPARED WITH 2.0um MIN SILVER OVER 1.05um MIN NICKEL
   - UNDERPLATE OVER 0.5um MIN COPPER UNDERPLATE POST-POLISHED
   - WITH 2.5um MIN MATTE TIN AND SAC SOLDER DIP OR PURE TIN SOLDER DIP
   - ALL PCBs: HIGH TEMPERATURE PCB, 165°C

2. MAGNETICS:
   - APPLICATION: 10/10N/1000 BASE-1
   - IMPEDANCE: 100 OHMS
   - TURNS RATIO 1CR1-100: 1:1 ALL FOUR PAIRS
   - OPEN CIRCUIT INDUCTANCE (OCL): 350µH MIN @ 100kHz, 0.1V RMS
   - LOW BIAS FROM 0°C TO 70°C, ALL FOUR PAIRS
   - DI-DIRECTIONAL PERFORMANCE @ 25°C:
     - INSERTION LOSS (IL): 1.1dB MAX FROM 0 MHz TO 100MHz
     - RETURN LOSS (RL): 18dB MIN FROM 0 MHz TO 40MHz
     - 12-20dBGS/80dBGS MIN FROM 40 MHz TO 100MHz
     - CROSS TALK ATTENUATION: 35dB MIN FROM 0 MHz TO 40MHz
     - COMMON MODE REJECTION RATIO (CMRR): 33-350dBGS/550dBGS MIN FROM 40 MHz TO 100MHz
     - ISOLATION VOLTAGE: 2500VAC(MAX) FOR 60 SECONDS WITH A RISE TIME OF
   - 1000V/SEC AND WITH ALL PORTS CONNECTED

3. PART NUMBER, DATE CODE AND COUNTRY OF ORIGIN ARE LOCATED IN APPROPRIATE AREA SHOWN. DATE CODE: "XX" IS YEAR, "WW" IS WORK WEEK. "D" IS DAY OF WEEK, WITH SUNDAY.

4. TRP LOGO AND AGENCY APPROVAL LOGO ARE LOCATED IN APPROXIMATE AREA SHOWN.

5. OPERATING TEMP: FROM 0°C TO +70°C

6. R145 CAVITY CONFORMS TO FCC RULES AND REGULATION PART 68 SUBPART F.

7. INDICATED MAGNETIC CONNECTIONS ARE SYMMETRICAL AND SUPPORT AUTO-MODULATION.

8. DATUM AND BASIC DIMENSIONS ESTABLISHED BY CUSTOMER.

9. BASIC DIMENSIONS ESTABLISHED BY CUSTOMER, BUT MAY NOT BE GREATER THAN 5.00mm.

10. LED COLOR: DOMINANT WAVELENGTH (λD): GREEN 588 nm TYP, @ 1W/20mA
    - FORWARD VOLTAGE (VF): GREEN 2.4V TYP, @ 1W/20mA
    - DOMINANT WAVELENGTH (λD): YELLOW 588 nm TYP, @ 1W/20mA
    - FORWARD VOLTAGE (VF): YELLOW 2.4V TYP, @ 1W/20mA
    - DOMINANT WAVELENGTH (λD): ORANGE 605 nm TYP, @ 1W/20mA
    - FORWARD VOLTAGE (VF): ORANGE 2.4V TYP, @ 1W/20mA

11. THE PARTS ARE RECOMMENDED FOR WAVE SOLDERING PROCESS.

   PEAK TEMPERATURE 260°C MAX, 10 SECONDS MAX.

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S8G56 GIGABIT CIRCUIT

TOP AND BOTTOM PORTS

C1 = 1000μF, 2kV CAPACITOR
C2 - C3 = 10μF, 50V CAPACITORS
R1-R4 = 15 Ohms, 1/16 W RESISTORS