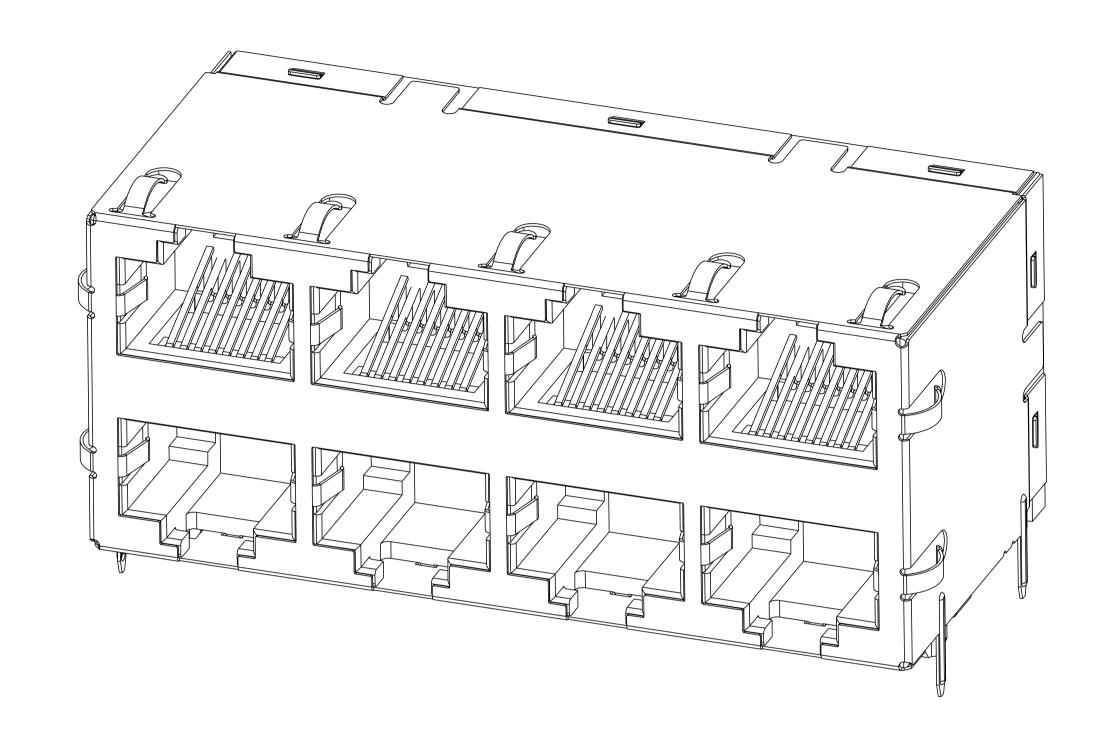
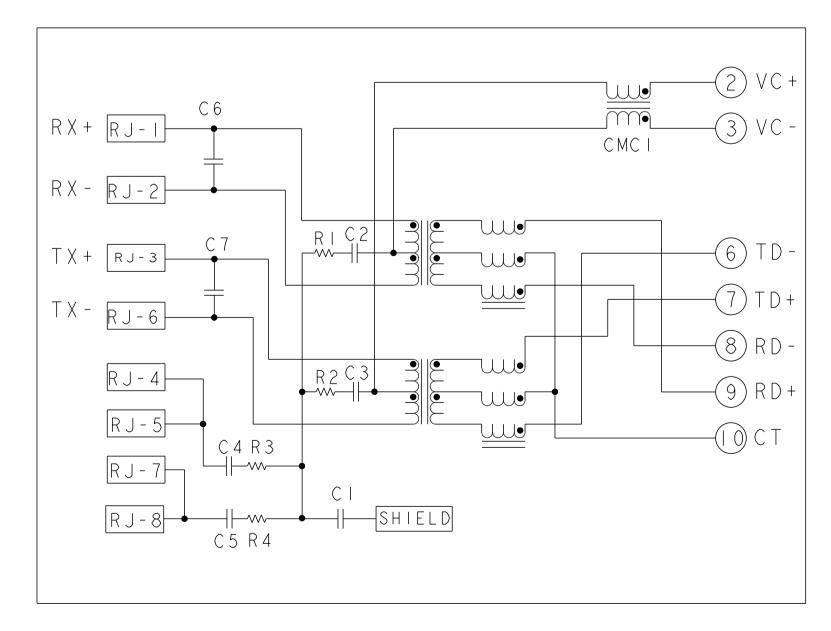
REVISIONS

P LTR DESCRIPTION DATE DWN APVD

D EC-1411035 COMPANY LOGO CHANGE 18DEC2014 GZ TY

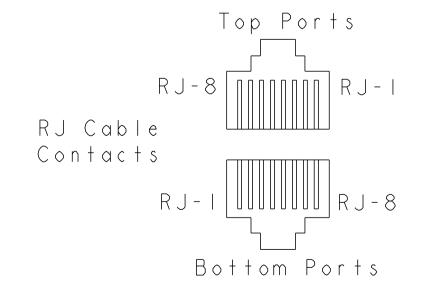


## S8V21 10/100 BASE-T POE CIRCUIT TOP AND BOTTOM PORTS



CI = 1000pF, 2KV,  $\pm 10\%$ , X7R DECOUPLING CAPACITOR C2 - C5 = 0.022uF, 10%, 100V CAPACITORS C6 - C7 = 3.3 PF, 10%, 16V CAPACITORS RI-R4 = 75 Ohms, 1/16 W,  $\pm 5\%$  RESISTORS

## Pin Designations (Repeat for each vertical pair of ports.)



I. MATERIALS:
PLASTIC HOUSING: BLACK, THERMOPLASTIC FLAMMABILITY RATING UL 94V-0
SHIELD: BRASS, PREPLATED WITH 0.76 um MIN SEMI-BRIGHT NICKEL,
POST DIPPED WITH 2.54 um MIN SAC SOLDER ON SOLDER TAILS,
CONTACTS: PHOSPHOR BRONZE, I.27 um MIN OVERALL NICKEL
UNDERPLATE WITH SELECTED I.27 um MIN GOLD AT MATING INTERFACE
AND 2.54 um MIN MATTE TIN ON SOLDER TAILS.
ALL PC BOARDS: HIGH TEMPERATURE PCB, TG>170°C

APPLICATION: 10/100 BASE-T, PoE
IMPEDANCE: 100 OHMS
TURNS RATIO (CHIP:CABLE): TX = 1:1, RX = 1:1
OPEN CIRCUIT INDUCTANCE (OCL): 350uH MIN @100kHz, 0.1VRMS,
8mADC BIAS FROM 0°C TO 70°C, TX AND RX
POE CURRENT: 350mADC MAX
PERFORMANCE @ 25°C:
INSERTION LOSS (IL): 1.1dB MAX FROM 0.5MHz TO 100MHz
RETURN LOSS (RL): 18dB MIN FROM 0.5MHz TO 30MHz

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.

18-20LOG(f/30)dB MIN FROM 30.IMHz TO 60MHz

PART NUMBER, DATE CODE AND COUNTRY OF ORIGIN ARE LOCATED IN APPROXIMATE AREA SHOWN.DATE CODE: YYWWD "YY" IS YEAR, "WW" IS WORK WEEK, "D" IS DAY OF WEEK, WITH SUNDAY=I

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

5. OPERATING TEMP: FROM 0°C TO +70°C.

6. RJ45 CAVITY CONFORMS TO FCC RULES AND REGULATION PART 68 SUBPART F.

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

DATUM AND BASIC DIMENSION ESTABLISHED BY CUSTOMER.

BASIC DIMENSION ESTABLISHED BY CUSTOMER, BUT MAY NOT BE GREATER THAN 5.08mm.

IO. THE PARTS ARE RECOMMENDED FOR WAVE SOLDERING PROCESS, PEAK TEMPERATURE 260°C MAX, IO SECONDS MAX.

THIS DRAWING IS A CONTROLLED DOCUMENT.

| TOLERANCES UNLESS OTHERWISE SPECIFIED: | NOMMY REN | 30DEC2009 | TOMMY REN | 30DEC2009 | NETHERWISE SPECIFIED: | NETHERWISE SPECIFIE

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