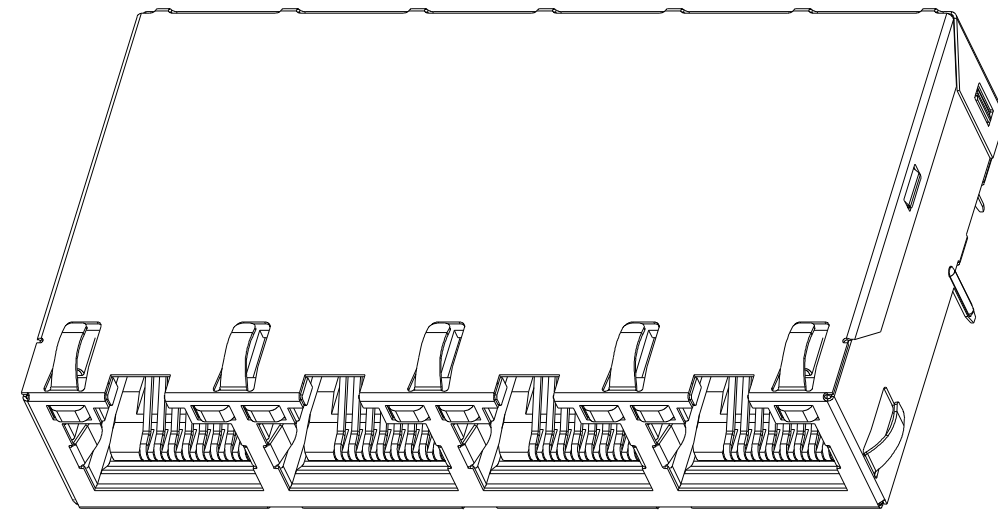
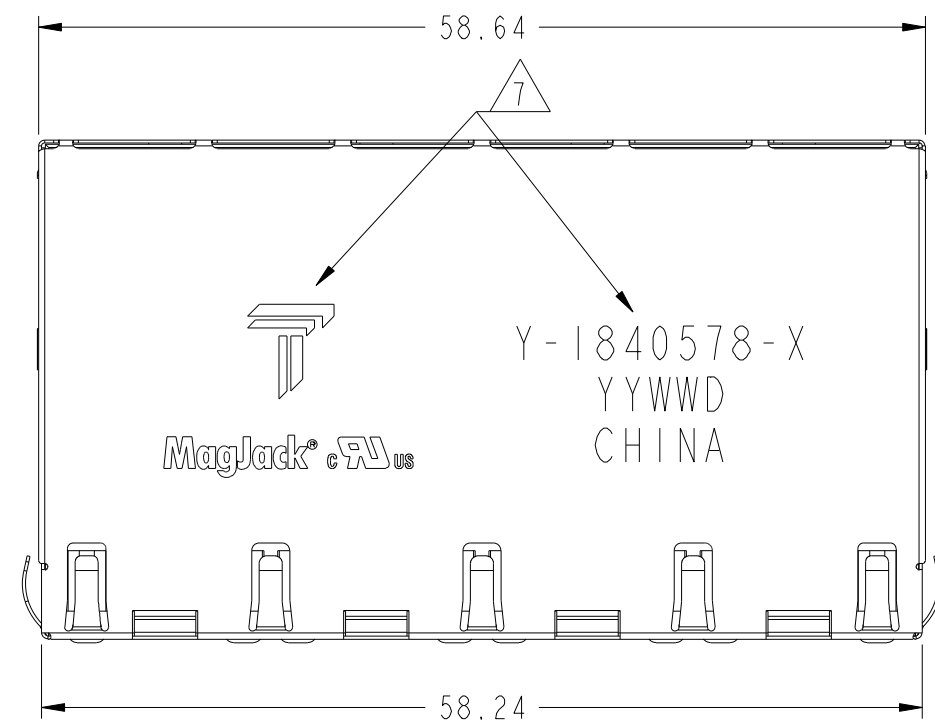


THIS DRAWING AND THE SUBJECT MATTER SHOWN THEREON ARE CONFIDENTIAL AND THE PROPERTY OF BEL/STEWART/TRP CONNECTOR AND SHALL NOT BE REPRODUCED, COPIED, OR USED IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF TRP CONNECTOR.

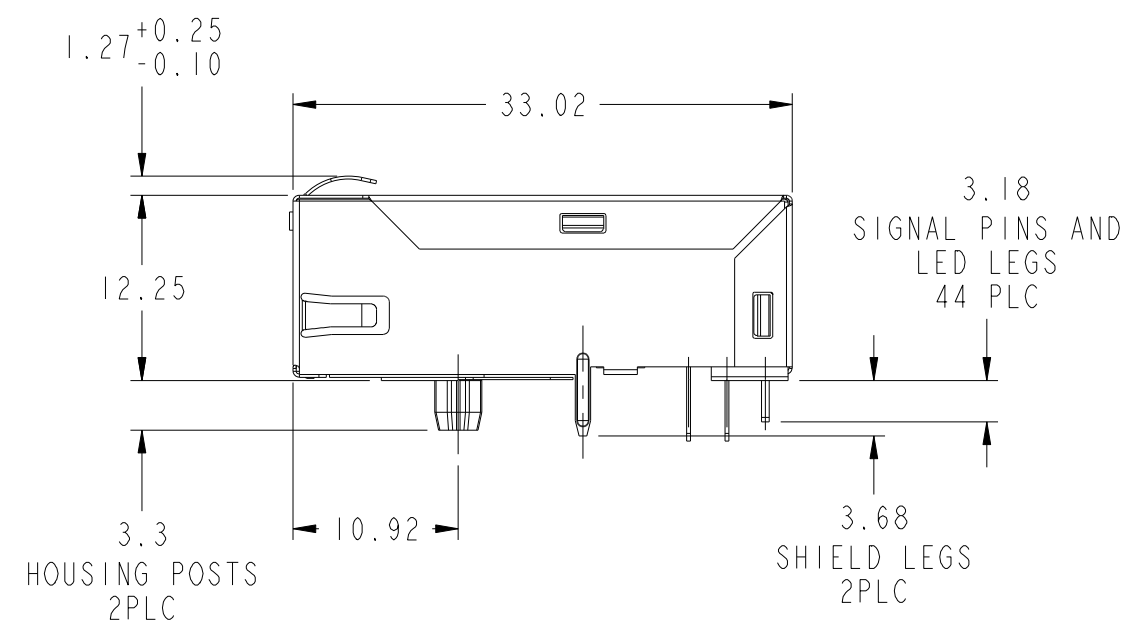
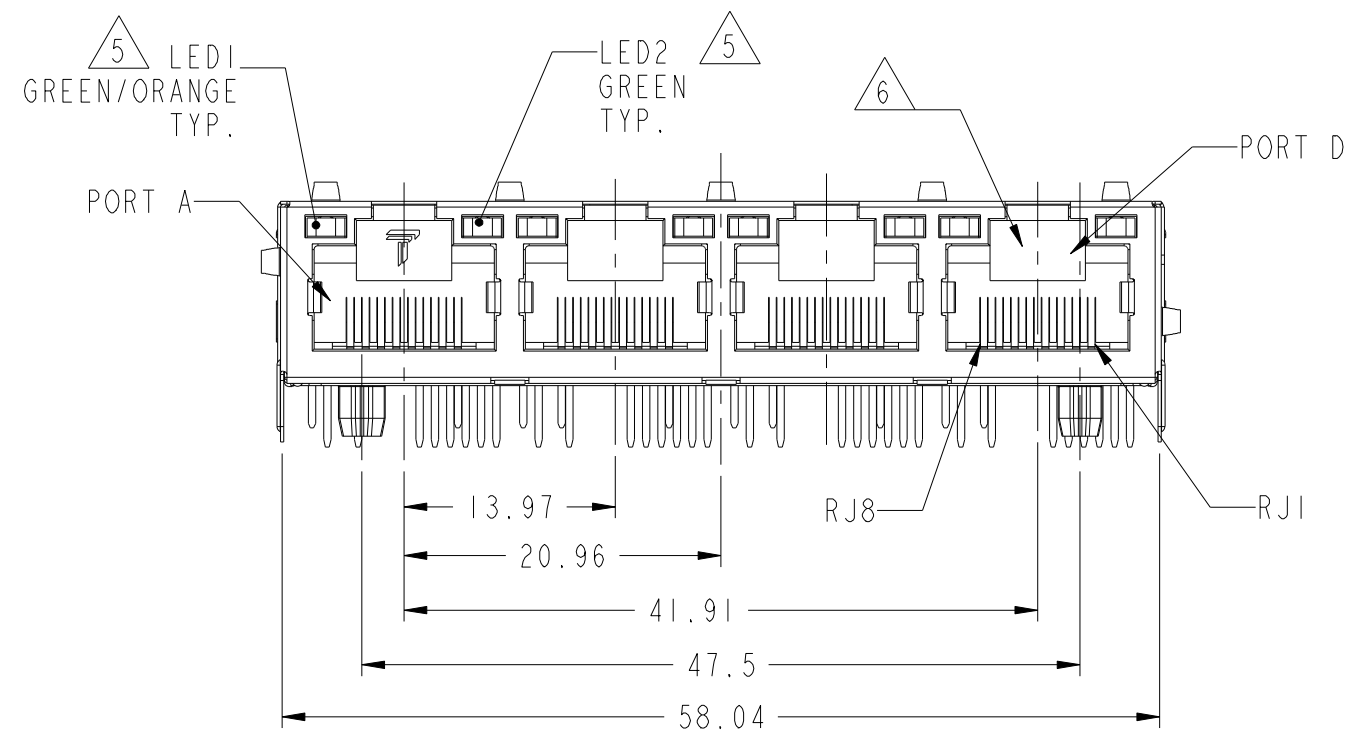
PRODUCT MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING US PATENTS:
5736910 5939955 6425781 6428361 6554638 6840817 7123117
7429195 7717749 7808751 6217391 6149050 7924130

REVISIONS						
P	LTR	DESCRIPTION	DATE	DWN	APVD	
	10	EC-1411035 COMPANY LOGO CHANGE	23DEC2014	DP	TY	



1. MATERIALS

HOUSING: THERMOPLASTIC, BLACK, FLAMMABILITY RATING UL 94V-0
SHIELD: BRASS, 0.20mm THICK, PREPLATED WITH MIN 0.76μm SEMI-BRIGHT NICKEL
POST DIPPED WITH 2.54μm MIN SAC SOLDER AT GROUND PINS.
CONTACT: PHOSPHOR BRONZE, 0.46mm X0.30mm
WITH 1.27μm MIN OVERALL NICKEL UNDERPLATE AND
SELECTIVE 1.27μm MIN GOLD PLATING AT MATING INTERFACE
SOLDER TAIL: 0.25mm THICK, PHOSPHOR BRONZE, 1.27μm MIN OVERALL NICKEL
UNDERPLATE, 3μm MIN TIN PLATE
LIGHT PIPE: POLYCARBON, TRANSPARENT, RATING UL 94V-0
LED: DIFFUSED EPOXY LENS, CARBON STEEL WIREFRAME LEADS
PREPLATED WITH 2.03μm MIN SILVER OVER 1.02μm MIN NICKEL UNDERPLATE
OVER 1.02μm MIN COPPER UNDERPLATE; POST PLATED WITH 2.54μm MIN MATTE TIN.



2

MAGNETICS

- ```
-APPLICATION: 10/100 BASE-T, PoE
-IMPEDANCE: 100 OHMS
-TURNS RATIO (CHIP:CABLE): TX = 1:1, RX = 1:1
-OPEN CIRCUIT INDUCTANCE (OCL): 350µH 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
 18-20LOG(f/30)dB MIN FROM 30.1MHz TO 60MHz
 12dB MIN FROM 60.1MHz TO 80MHz
 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:1500VAC (MAX) AT 60Hz FOR 60 SECS WITH ALL PORTS CONNECTED.
```

3

THE MAGNETICS ARE SYMMETRICAL TO SUPPORT AUTO-MDIX OPERATION.

4.

4. OPERATING TEMPERATURE: 0°C ~ 70°C

5

LEDs ARE DRIVEN WITH CONSTANT CURRENT AT APPROX 20mA.  
LED COLOR: DOMINANT WAVELENGTH ( $\lambda_D$ ): GREEN 568 nm TYP. @ IF=20mA  
FORWARD VOLTAGE (VF): GREEN 2.2V TYP. @ IF=20mA  
DOMINANT WAVELENGTH ( $\lambda_D$ ): ORANGE 610 nm TYP. @ IF=20mA  
FORWARD VOLTAGE (VF): ORANGE 2.1V TYP. @ IF=20mA



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

7

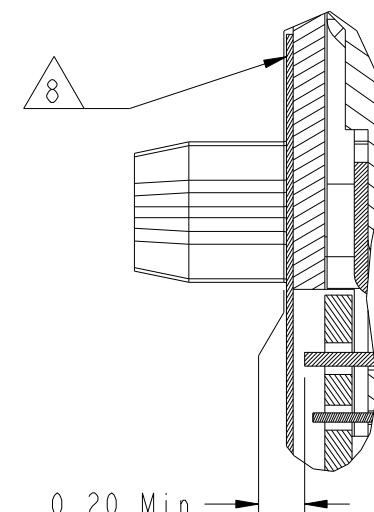
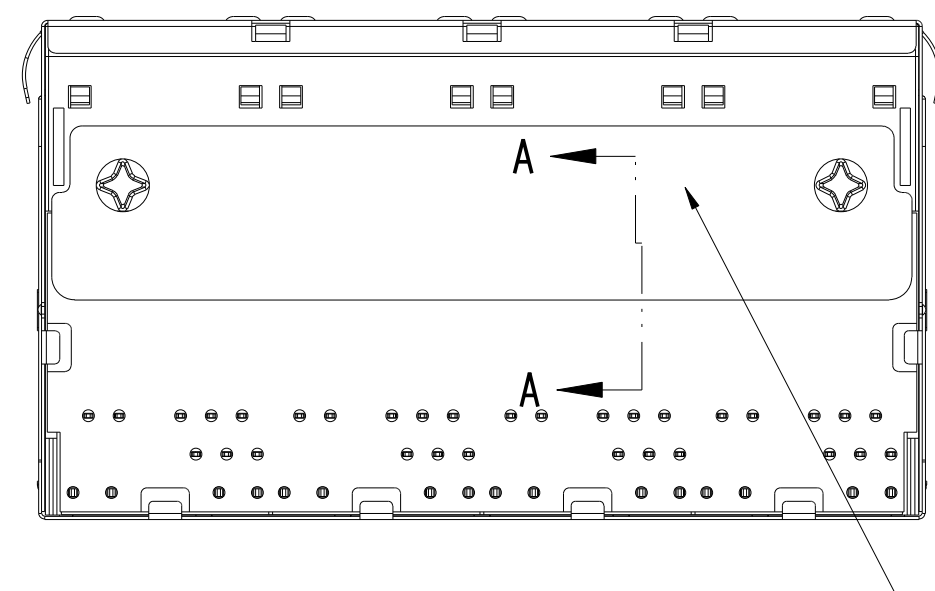
TRP CONNECTOR LOGO, PART NUMBER, DATE CODE, COUNTRY OF ORIGIN,  
AGENCY APPROVAL MARKING IN APPROPRIATE LOCATION SHOWN.  
DATE CODE: YYWW "YY" IS YEAR, "WW" IS WORK WEEK, "D" IS DAY OF WEEK,  
WITH SUNDAY=1.



KAPTON SHEET IS PASTED AS SHOWN FOR AVOID HI-POT ISSUE BETWEEN CONNECTOR WITH CUSTOMER BOARD.

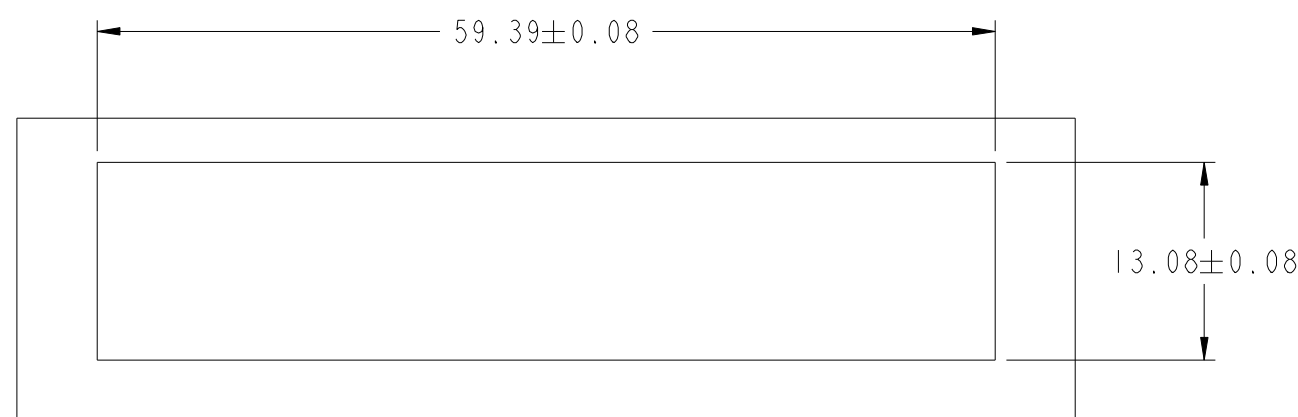
9

9. PART SHOULD BE RECOMMENDED FOR WAVE SOLDERING PROCESS, PEAK WAVE SOLDERING TEMPERATURE IS 260°C, 10<sub>sec</sub> MAX.

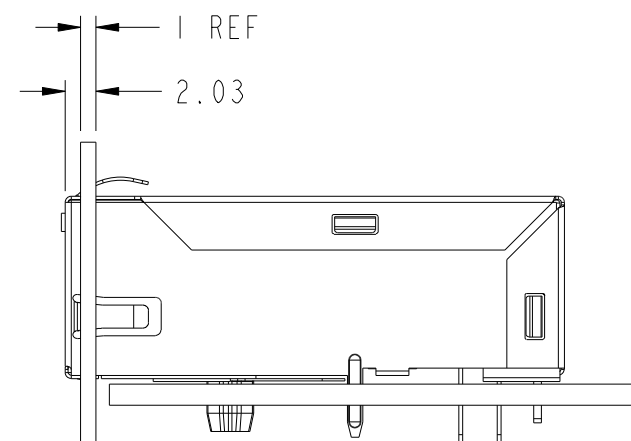


0.20 Min  
(STAND-OFF TO TIP OF PINS)


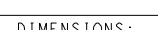
SECTION **A - A**  
SCALE 6:1

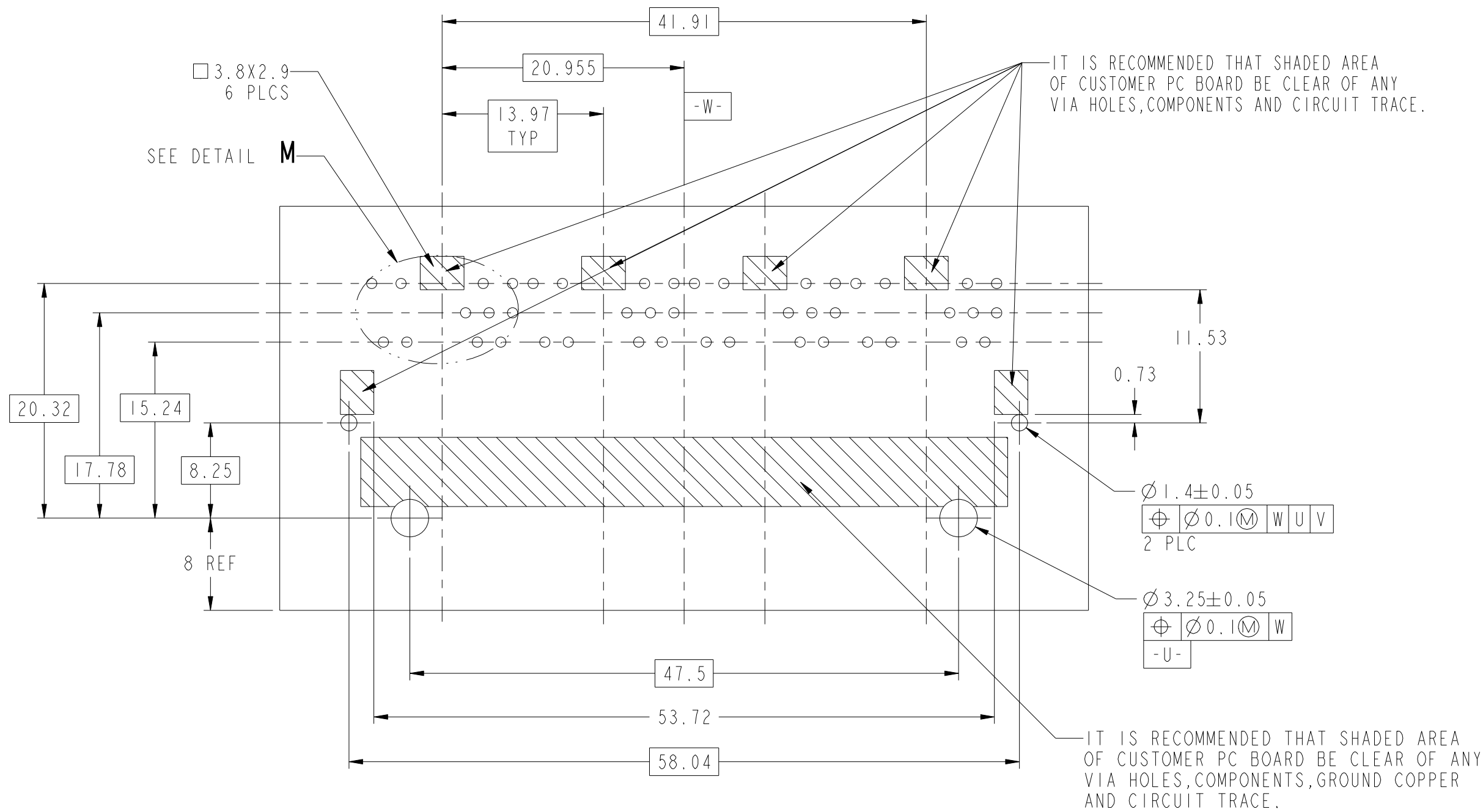


SUGGESTED PANEL CUTOUT  
SCALE 2:1

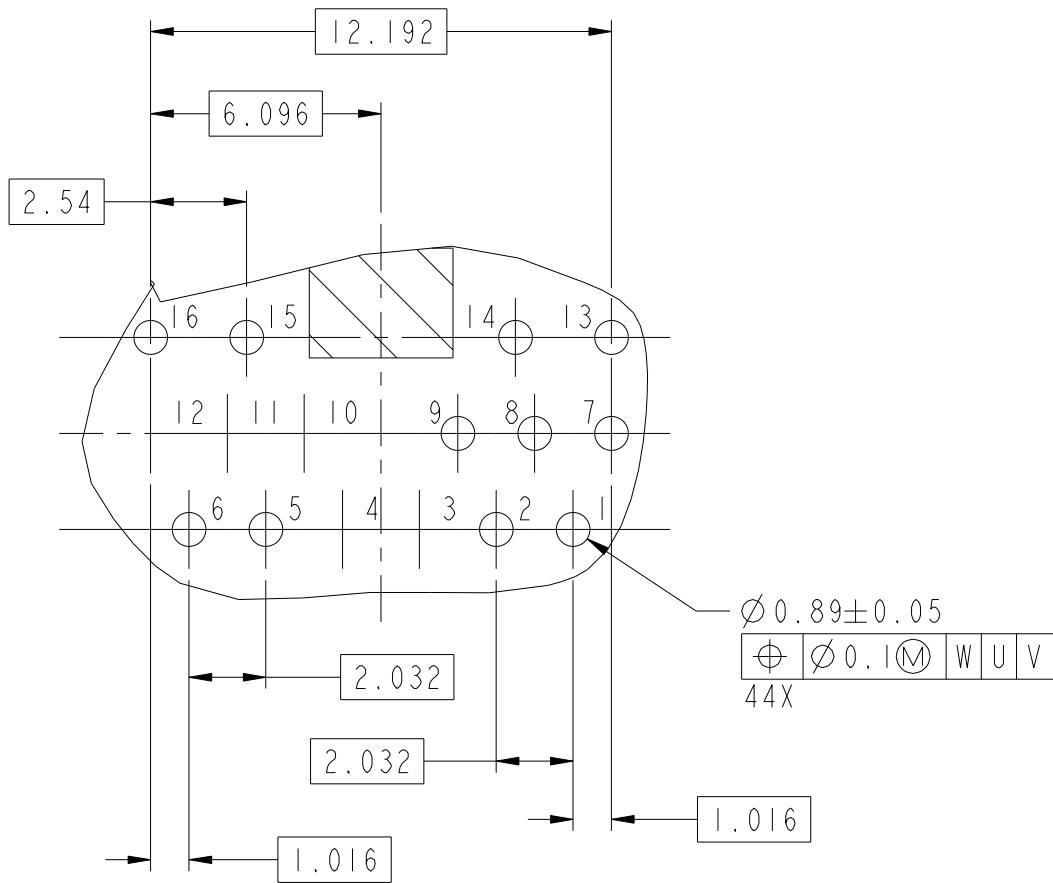


CONNECTOR ASSEMBLED  
TO PANEL AND PCB  
SCALE 2:1

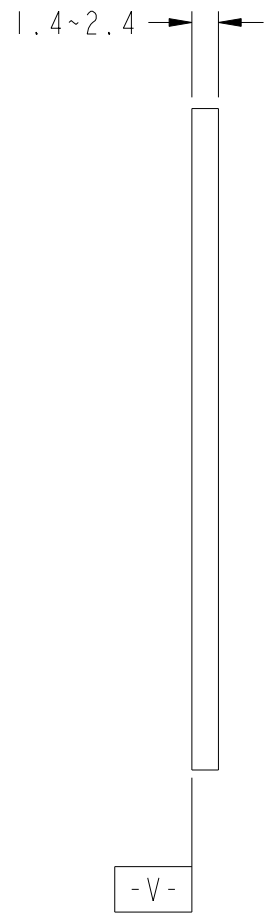
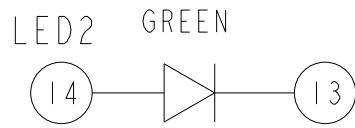
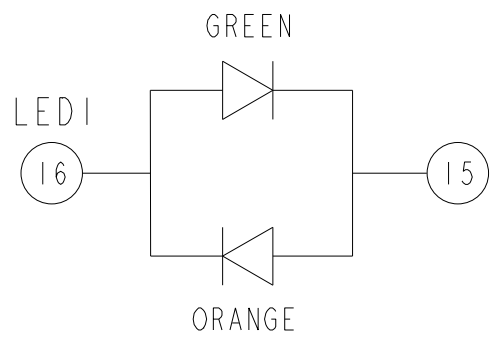
|                                                                                       |  |                                                                                             |  |                                                                                                                           |           |                         |                    |
|---------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------------------|-----------|-------------------------|--------------------|
| THIS DRAWING IS A CONTROLLED DOCUMENT.                                                |  | DWN TOWER YU 19NOV2009<br>CHK KEITH ZHU 19NOV2009<br>APVD KEITH ZHU 19NOV2009<br>MODEL NAME |  |  <b>trp</b> CONNECTOR<br>a bel group |           | DONGGUAN CHINA          |                    |
| DIMENSIONS:<br>mm                                                                     |  | TOLERANCES UNLESS OTHERWISE SPECIFIED:                                                      |  | DESC 1X4 7V56P25 10/100 POE TAB UP<br>LOW PROFILE W/ LED                                                                  |           |                         |                    |
|  |  | 0 PLC ±-<br>1 PLC ±0.25<br>2 PLC ±0.25<br>3 PLC ±0.25<br>4 PLC ±-<br>ANGLES ±-              |  |                                                                                                                           |           |                         |                    |
| PRODUCT SPEC<br>108-104004                                                            |  | APPLICATION SPEC<br>-                                                                       |  | SIZE<br>A2                                                                                                                | CAGE CODE | DRAWING NO<br>C=1840578 | RESTRICTED TO<br>- |
| CUSTOMER DRAWING                                                                      |  |                                                                                             |  | SCALE                                                                                                                     | NTS       | SHEET                   | 1 OF 2             |
|                                                                                       |  |                                                                                             |  | REV                                                                                                                       | 10        |                         |                    |



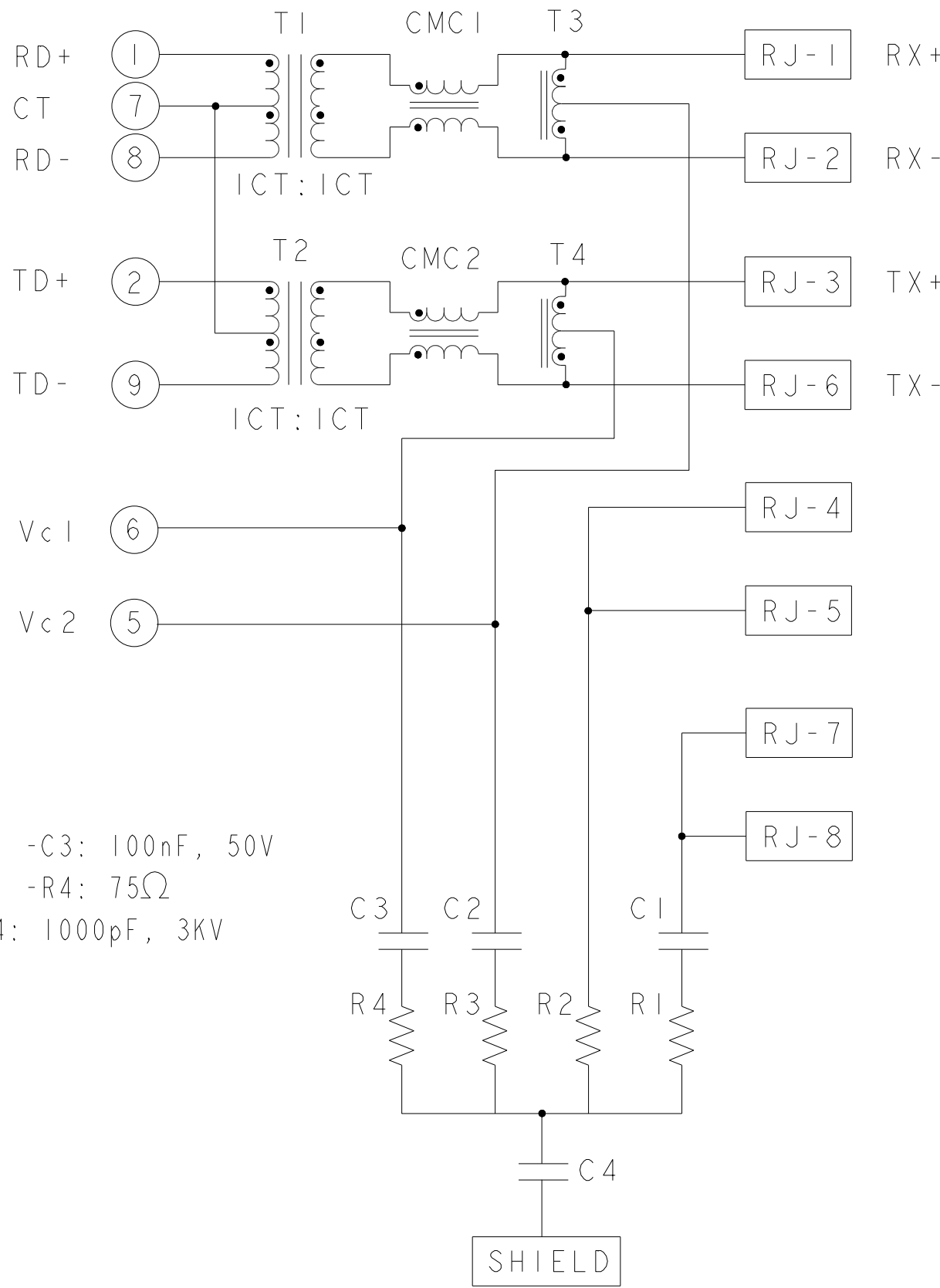
SUGGESTED PCB FOOTPRINT  
COMPONENT SIDE  
SCALE 2:1





DETAIL M  
SCALE 5:1



7V56P25 10/100 BASE-T PoE CIRCUIT



C1 -C3: 100nF, 50V  
R1 -R4: 75Ω  
C4: 1000pF, 3KV

|                                                                                       |  |                                                                                                    |           |                                                                                                                           |            |                         |           |
|---------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------|-----------|---------------------------------------------------------------------------------------------------------------------------|------------|-------------------------|-----------|
| THIS DRAWING IS A CONTROLLED DOCUMENT.                                                |  | DWN<br>TOWER YU                                                                                    | 19NOV2009 |  <b>trp</b> CONNECTOR<br>a bel group |            | DONGGUAN<br>CHINA       |           |
| DIMENSIONS:<br>mm                                                                     |  | CHK<br>KEITH ZHU                                                                                   | 19NOV2009 |                                                                                                                           |            |                         |           |
|  |  | APVD<br>KEITH ZHU                                                                                  | 19NOV2009 |                                                                                                                           |            |                         |           |
|                                                                                       |  | MODEL NAME                                                                                         |           |                                                                                                                           |            |                         |           |
| PRODUCT SPEC<br><br>108-104004                                                        |  | MAGJACK<br>GANG PoE                                                                                |           | DESC<br>1X4 7V56P25 10/100 POE TAB UP<br>LOW PROFILE W/ LED                                                               |            |                         |           |
| TOLERANCES UNLESS<br>OTHERWISE SPECIFIED:                                             |  | 0 PLC ±-<br>1 PLC ±0.25<br>2 PLC ±0.25<br>3 PLC ±0.25<br>4 PLC ±-<br>ANGLES ±-<br>APPLICATION SPEC |           | SIZE<br>A2                                                                                                                | CAGE CODE  | DRAWING NO<br>C-1840578 |           |
| CUSTOMER DRAWING                                                                      |  |                                                                                                    |           | SCALE<br>NTS                                                                                                              | SHEET<br>2 | OF<br>2                 | REV<br>10 |