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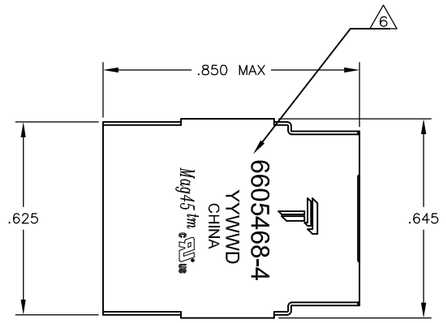
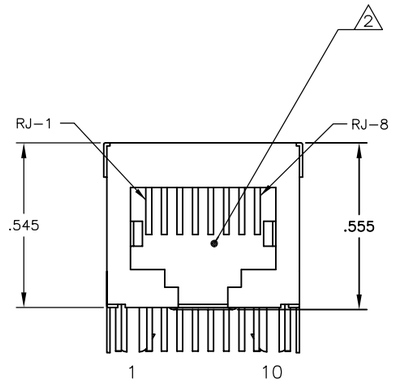
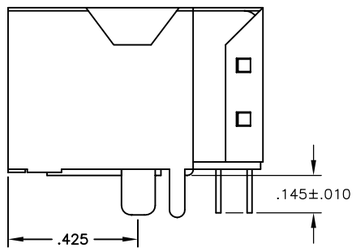
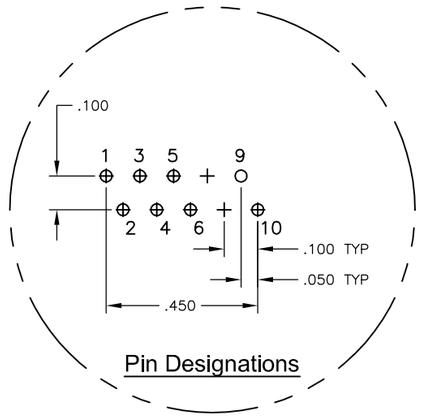
REVISIONS					
P	LTR	DESCRIPTION	DATE	DWN	APVD
	E	LOGO CHANGE	23APR2013	JC	KZ

MECHANICAL:





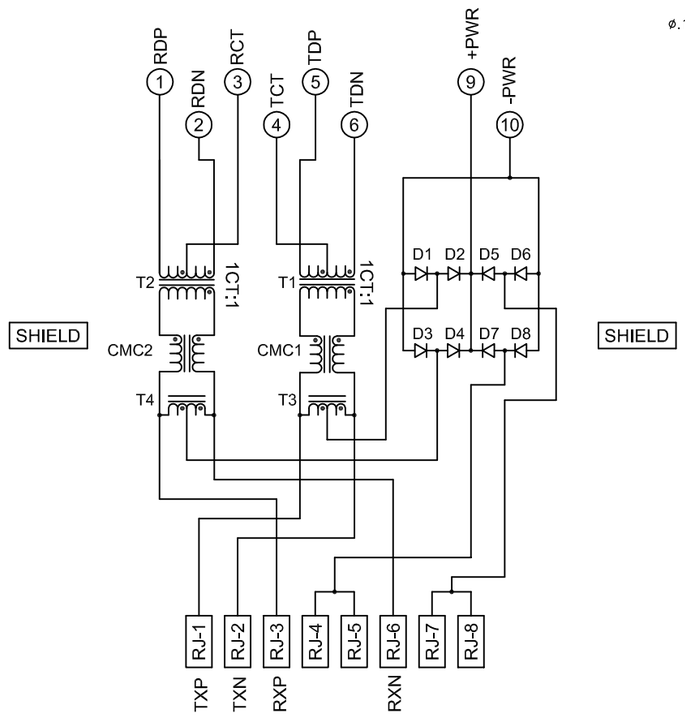




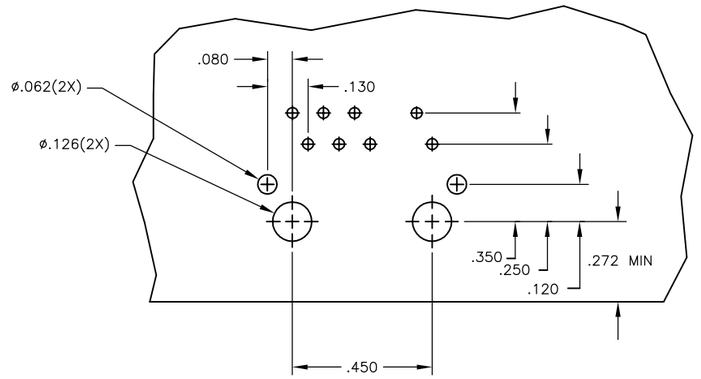
Pin Designations

ELECTRICAL:

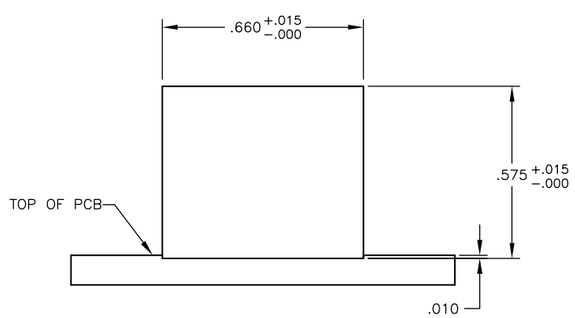
4D15ET 10/100 BASE-T PoE CIRCUIT 3 5



D1–D8 = RECTIFIER DIODE
–FORWARD VOLTAGE, Vf = 1.2V MAX @ If= 0.5A
–FORWARD CURRENT, If = 0.5A MAX
–REVERESE VOLTAGE, Vr = 80V MAX



Suggested PCB Layout
(Component Side)



Suggested Panel Cutout

1. MATERIALS:
HOUSING – THERMOPLASTIC PET POLYESTER FLAMMABILITY RATING UL 94V-0.
SHIELD – .010" THICK, C26800 BRASS PREPLATED WITH 30µINCH MIN SEMI-BRIGHT NICKEL. SOLDER TABS POST DIPPED WITH 100µINCH MIN SAC SOLDER.
MOD JACK CONTACTS – 0.0157 X 0.018" PHOSPHOR BRONZE, 50µINCH MIN OVERALL NICKEL UNDERPLATE WITH SELECT 50µINCH MIN HARD GOLD FINISH PLATE.
SOLDERTAILS WITH 100µINCH MIN MATTE TIN AND/OR SAC SOLDER DIP.

2. RJ45 JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS PART 68, SUB PART F.

3. MAGNETICS
-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 -40°C TO +85°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
33-20*LOG(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.

4. OPERATING TEMPERATURE: FROM -40°C TO +85°C.

5. THE MAGNETICS ARE SYMMETRIC TO SUPPORT AUTO-MDI/MDIX.

6. TRP CONNECTOR LOGO, PART NUMBER, DATE CODE, COUNTRY OF ORIGIN AND AGENCY APPROVAL MARKING IN APPROXIMATE LOCATION SHOWN.

7. THE PART IS RECOMMENDED FOR WAVE SOLDERING PROCESS, PREHEAT TEMPERATURE IS 120°C TO 160°C, 120 SECONDS TO 180 SECONDS, PEAK WAVE SOLDERING TEMPERATURE IS 260°C MAX, 10 SECONDS MAX.

THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS: INCHES
TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ± – ; 1 PLC ± – ; 2 PLC ± .010 ; 3 PLC ± .005 ; 4 PLC ± – ; ANGLES ± –
MATERIAL 1
FINISH 1

DWN L. VARELA – DOCK5 08MAR2005
CHK D. FAROLE 08MAR2005
APVD D. FAROLE 08MAR2005
PRODUCT SPEC 108-2100
APPLICATION SPEC –
WEIGHT –

TRP connector
Dongguan China

NAME 1X1 MAG45(TM), MODULAR JACK, 4DN2 SCHEMATIC, 4D15ET SERIES PoE CIRCUIT, SHIELDED, NO LEDS
SIZE A1 | CAGE CODE | DRAWING NO C=6605468 | RESTRICTED TO –
CUSTOMER DRAWING | SCALE NTS | SHEET 1 OF 1 | REV E

6605468-4
PART NUMBER