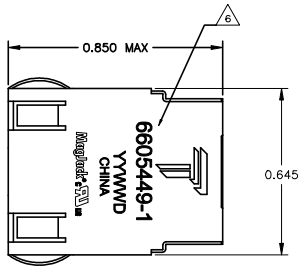
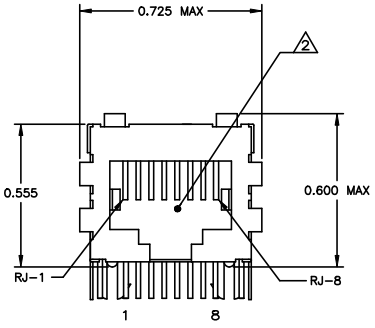
THIS DRAWING AND THE SUBJECT MATTER SHOWN THEREON ARE CONFIDENTIAL AND THE PROPERTY OF BEL/STEWART/TRP CONNECTOR AND SHALL NOT BE REPRODUCED, COPIED, OR USED IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF TRP CONNECTOR.

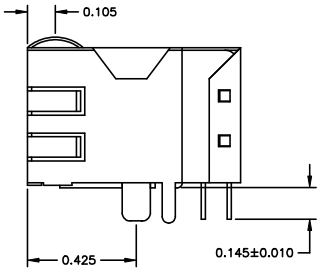
PRODUCT MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING US PATENTS:
5736910 5939955 6425781 6428361 6554638 6840817 7123117
7429195 7717749 7808751 6217391 6149050 7924130

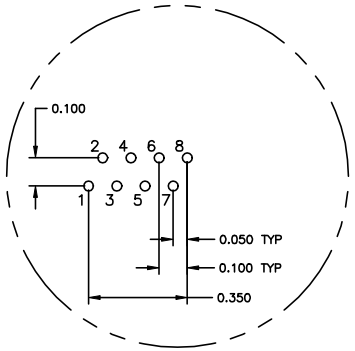
REVISIONS					
P	LTR REV	DESCRIPTION	DATE	DWN	APVD
	E	EC-1411035 COMPANY LOGO CHANGE	29DEC2014	ST	TL

MECHANICAL:









Pin Designations

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.

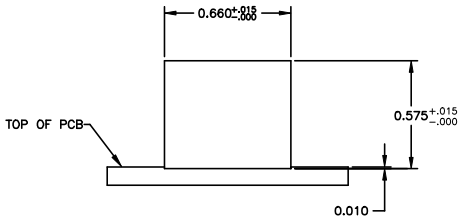
3 MAGNETICS
-APPLICATION: 10/100 BASE-T
-IMPEDANCE: 100 OHMS
-TURNS RATIO (CHIP:CABLE): TX = 1:1.41, RX = 1:1
-OPEN CIRCUIT INDUCTANCE (OCL): 350µH MIN @100kHz, 0.1VRMS, 8mADC BIAS FROM 0°C TO 70°C, TX AND RX
-PERFORMANCE @ 25°C:
INSERTION LOSS (IL): 1.1dB MAX FROM 0.5MHz TO 100MHz
RETURN LOSS (RL): 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:2250VDC (MAX) FOR 60 SECONDS WITH A RISE TIME OF 500V/SEC.

4 OPERATING TEMPERATURE: FROM 0°C TO +70°C

5 INDICATED CONNECTIONS ARE FOR NIC CONFIGURATION. THE MAGNETICS ARE ASYMMETRIC, AND THEREFORE DO NOT SUPPORT AUTO-MDI/MDIX.

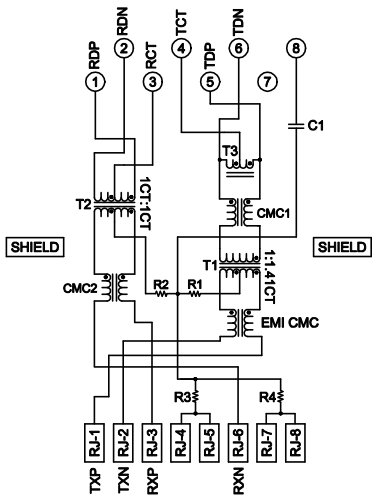
6 TRP CONNECTOR LOGO, PART NUMBER, DATE CODE, COUNTRY OF ORIGIN AND AGENCY APPROVAL MARKING IN APPROXIMATE LOCATION SHOWN.

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.



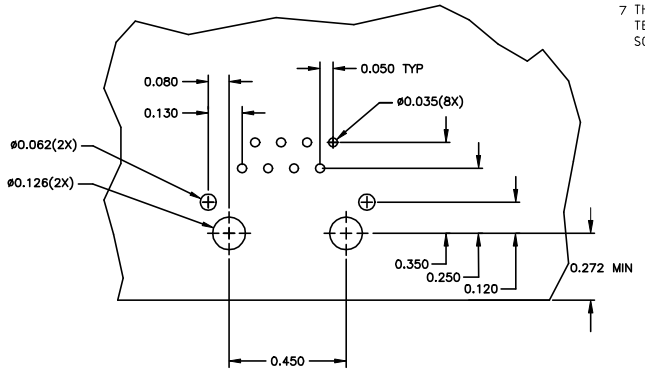
Suggested Panel Cutout

416 SERIES MAGNETIC CIRCUIT 3 5



C1= 1000 pF, 2kV DECOUPLING CAPACITOR

R1-R4 = 75 OHMS, 1/16 W RESISTORS



Suggested PCB Layout
(Component Side)

THIS DRAWING IS A CONTROLLED DOCUMENT.	DRN A. FERNANDEZ-DOCKS 04MAR2005	trp CONNECTOR a bel group	DONGGUAN CHINA
DIMENSIONS: INCHES	CHK D. FAROLE 04MAR2005		
TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ± –; 1 PLC ± –; 2 PLC ± 0.010; 3 PLC ± 0.005; 4 PLC ± –; ANGLES ± –	APVD D. FAROLE 04MAR2005	DESC 1X1 416 10/100 TAB DOWN W/O LED –	
PRODUCT SPEC 108-2100	APPLICATION SPEC –	MODEL NAME MAGJACK SINGLE NON-POE	SIZE A1 / CAGE CODE / DRAWING NO C-6605449 / RESTRICTED TO –
		CUSTOMER DRAWING	SCALE NTS / SHEET 1 OF 1 / REV E

6605449-1
PART NUMBER