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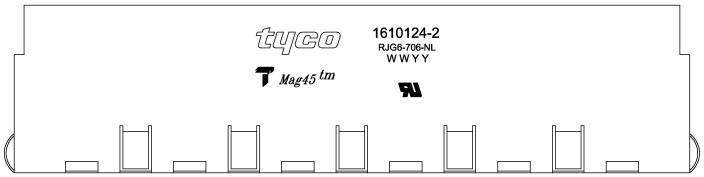
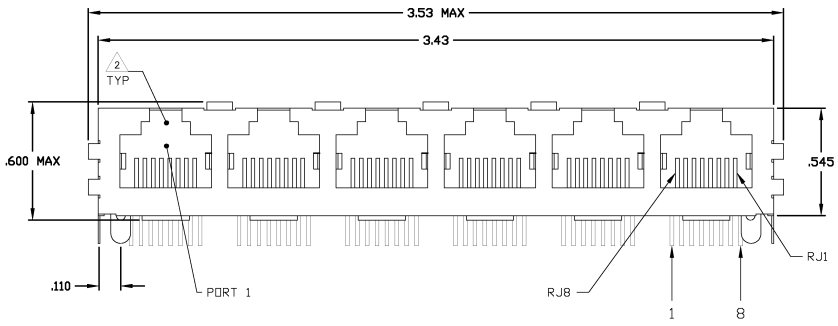
LOC	DIST
AA	22

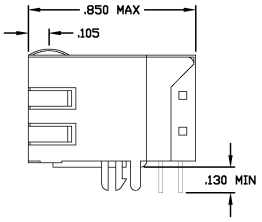
REVISIONS

P	LTR	DESCRIPTION	DATE	DWN	APVD
	O	RELEASED PER EC 0515-0087-02	24AUG2002	EB	ECL

MECHANICAL:





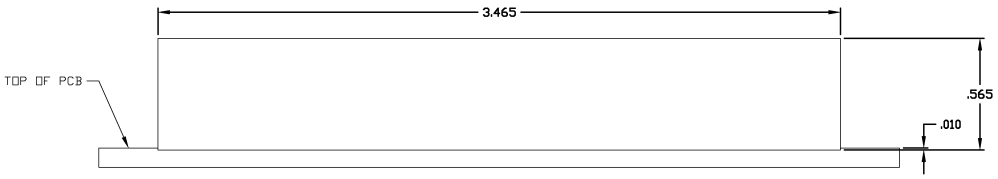


NOTES:

1. MATERIALS:
-HOUSING - THERMOPLASTIC PET POLYESTER FLAMMABILITY RATING UL 94V-0.
-SHIELD - .010" THICK, C26800 BRASS PREPLATED WITH 80-150µIN SEMI-BRIGHT NICKEL; POST-DIPPED WITH 100µIN MIN TIN-LEAD.
-MOD JACK CONTACTS - .012" X .018", PHOSPHOR BRONZE, 50µIN MIN OVERALL NICKEL UNDERPLATE, WITH SELECT 50µIN MIN HARD GOLD FINISH PLATE.
SOLDERTAILS WITH 5µIN MIN NICKEL PLATE.

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

MAGNETICS:
2. -IMPEDANCE: 100 OHMS.
-TRANSMIT OPEN CIRCUIT INDUCTANCE (OCL): 350µH (MIN) @100KHZ, 0.1VRMS WITH 8 mA DC BIAS.
3. -RISE TIME: 2.5 NANO-SECONDS FROM 10 TO 90 PERCENT.
-TURNS RATIO (CHIP-CABLE): TX-1:1, RX-1:1
PERFORMANCE:
-TRANSMIT RJ1 & 2.
RECEIVE RJ3 & 6.
-INSERTION LOSS: FREQUENCY: 100 KHZ TO 100 MHZ, TX/RX: -1.1 DB (MAX)
-RETURN LOSS: FREQUENCY: 1 MHZ TO 60 MHZ, TX/RX: -18.0 DB (MIN)
FREQUENCY: 60.1 MHZ TO 80 MHZ, TX/RX: -15.0 DB (MIN)
FREQUENCY: 80.1 MHZ TO 100 MHZ, TX/RX: -12.0 DB (MIN)
-CROSSTALK: NEXT (TX TO RX) 35.0 DB (MIN) @100MHZ
-TX CMRR: FREQUENCY: 100KHZ TO 100 MHZ, 42.0 DB (MIN).
-RX CMRR: FREQUENCY: 100KHZ TO 100 MHZ, 33.0 DB (MIN).
HIPOT (ISOLATION VOLTAGE):
-1500 VAC (0.5mA CUTOFF CURRENT) FOR 60 SECOND DURATION.
-ALL BRIDGED ON EITHER SIDE OF MAGNETICS PACKAGE FOR RJ-45 CONTACTS.
OPERATING TEMPERATURE: FROM 4°C TO +70°C.
4. ALL DIMENSIONS NOMINAL UNLESS OTHERWISE NOTED.
5. R1-R4 = 75 OHMS, 1/16 W, 5%.
6. INDICATED CONNECTIONS ARE FOR NIC CONFIGURATION. HOWEVER, THE MAGNETICS ARE SYMMETRICAL TO ACCOMODATE CONNECTIONS FOR EITHER NIC OR HUB CONFIGURATION, OR AUTO-MDI/MDIX.



1X6 SUGGESTED PANEL CUTOUT

RJG6-706-NL	1610124-2
TRANSPOWER P/N	TYCO P/N
CROSS REFERENCE	

1610124-2
PART NUMBER

THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS: INCHES
TOLERANCES UNLESS OTHERWISE SPECIFIED:
0 PLC ± -
1 PLC ± .1
2 PLC ± .01
3 PLC ± .005
ANGLES ± 1°

MATERIAL -
FINISH -

DWN ERIC BRIANT 24AUG2002
CHK ERIC VESTAL 24AUG2002
APVD ERIC LAUBER 24AUG2002
PRODUCT SPEC 108-2100
APPLICATION SPEC -
WEIGHT -
CUSTOMER DRAWING

Tyco Electronics Corporation
Harrisburg, PA 17105-3608

DRAWING TITLE: 1X6 MAG45(TM) MODULAR JACK, 7N7 SCHEMATIC, 06 SERIES CIRCUIT, SHIELDED, NO LEDS

SIZE A1 | CAGE CODE 00779 | DRAWING NO 1610124 | RESTRICTED TO -
SCALE 4:1 | SHEET 1 OF 2 | REV O

AMP 4805 REV 31MAR2000

07SEP2002 1:57pm AMP36051 H:\APSTP--COMPLETED\1610124_1c.dwg

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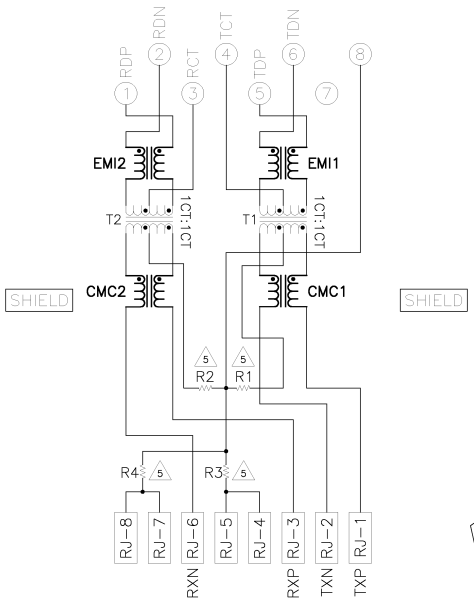
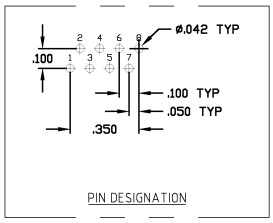
REVISIONS

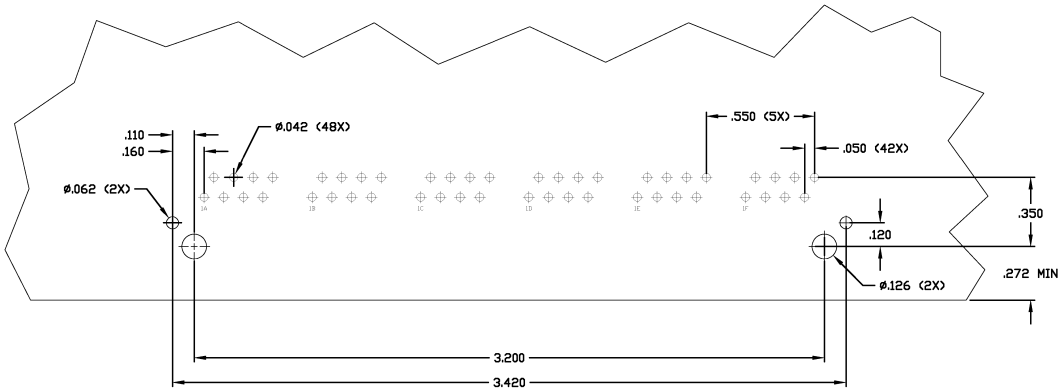
P	LTR	DESCRIPTION	DATE	DWN	APVD
–	–	SEE SHEET 1	–	–	–

06 SERIES MAGNETIC CIRCUIT





PIN DESIGNATION



SUGGESTED PCB LAYOUT
(Component Side)

THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS: INCHES

TOLERANCES UNLESS OTHERWISE SPECIFIED:
X ±.1
.XX ±.010
.XXX ±.005
ANGLES ±1°

MATERIAL –
FINISH –

DWN	ERIC BRIANT	28AUG2002
CH	ERIC VESTAL	28AUG2002
APVD	ERIC LAUBER	28AUG2002
PRODUCT SPEC	108-2100	
APPLICATION SPEC	–	
WEIGHT	–	

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1X6 MAG45(TM) MODULAR JACK, 7N7 SCHEMATIC, 06 SERIES CIRCUIT, SHIELDED, NO LEDS

SIZE	DOC CODE	DRAWING NO	RESTRICTED TO
A1	00779	1610124	–

SCALE 4:1 SHEET 2 OF 2 REV O

AMP 4805 REV 31MAR2000

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