

REVISIONS			
REV.	DESCRIPTION	ECN NO.	DATE
01	FIRST RELEASE	N/A	06/13/14

**PAGE 5 IS FOR INTERNAL ONLY**

PART NUMBER	PART DESCRIPTION
824-00487F	RoHS compliant per EU Directive 2011/65/EU

TITLE TRANSFORMER, 1000BASE-T, 5-PORT, THRU-HOLE, 90 PIN
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**WARNING !**  
 ALL SHEETS OF THIS DOCUMENT ARE CONTROLLED DOCUMENTATION AND ARE NOT TO BE RELEASED OUTSIDE OF E&E OR ITS SUB-CONTRACTORS WITHOUT AUTHORIZATION.

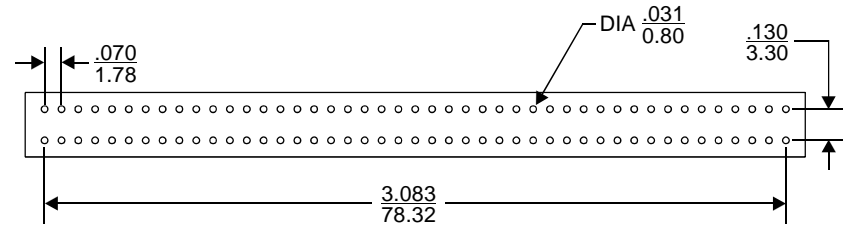
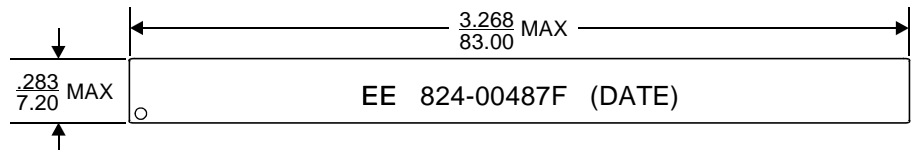
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCH/mm.

TOLERANCE ARE:

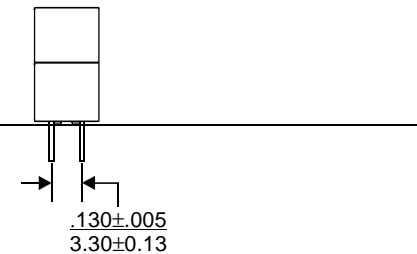
INCH	mm	ANGLE
.XXX ± .005	.XX ± .13	X.X ± 0.3
.XX ± .02	.X ± .5	X. ± 1

APPROVALS	DATE
DRAWN BY Y.L. YUNG	06/13/14
PROJ. ENG Y.L. YUNG	06/13/14
APPROVED BY D. YUNG	06/13/14
Q.A. D. LUO	06/13/14

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Recommended hole pattern



## MECHANICAL OUTLINE



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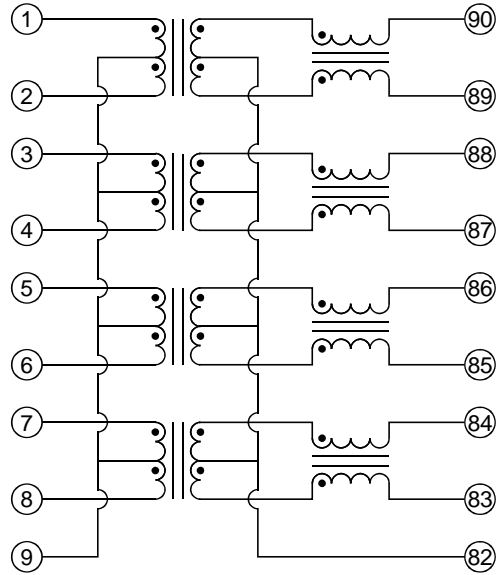
OF

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1. Dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
2. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .
3. "(DATE)" includes at least the manufacturing date code (in YYWW format) plus two character country code.

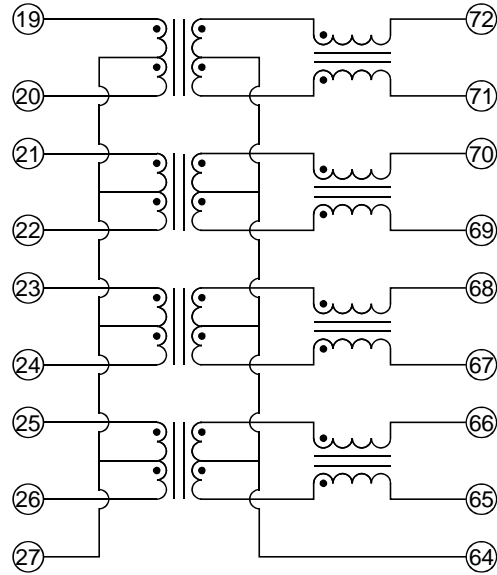
PHY Side  
(Primary)

Line Side  
(Secondary)



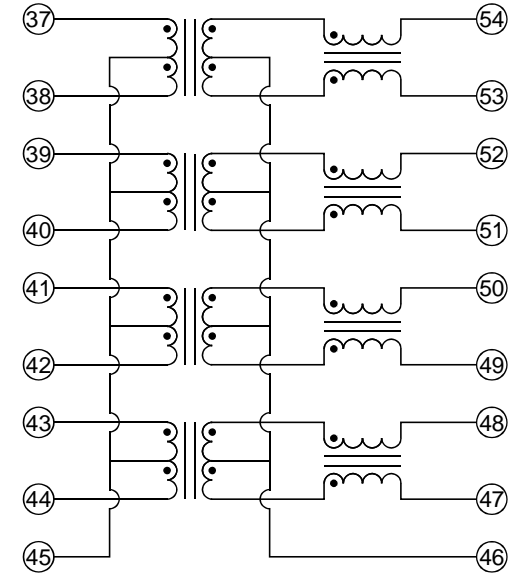
PHY Side  
(Primary)

Line Side  
(Secondary)



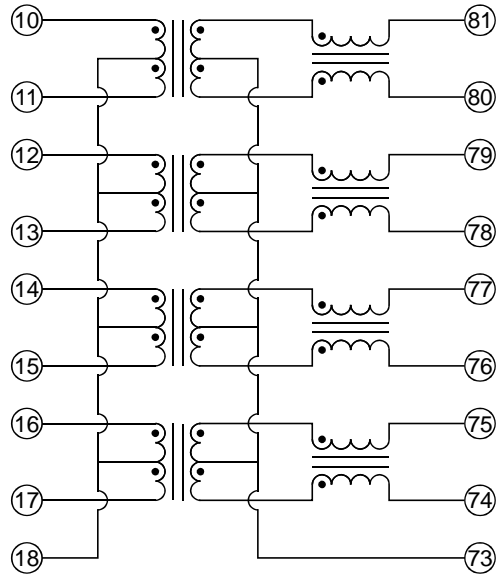
PHY Side  
(Primary)

Line Side  
(Secondary)



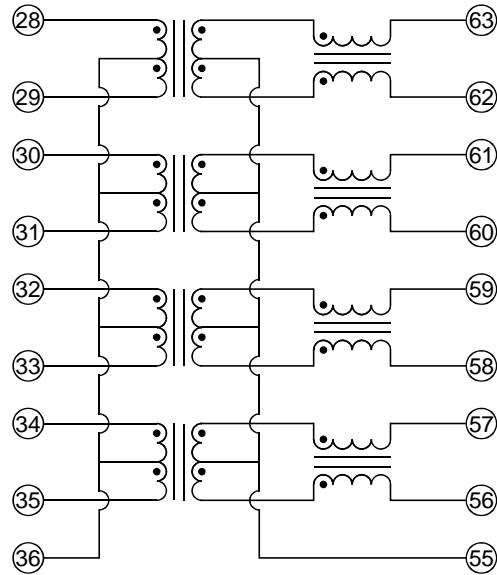
PHY Side  
(Primary)

Line Side  
(Secondary)



PHY Side  
(Primary)

Line Side  
(Secondary)



## SCHEMATIC



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**ELECTRICAL SPECIFICATION @25°C:**

PARAMETERS	UNIT	Each Channel
Turns Ratio (Primary):(Secondary)	-	1CT:1CT ± 5%
Polarity (Primary):(Secondary)	-	Per Schematic
Inductance, Ls(Primary) @100KHz, 0.1Vrms, 8mADC	uH	350 Min
Insertion Loss @1-100MHz	dB	1.0 Max
Return Loss @1-30MHz (100Ω)	dB	18 Min
Return Loss @40MHz (100Ω)	dB	14.4 Min
Return Loss @50MHz (100Ω)	dB	13.1 Min
Return Loss @60-80MHz (100Ω)	dB	12 Min
Return Loss @100MHz (100Ω)	dB	10 Min
CMRR @1-30MHz	dB	40 Min
CMRR @30-60MHz	dB	35 Min
CMRR @60-100MHz	dB	30 Min
Crosstalk @1-100MHz, between channels	dB	30 Min
Hipot (Primary):(Secondary)	Vrms	1500 Min

4. Operating temperature: 0°C to +70°C.



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