

REVISIONS			
REV.	DESCRIPTION	ECN NO.	DATE
01	FIRST RELEASE	N/A	10/07/15

PAGE 5 & 6 ARE FOR INTERNAL ONLY

PART NUMBER	PART DESCRIPTION
824-00511F	RoHS compliant per EU Directive 2011/65/EU

TITLE
**TRANSFORMER, 1000BASE-T(PoE Plus),
 QUAD, THRU-HOLE, 96 PIN, EXT. TEMP.**


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.

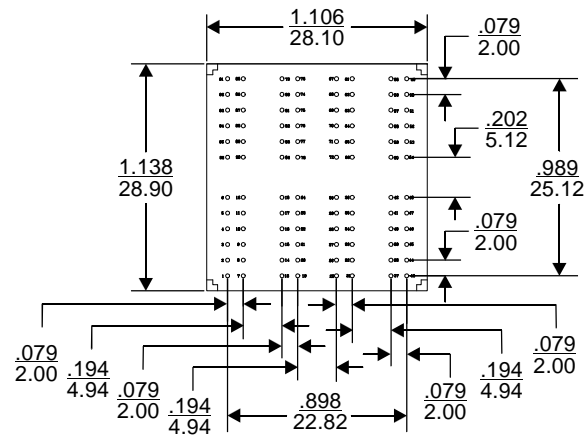
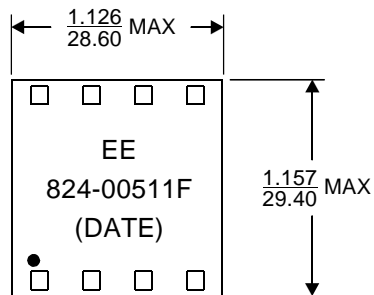
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCH/mm.

TOLERANCE ARE:

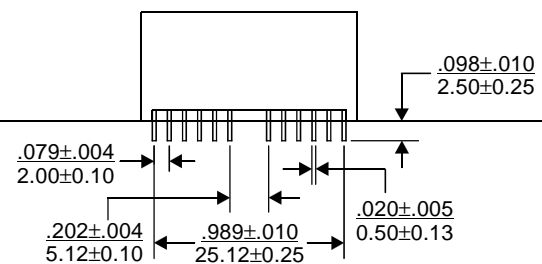
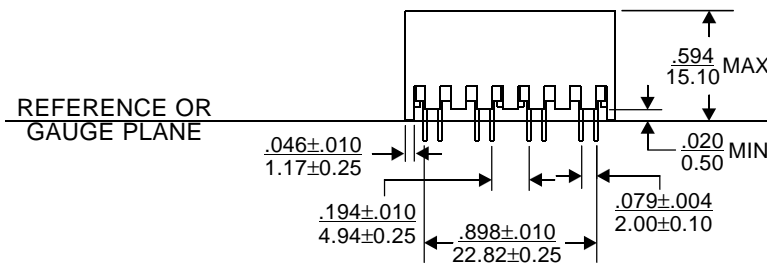
INCH	mm	ANGLE
.XXX ± .005	.XX ± .13	X.X ± 0.3
.XX ± .02	.X ± .5	X. ± 1

APPROVALS	DATE
DRAWN BY Y.L. YUNG	10/07/15
PROJ. ENG Y.L. YUNG	10/07/15
APPROVED BY D. YUNG	10/07/15
Q.A. D. LUO	10/07/15

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Recommended Pad Layout



MECHANICAL OUTLINE



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1. Dimensions are specified in $\frac{\text{inches}}{\text{mm}}$ with higher precedence in mm.
2. "(DATE)" includes at least the manufacturing date code (in YYWW format) plus two character country code.

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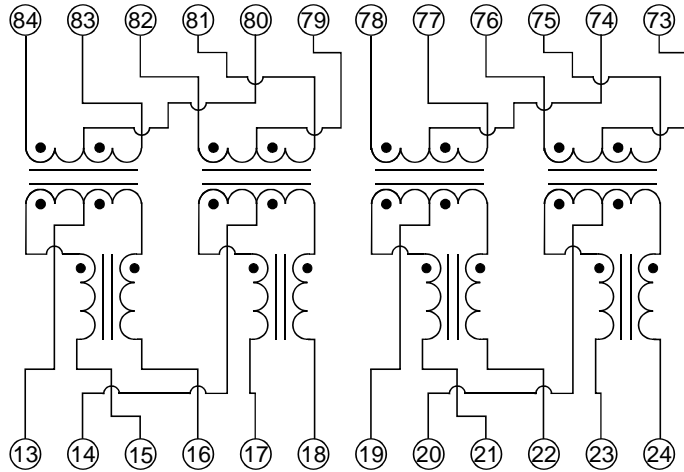
PAGE

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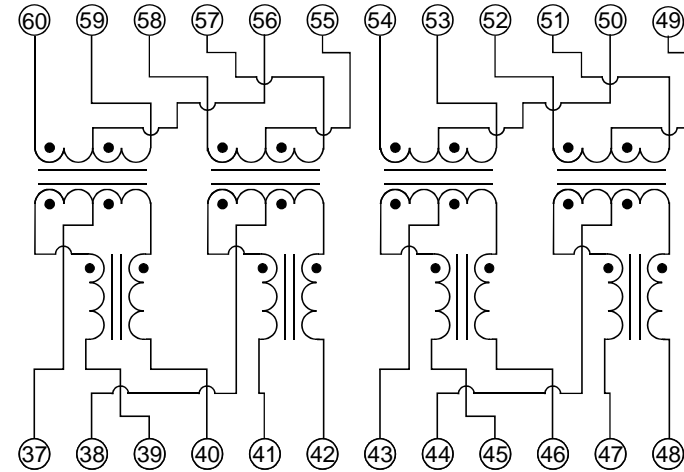
6

Line Side
(Secondary)



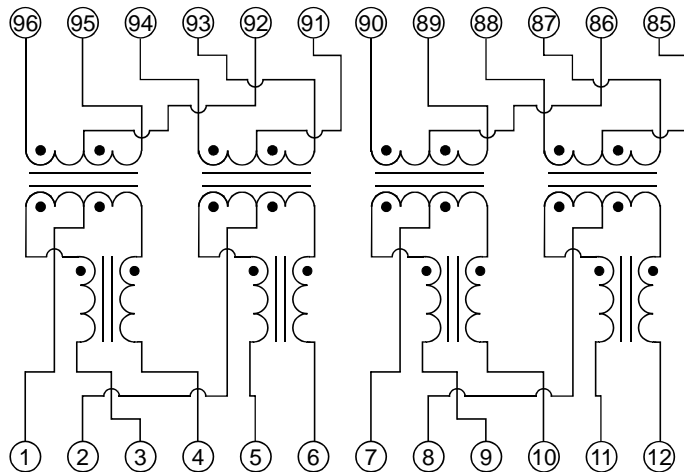
PHY Side
(Primary)

Line Side
(Secondary)



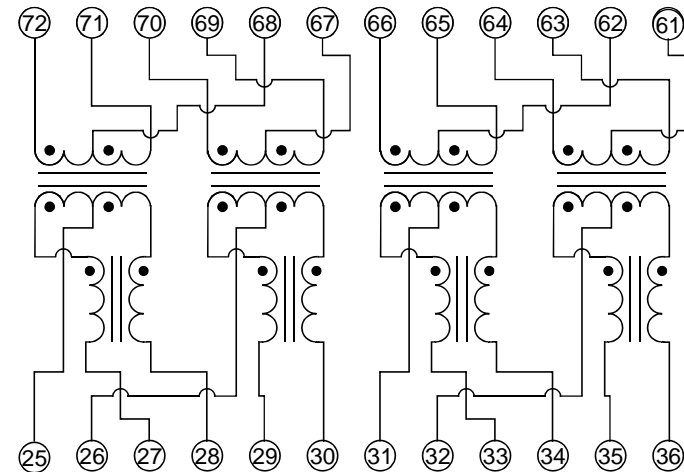
PHY Side
(Primary)

Line Side
(Secondary)



PHY Side
(Primary)

Line Side
(Secondary)



PHY Side
(Primary)

SCHEMATIC



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ELECTRICAL SPECIFICATION @25°C:

PARAMETERS	UNIT	EACH CHANNEL
Turns Ratio (Primary):(Secondary)	-	1CT:1CT \pm 3%
Polarity (Primary):(Secondary)	-	Per Schematic
Inductance, Ls(Primary) @100kHz, 0.1Vrms, 11mADC	uH	350 Min
Inductance, Ls(Primary) @100kHz, 0.1Vrms, 19mADC	uH	120 Min
Insertion Loss @ 1-100MHz	dB	1.8 Max
Insertion Loss @ 100-125MHz	dB	3.0 Max
Return Loss @ 1-40MHz (100 Ω)	dB	18 Min
Return Loss @ 1-40MHz (85 Ω ,115 Ω)	dB	16 Min
Return Loss @60MHz (85 Ω ,100 Ω ,115 Ω)	dB	12.5 Min
Return Loss @80MHz (85 Ω ,100 Ω ,115 Ω)	dB	10 Min
Return Loss @ 100MHz (85 Ω ,100 Ω ,115 Ω)	dB	8.1 Min
Crosstalk @30-100MHz, Between Channels	dB	30 Min
HIPOT (Primary):(Secondary)	Vrms	1500 Min

3. Operating temperature: -40°C to +85°C.

4. Balanced DC line current capability (Line Side):720mADC maximum.



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