REVISIONS

REV.	DESCRIPTION	ECN NO.	DATE
01	FIRST RELEASE	N/A	06/12/14

When ordering, please add suffix “T” to the part number for tape & reel packaging (330mm reel).

PAGE 4 & 5 ARE FOR INTERNAL ONLY

PART NUMBER	PART DESCRIPTION
824-00488F	RoHS compliant per EU Directive 2011/65/EU

TITLE

TRANSFORMER, 100BASE-T(PoE+), SINGLE, SOIC, 16 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 ± 0.13	X.X ± 0.3
.XX ± .02	.X ± 0.5	X. ± 1

APPROVALS		DATE
DRAWN BY	Y.L. YUNG	06/12/14
PROJ. ENG	Y.L. YUNG	06/12/14
APPROVED BY	D. YUNG	06/12/14
Q.A.	D. LUO	06/12/14

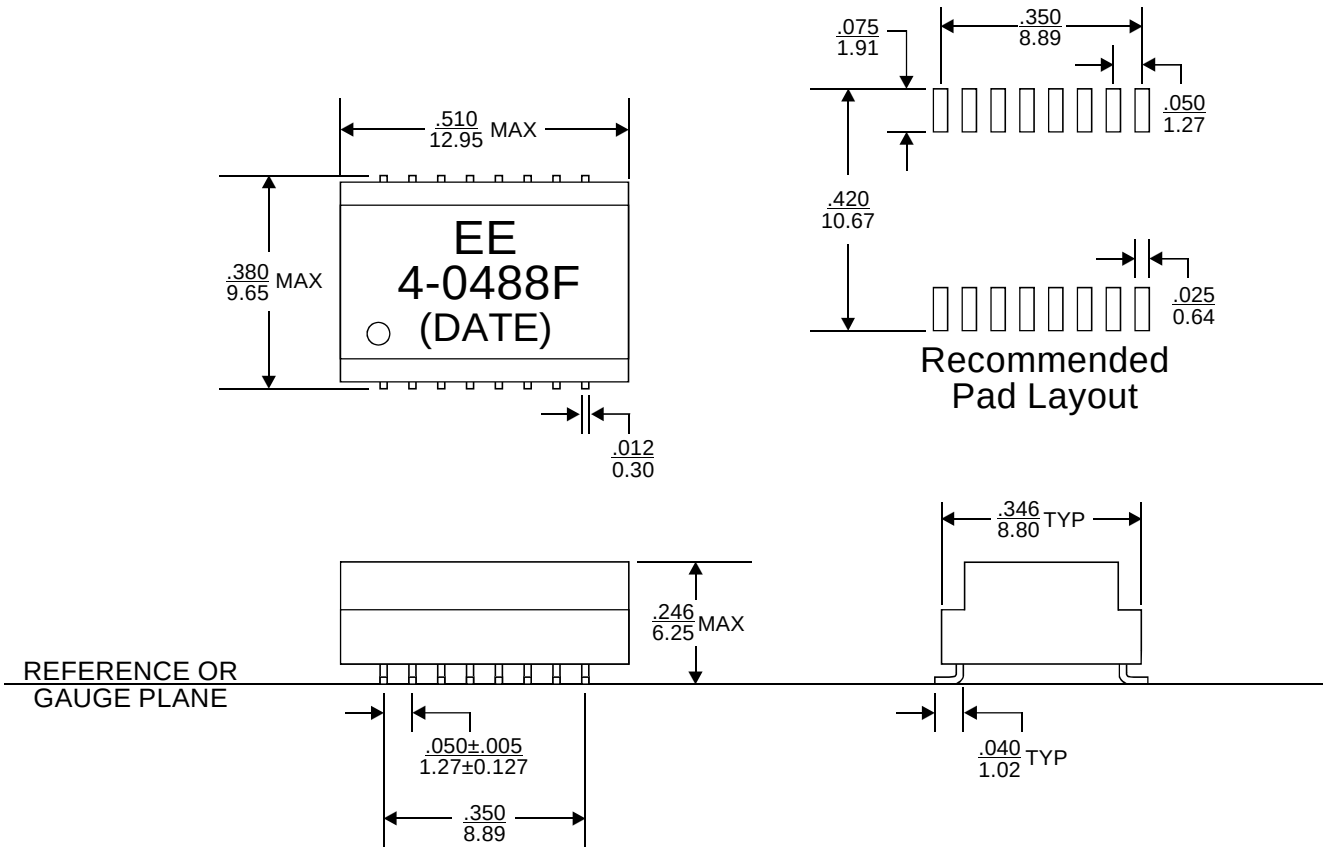
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DRAWING NO./MODEL: 824-00488F

REV: 01

SCALE: DO NOT SCALE

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1. Dimensions are specified in $\frac{\text{inches}}{\text{mm}}$ with higher precedence in inches.
2. Unless otherwise specified, all tolerances are ± $\frac{.010}{0.25}$.
3. Coplanarity: $\frac{.004}{0.10}$ max.
4. "(DATE)" includes at least the manufacturing date code(in YYWW format) plus two character country code.

MECHANICAL OUTLINE

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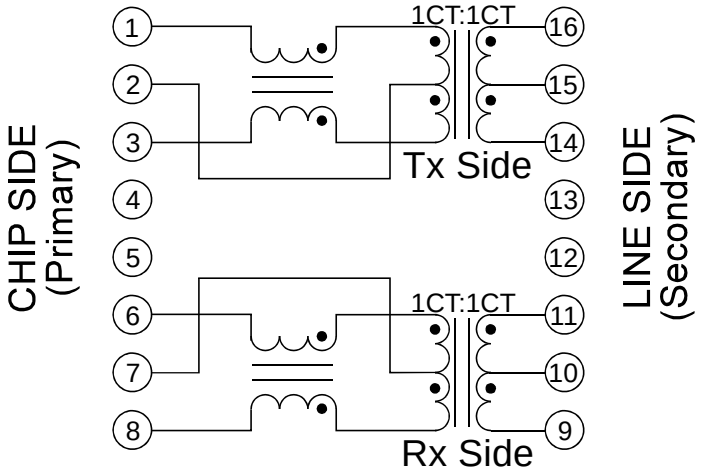
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ELECTRICAL SPECIFICATION @25°C:

	PARAMETERS	UNIT	TX Side	RX Side
	Turn Ratio (Primary):(Secondary)	-	1CT:1CT ± 2%	1CT:1CT ± 2%
	Polarity (Primary):(Secondary)	-	Per Schematic	Per Schematic
	Inductance, Ls(Primary) @100KHz, 0.1Vrms, 8mADC	uH	350 Min	350 Min
	Inductance, Ls(Primary) @100KHz, 0.1Vrms, 19mADC	uH	120 Min	120 Min
	Insertion Loss @100KHz	dB	1.2 Max	1.2 Max
	Insertion Loss @100MHz	dB	1.5 Max	1.5 Max
	Insertion Loss @125MHz	dB	1.9 Max	1.9 Max
	Return Loss @1-30MHz	dB	16 Min	16 Min
6	Return Loss @30-60MHz	dB	10-20Log(F/60) Min	10-20Log(F/60) Min
	Return Loss @60-80MHz	dB	10 Min	10 Min
	CMRR @2MHz	dB	45 Min	45 Min
6	CMRR @30-200MHz	dB	7-28Log(F/200) Min	7-28Log(F/200) Min
	Crosstalk @1MHz (TX<=>RX)	dB	50 Min	
6	Crosstalk @10-100MHz (TX<=>RX)	dB	55-22Log(F/10) Min	
	Hipot (Primary):(Secondary)	Vrms	1500 Min	1500 Min
	DCR (Secondary - half winding)	Ω	0.75 Max	0.75 Max
	DCR Imbalance (Secondary)	Ω	±0.065 Max	±0.065 Max

5. Temperature range: -40°C to +85°C.
6. "F" represents the test frequency specified in MHz.
7. Balanced DC line current capability (Line Side): 600mADC maximum.



SCHEMATIC

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