	REVISIONS			
REV.	DESCRIPTION	ECN NO.	DATE	
01	FIRST RELEASE FOR RFQ#D2005-5730	N/A	02/14/05	
02	UPDATE ES DRAWING	EE8542	09/04/06	
03	ADD INTERNAL PAGE	EE9952	12/12/07	
04	UPDATE INTERNAL PAGE	EE10267	04/17/08	
05	UPDATE INTERNAL PAGE	EE12597	02/10/10	
06	UPDATE INTERNAL PAGE	EE12731	04/14/11	

PART NUMBER		PART DESCRIPTION
	824-00293	Standard version, with lead
	824-00293F	RoHS compliant per EU Directive 2002/95/EC (without exemption of solder content)
1		

WARNING!

ALL SHEETS OF THIS DOCUMENT ARE CONTROLLED DOCUMENTATION AND ARE NOT TO BE RELEASED OUTSIDE OF E&E OR ITS SUB-CONTRACTORS WITHOUTAUTHORIZATION.

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	0.4/4.4/4.4
	Y.L YUNG PROJ. ENG	04/14/11
	D. YUNG	04/14/11
	APPROVED BY V. TSUI	04/14/11
3	Q.A. C.M. TSUI	04/14/11

PAGE 4&5 ARE FOR INTERNAL ONLY

TITLE

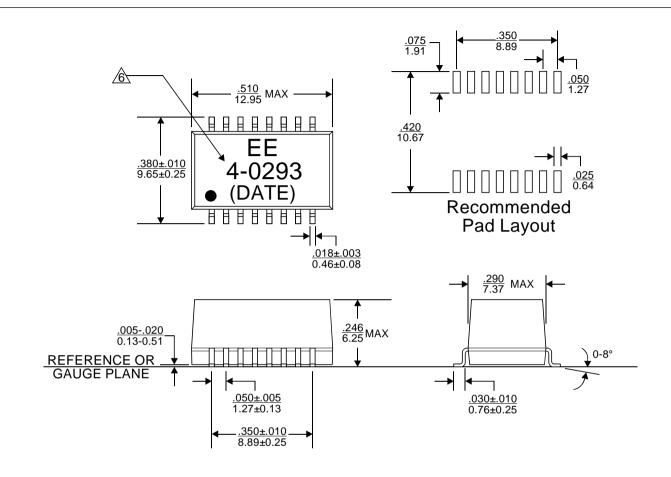
TRANSFORMER, 100BASE-T(PoE), SINGLE, SOIC, 16 PIN, EXT. TEMP.



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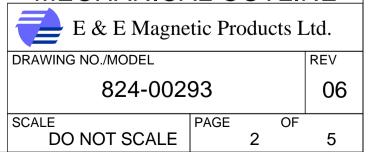
DRAWING NO./MODEL REV 824-00293 06

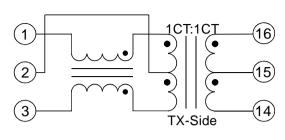
SCALE PAGE OF DO NOT SCALE 1 5



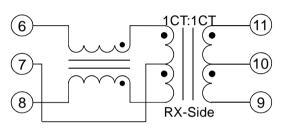
- 1. Dimensions are specified in $\frac{\text{inches}}{\text{mm}}$ with higher precedence in inches.
- 2. Unless otherwise specified, all tolerances are $\pm \frac{.010}{0.25}$.
- 3. Coplanarity: $\frac{.004}{0.10}$ max.
- 4. "(DATE)" includes at least the manufacturing date code(in YYWW format) plus two character country code.
- 5. Dimensions are to be measured in accordance with JEDEC standard 95-1.
- 6 For RoHS compliant version, 824-00293F, the part will be marked with "4-0293F", instead of "4-0293".

MECHANICAL OUTLINE





CHIP SIDE (Primary)



LINE SIDE (Secondary)

SCHEMATIC

ELECTRICAL SPECIFICATION @25°C:

PARAMETERS		TX Side	RX Side
Turn Ratio (Primary):(Secondary)		1CT:1CT ± 2%	1CT:1CT ± 2%
Polarity (Primary): (Secondary)		Per Schematic Per Schema	
Inductance, Ls(Primary) @100KHz, 0.1Vrms, 8mADC		350 Min 350 Min	
Insertion Loss @0.1-100MHz	dB	1.1 Max	1.1 Max
Return Loss @30MHz	dB	16.0 Min	16.0 Min
Return Loss @60MHz	dB	10.0 Min	10.0 Min
Return Loss @80MHz	dB	10.0 Min	10.0 Min
Crosstalk @30MHz (for refer. only)	dB	35 Min	
Crosstalk @60MHz (for refer. only)	@60MHz (for refer. only) dB 30 Min		Min
Crosstalk @100MHz (for refer. only)	dB	30 Min	
Hipot (Primary):(Secondary)		1500 Min	1500 Min

- 7. Operating temperature: -40°C to +85°C.
- 8. Balanced DC line current capability (LINE SIDE): 350mADC maximum.

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DRAWING NO./MODEL			REV	
824-00293				06
SCALE	PAGE		OF	