

REVISIONS			
REV.	DESCRIPTION	ECN NO.	DATE
01	FIRST RELEASE	N/A	10/29/15

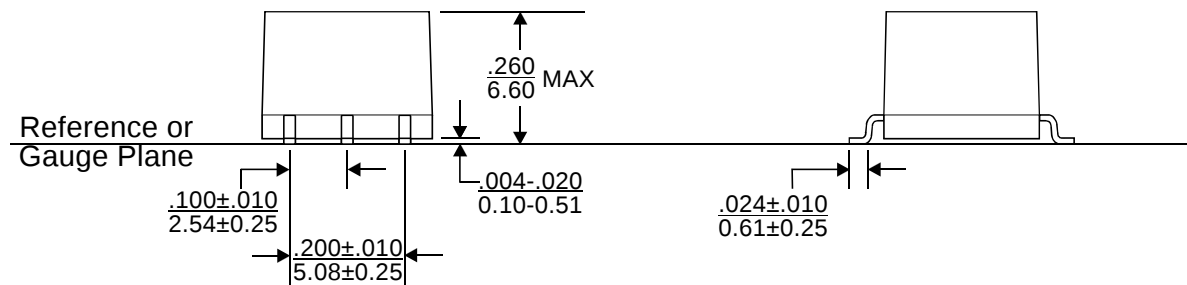
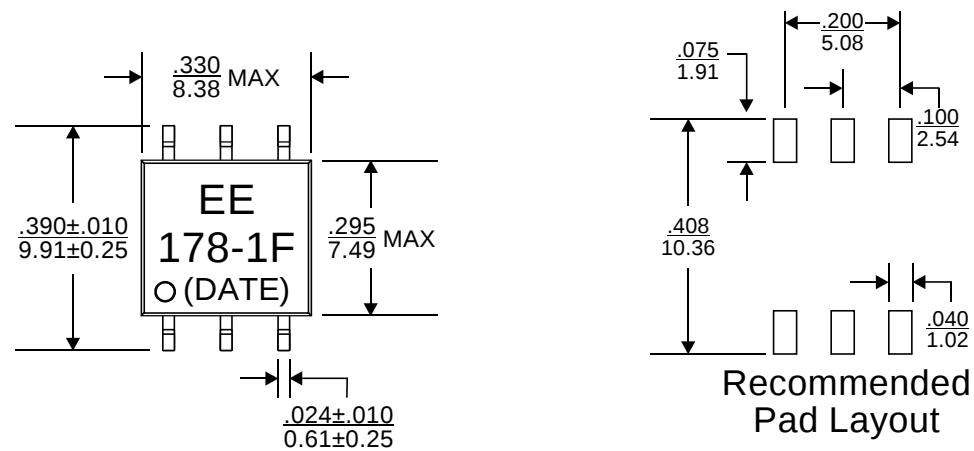
When ordering, please add suffix "T" to the part number for tape & reel packaging (330mm reel).

PART NUMBER	PART DESCRIPTION
824-00178-1F	RoHS compliant per EU Directive 2011/65/EU

PAGE 4 IS FOR INTERNAL ONLY

TITLE	
TRANSFORMER, 100BASE-T(PoE), HALF, SMD, 6 PIN	
 E & E Magnetic Products Ltd.	
DRAWING NO./MODEL	REV
824-00178-1F	01
SCALE DO NOT SCALE	PAGE 1 OF 4

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.			APPROVALS		DATE
				DRAWN BY		
				Y.L. YUNG		10/29/15
	TOLERANCE ARE: INCH mm ANGLE .XXX ± .005 .XX ± .13 X.X ± 0.3 .XX ± .02 .X ± .5 X. ± 1			PROJ. ENG		
				Y.L. YUNG		10/29/15
				APPROVED BY		
	D. YUNG		10/29/15			
Q.A.						
D. LUO		10/29/15				



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.

MECHANICAL OUTLINE



E & E Magnetic Products Ltd.

DRAWING NO./MODEL

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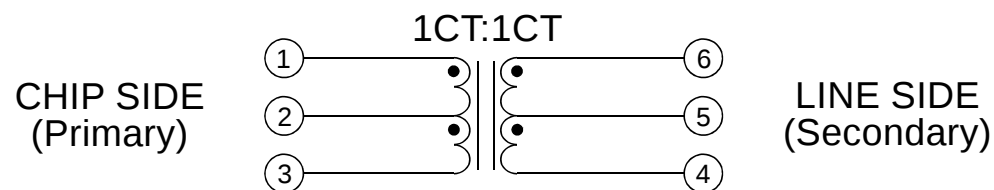
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SCHEMATIC

ELECTRICAL SPECIFICATION @25°C:

PARAMETERS	UNIT	LIMITS
Turn Ratio (Primary):(Secondary)	-	1CT:1CT $\pm$ 3%
Polarity	-	Per Schematic
Inductance, Ls(Primary) @100KHz, 0.02Vrms	μ H	400 Min
Inductance, Ls(Primary) @100KHz, 0.1Vrms, 8mADC	μ H	350 Min
Insertion Loss @1-100MHz	dB	0.5 Typ
Insertion Loss @1-100MHz	dB	1.2 Max
Return Loss @1-30MHz	dB	16.0 Min
Return Loss @40MHz	dB	14.0 Min
Return Loss @50MHz	dB	13.0 Min
Return Loss @60-80MHz	dB	12.0 Min
LL (Primary), short (Secondary) @1MHz, 1.0Vrms	μ H	0.4 Max
C _{ww} (Primary):(Secondary) @1MHz, 1.0Vrms	pF	25 Max
DCR (Primary)	Ω	0.55 Max
DCR (Secondary)	Ω	0.55 Max
Hipot (Primary):(Secondary)	Vrms	1500 Min

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

6. Balanced DC line current capability (LINE SIDE): 350mADC maximum.



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