

REVISIONS			
REV.	DESCRIPTION	ECN NO.	DATE
01	FIRST RELEASE	N/A	06/10/20

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
A20-00024F	RoHS compliant per EU Directive 2011/65/EU and (EU) 2015/863

TITLE  
**TRANSFORMER, 1000BASE-T(4-Pair PoE), SINGLE, SMD, 24 PIN, EXT. TEMP.**

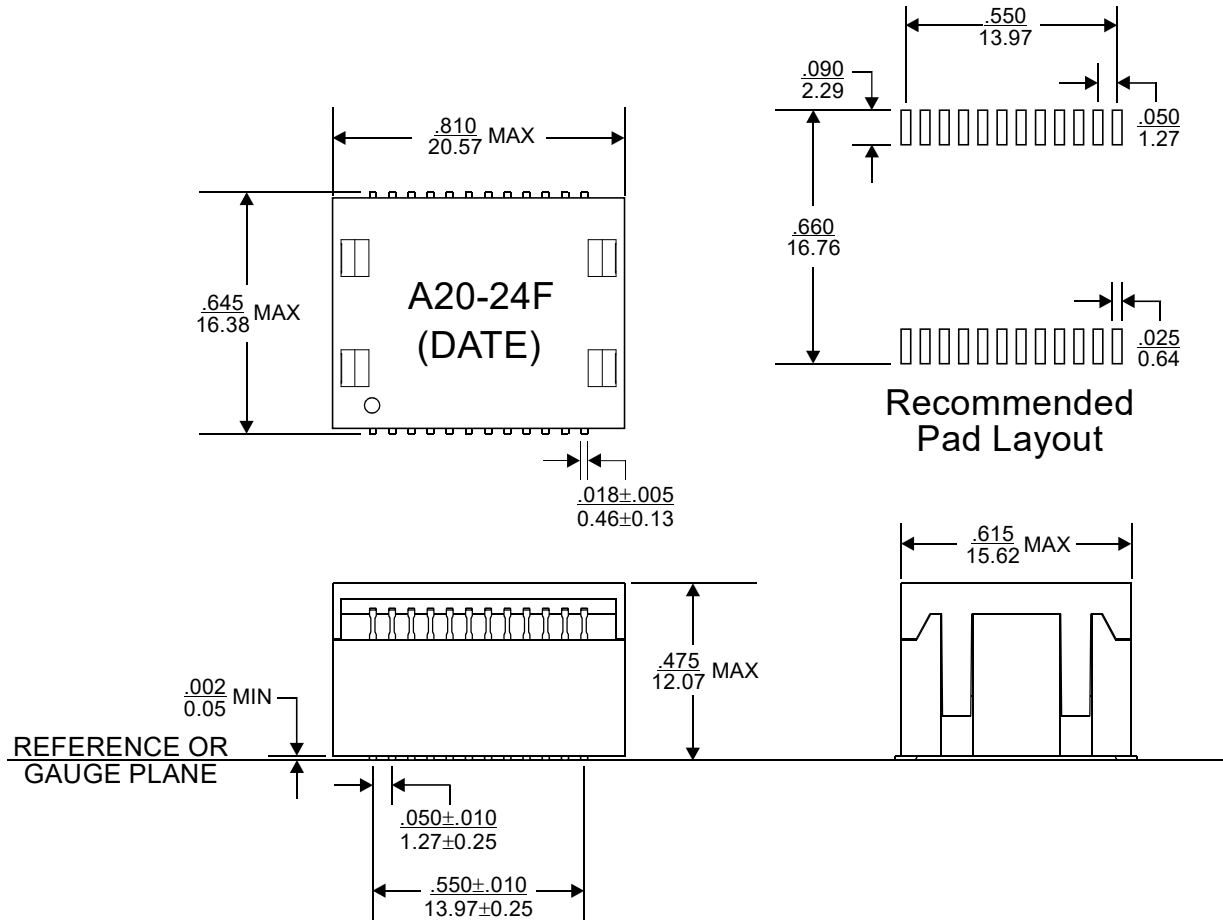
**WARNING !**  
 ALL SHEETS OF THIS DOCUMENT ARE CONTROLLED DOCUMENTATION AND ARE NOT TO BE RELEASED OUTSIDE OF E&E OR ITS SUB-CONTRACTORS WITHOUT AUTHORIZATION.

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
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APPROVED BY D. YUNG	06/10/20
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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  $\pm \frac{.010}{.25}$ .
3. Coplanarity:  $\frac{.004}{0.10}$  max.
4. "(DATE)" includes at least the manufacturing date code (in YYWW format).
5. The plastic material meet UL flammability rating 94-V0.
6. Moisture Sensitivity Level (MSL) is 1.
7. L1 grade S per Cisco EDCS-748093.

## MECHANICAL OUTLINE



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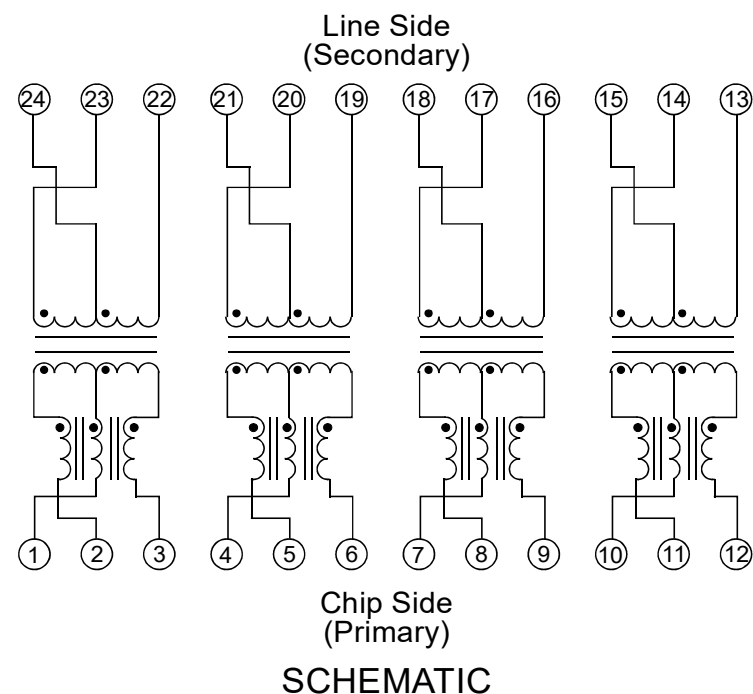
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### ELECTRICAL SPECIFICATION @25°C:

PARAMETERS	UNIT	EACH CHANNEL
Turn Ratio (Primary):(Secondary)	-	1CT:1CT ± 2%
Polarity (Primary):(Secondary)	-	Per Schematic
Inductance, Ls(Primary) @100KHz, 0.1Vrms, 21mADC	uH	120 Min
Insertion Loss @1-100MHz	dB	1.5 Max
Insertion Loss @125MHz	dB	2.0 Max
Return Loss @1-40MHz	dB	16 Min
9 Return Loss @40-100MHz	dB	10-20Log(F/80) Min
CMRR @1-100MHz	dB	30 Min
Crosstalk @1-100MHz (between channels)	dB	27 Min
Hipot (Primary):(Secondary)	Vrms	1500 Min
DCR (Secondary - half winding)	Ω	0.35 Max
DCR Imbalance (Secondary)	Ω	± 0.05 Max



8. Operating temperature: -40°C to +155°C (115°C max. ambient + 40°C max. self-rise).


9. "F" represents the test frequency specified in MHz.

10. Balanced DC line current (Line Side): 866mADC max. @ 57VDC (2-Pair)

1.732ADC max. @ 57VDC (4-Pair)

11. Wire is enameled magnetic wire, MW83-C, 180°C, or equivalent.

12. The part temperature (115°C max. ambient + 40°C max. self-rise) should not exceed +155°C under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

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