

Features

- 13 W PoE
- 1.5 kVrms isolation voltage
- Supports IEEE 802.3af compliant, integrated PoE PD and PWM controllers
- UL 94V-0 rated bobbin
- UL 1446 Class B Insulation System
- RoHS compliant*

SM13117EL - PoE Flyback Transformer

Electrical Specifications @ 25 °C

Bourns Part Number	Power (W)	L3-4 (μH) $\pm 10\%$ @ 250 kHz / 0.1 V	DCR (m Ω) Max.			Turns Ratio $\pm 3\%$ (3-4) : (2-1) : (7-9) : (8-10)	Input	Output
			3-4	2-1	7,8 (short) – 9,10 (short)			
SM13117EL	13	127	199	308	33	1 : 0.5 : 0.5 : 0.5	36-72 Vdc 250 kHz	12 Vdc @ 1.08 A

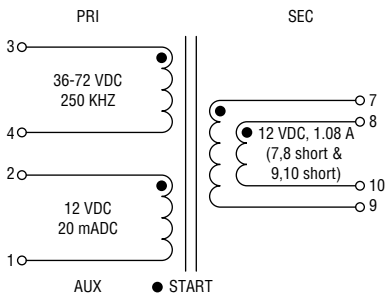
General Specifications

Primary (3-4) Leakage Inductance (250 kHz, 0.1 V Aux. Sec. shorted) 2.0 μH Max.
 Hi-Pot
 Pri/Sec.....1.5 kVAc, 2 mA, 2 Sec.
 Pri/Aux, Pri/core, Sec/core 0.5 kVAc, 2 mA, 2 Sec.
 Operating Temperature.....-40 to +125 °C (temperature rise included)
 Storage Temperature (Component)-40 to +125 °C
 Moisture Sensitivity Level..... 1
 ESD Classification (HBM)..... N/A

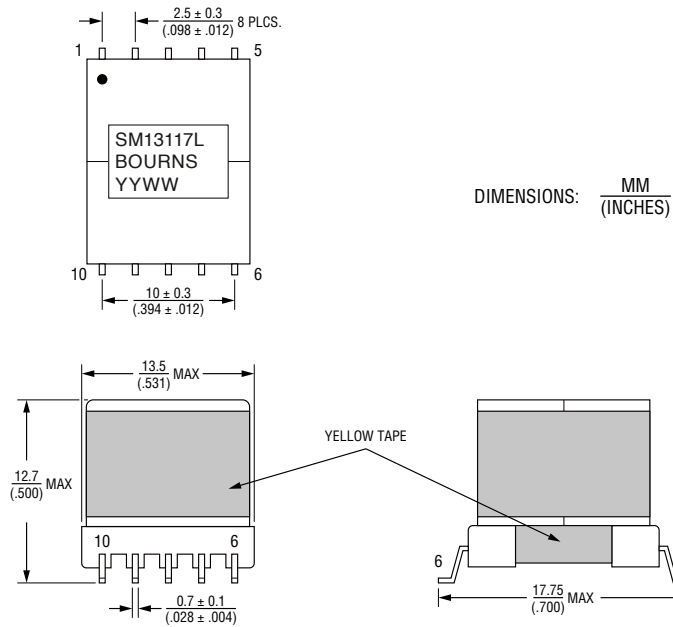
Materials

Core.....Ferrite
 WireEnameled copper
 Terminal FinishSn
 Packaging..... 200 pcs. per 13-inch reel

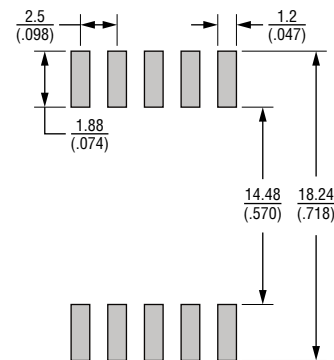
Electrical Schematic



Product Dimensions



Recommended Layout



How To Order

Model **SM13117 E L**
 Packaging _____
 E = Tape and Reel (200 pcs. per reel)
 Termination _____
 L = Tin (RoHS Compliant)



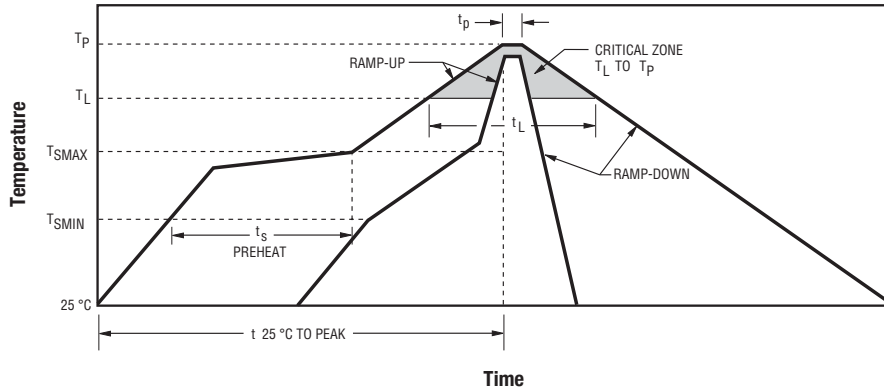
WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

*RoHS Directive 2015/863, Mar 31, 2015 and Annex. Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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Solder Profile



- Ramp-up rate = 3 °C/sec. max.
- Ramp-down rate = 6 °C/sec. max.
- $T_L = 217 °C$
- $t_L = 60-150 \text{ sec.}$
- $T_P = 250 \pm 3 °C$
- Time within 5 °C of actual Peak Temp (t_p) = 20-40 sec.
- $T_{smin} = 150 °C$
- $T_{smax} = 200 °C$
- T_{smin} to $T_{smax} = 60-180 \text{ sec.}$,
25 °C to Peak Temperature = 8 min. max.

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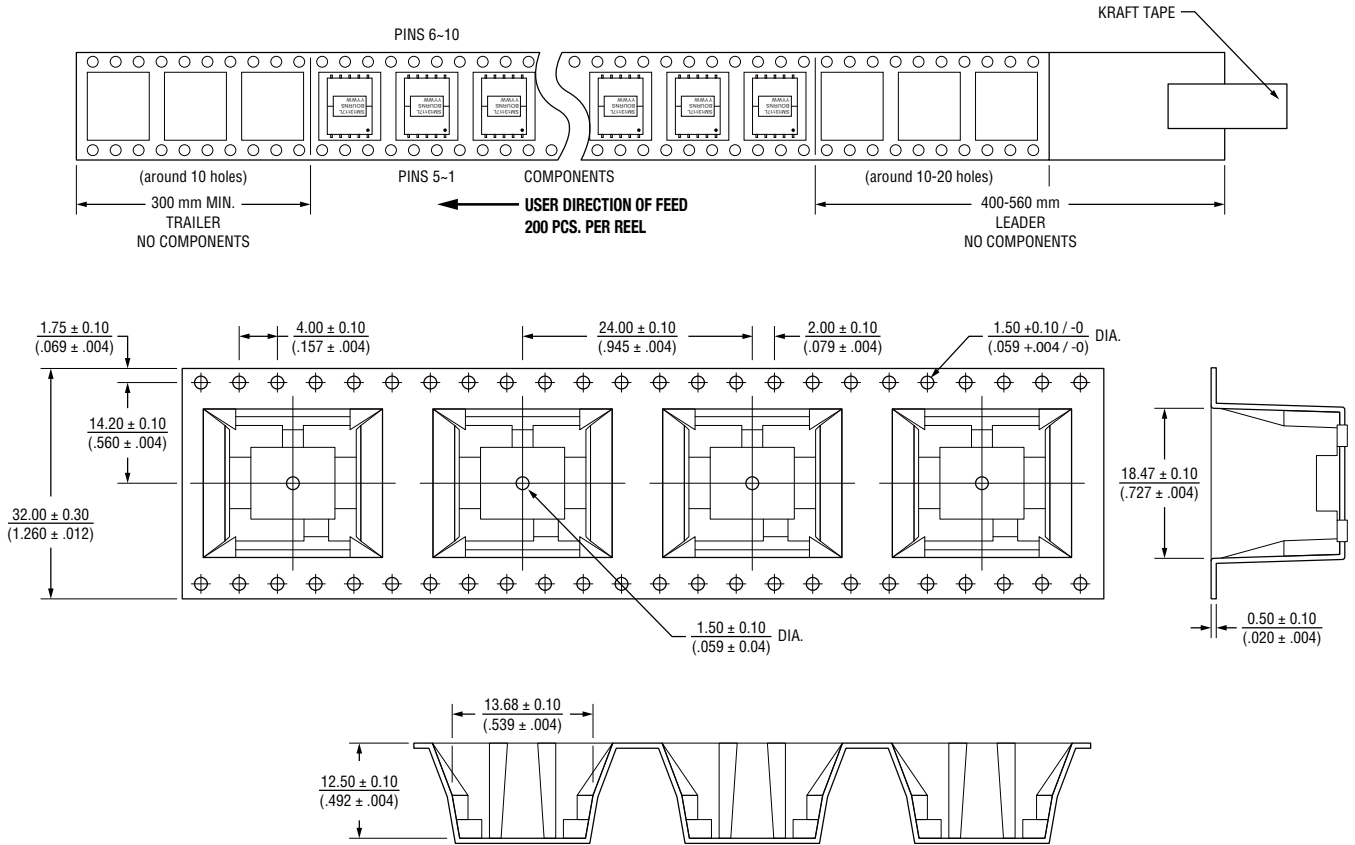
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SM13117EL - PoE Flyback Transformer

BOURNS®

Packaging Specifications



DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

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REV. 10/19

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