

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) ± 10 % @ 250 kHz / 0.1 V	DCR (mΩ) Max.			Turns Ratio ± 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

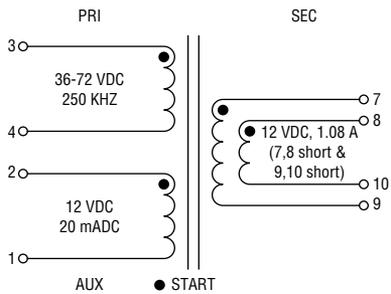
Moisture Sensitivity Level..... 1

ESD Classification (HBM)..... N/A

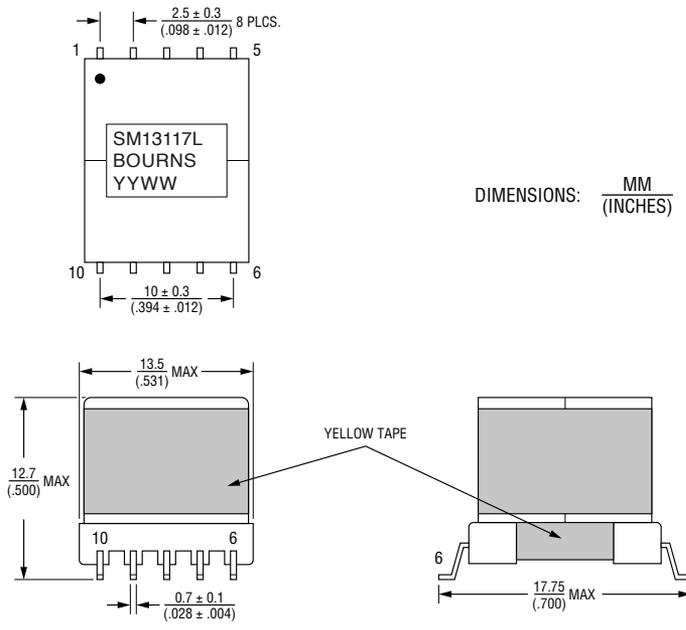
Materials

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

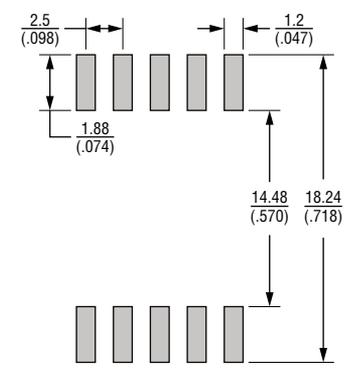
Electrical Schematic



Product Dimensions



Recommended Layout



How To Order

SM13117 E L

Model _____

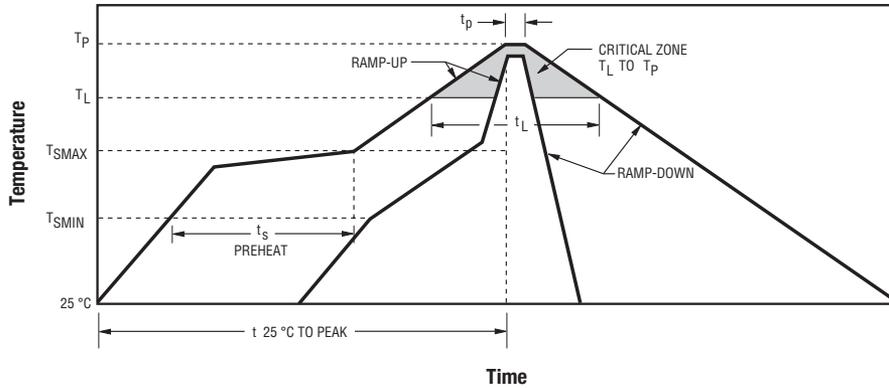
Packaging _____
 E = Tape and Reel (200 pcs. per reel)

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. The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at www.bourns.com/docs/legal/disclaimer.pdf.

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.

Specifications are subject to change without notice.

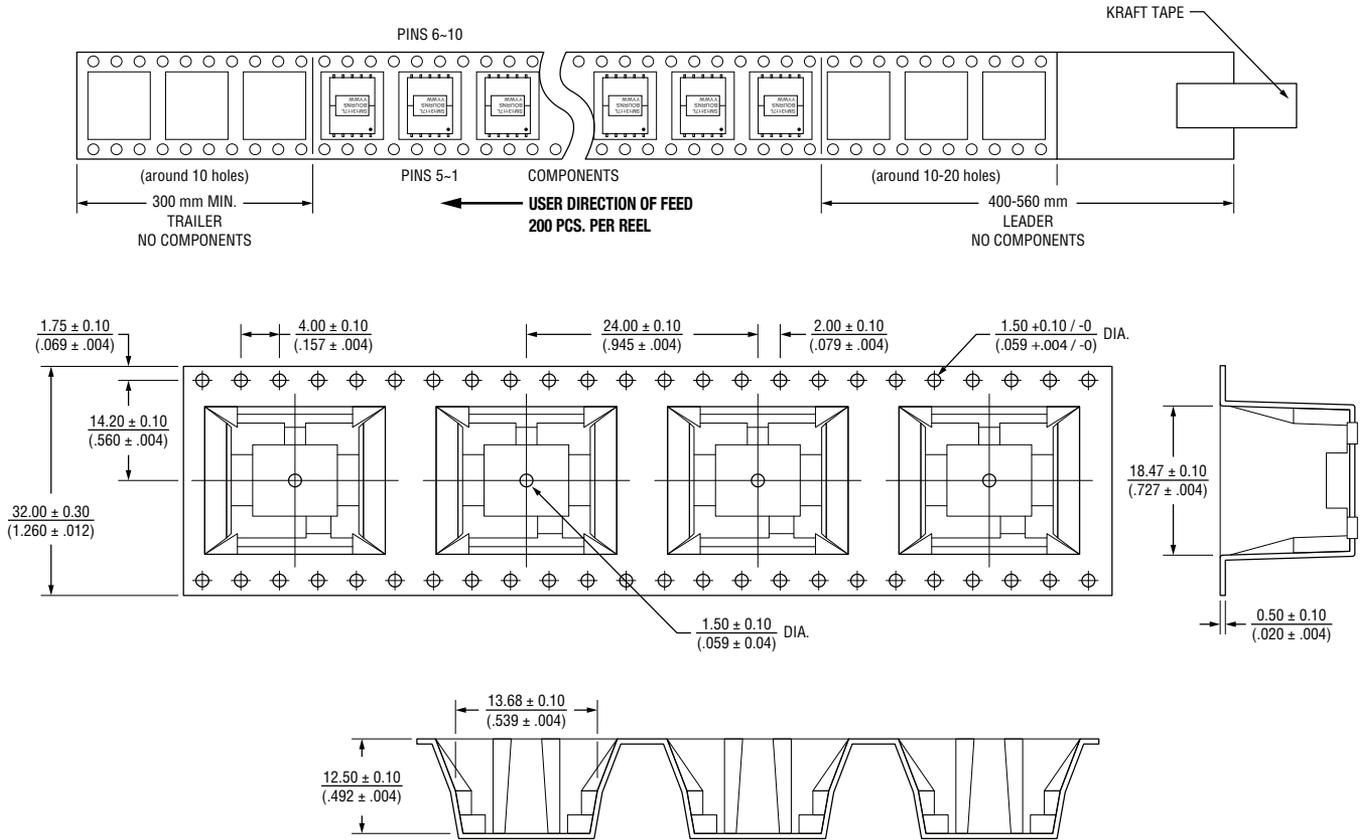
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SM13117EL - PoE Flyback Transformer

BOURNS®

Packaging Specifications



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

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