



Features

- Wide operating input voltage range
- 5 volt / 0.4 Adc output
- Meets IEC 60950-1, Functional Grade of Insulation
- RoHS compliant*

Applications

- TI UCC28880 High voltage switcher
- AC/DC Power supplies
- Metering, home automation, appliances, white goods and LED drivers

PRELIMINARY

SM91047EL Flyback Transformer

Electrical Specifications @ 25 °C

Inductance @10 kHz, 1 V
 Pin 9-7 5.0 mH ±15 %

L_{drop} @10 kHz, 1 V @ 0.2 ADC
 Pin 9-7 >85 % L_{0A}

Leakage Inductance @10 kHz, 1 V
 Pin 9-7 100 µH max.
 (Pin 2,4 Short)

DCR
 Pin 9-7 8.0 Ω ±20 %
 Pin 2-4 104 mΩ ±30 %

Turns Ratio & Polarity @10 kHz, 1 V
 Pin 9-7 : Pin 2-4 11.875 : 1 typ.

Hi-Pot
 NP to NS
 1.5k Vrms, 2 mA, 2 sec.
 NP, NS to Core
 200 Vrms, 2 mA, 2 sec. Operating

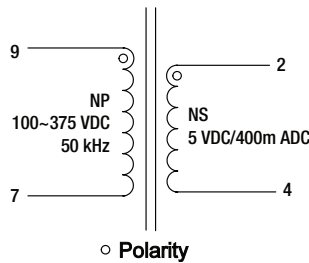
Temperature Range
 -40 °C to +125 °C
 including temperature rise

Storage Temperature Range
 -40 °C to +85 °C

Packaging Specifications

Tape & Reel 180 pcs./reel

Electrical Schematic



How To Order

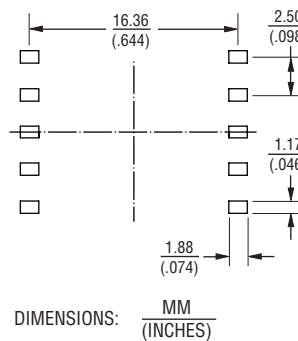
SM91047 E L

Model _____

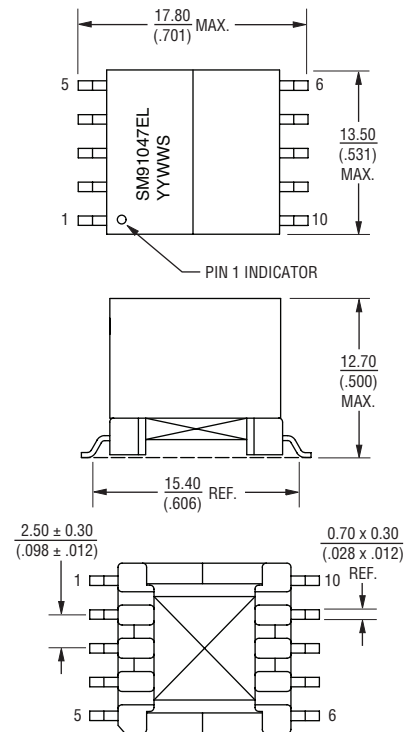
Packaging _____
 E = Tape and Reel (180 pcs./reel)

Termination _____
 L = Tin (RoHS Compliant)

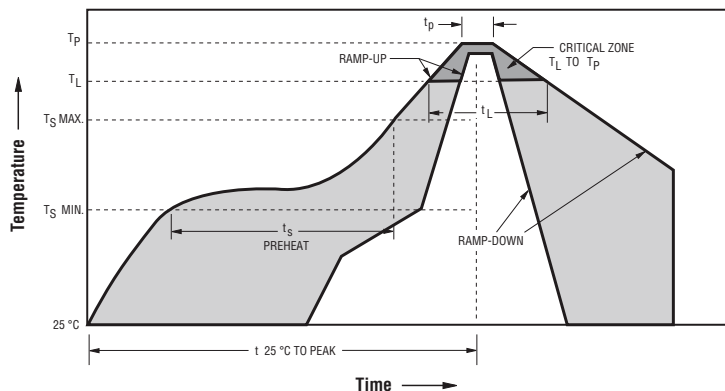
Recommended Layout



Product Dimensions



Reflow Solder Profile



- Ramp-up rate = 3 °C/sec. max.
- Ramp-down rate = 6 °C/sec. max.
- $T_L = 217^\circ C$ $t_L = 60-150$ sec.
- $T_p = 245^\circ C \pm 5^\circ C$
- Time within 5 °C of actual Peak Temp (t_p) = 20-40 sec.
- T_S min = 150 °C T_S max = 200 °C
- T_S min to T_S max = 60-180 sec., 25 °C to Peak Temperature = 6 min. max.

*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011. Specifications are subject to change without notice.

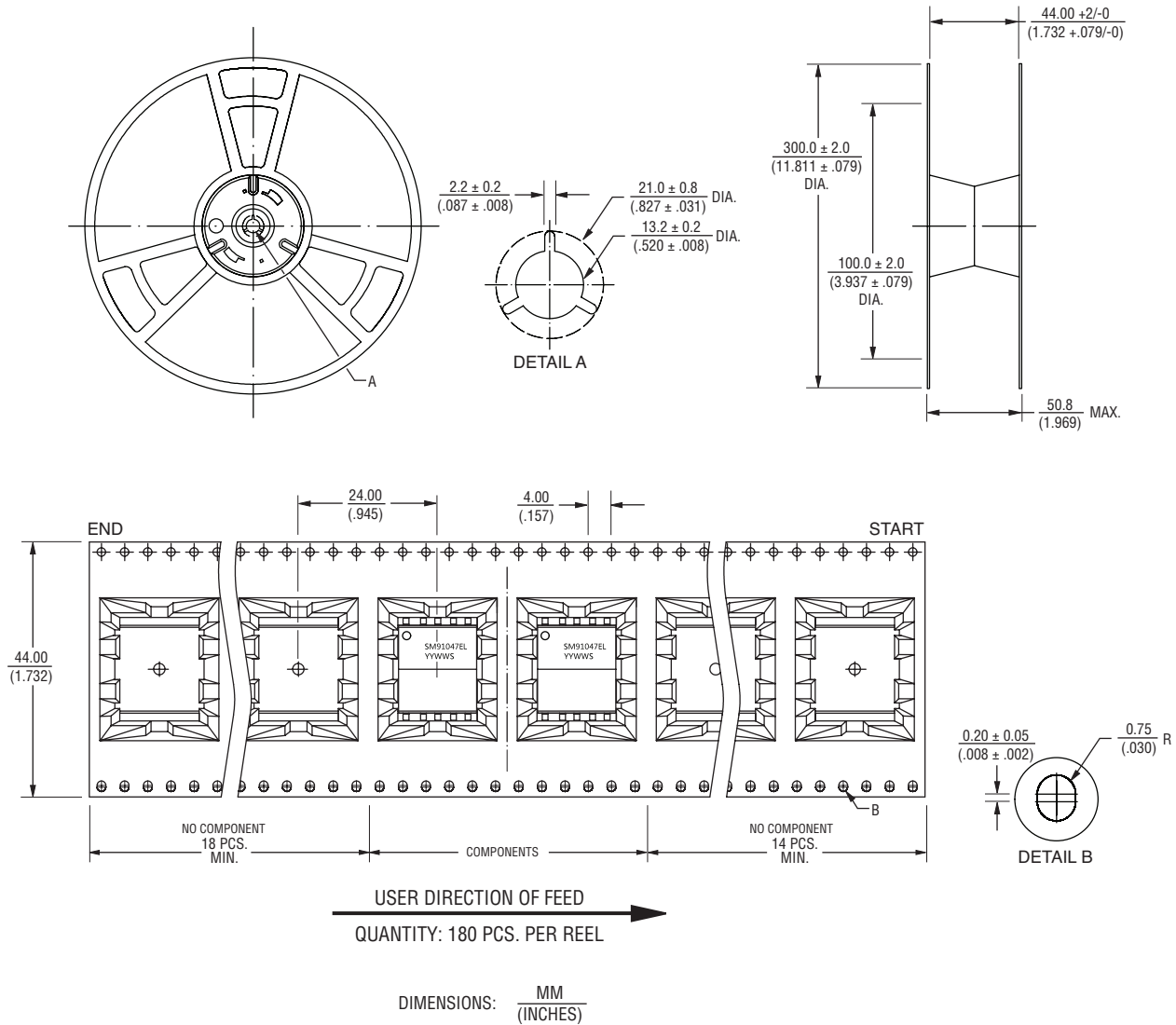
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Users should verify actual device performance in their specific applications.

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SM91047EL Flyback Transformer

BOURNS®

Packaging Specifications



BOURNS®

Asia-Pacific: Tel: +886-2 2562-4117 • Email: asiacus@bourns.com

EMEA: Tel: +36 88 520 390 • Email: eurocus@bourns.com

The Americas: Tel: +1-951 781-5500 • Email: americus@bourns.com

www.bourns.com

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