



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

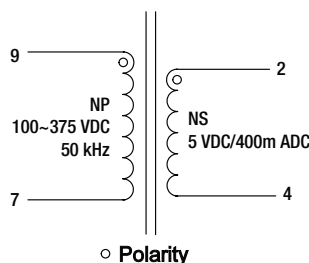
Electrical Specifications @ 25 °C

Inductance @10 kHz, 1 V
 Pin 9-7 5.0 mH $\pm 15\%$
 L_{drop} @10 kHz, 1 V @ 0.2 ADC
 Pin 9-7 $>85\%$ L_{OA}
 Leakage Inductance @10 kHz, 1 V
 Pin 9-7 100 μ H max.
 (Pin 2,4 Short)
 DCR
 Pin 9-7 8.0 Ω $\pm 20\%$
 Pin 2-4 104 m Ω $\pm 30\%$
 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

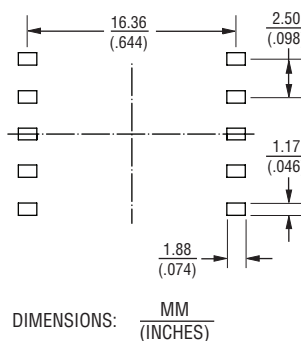
Electrical Schematic



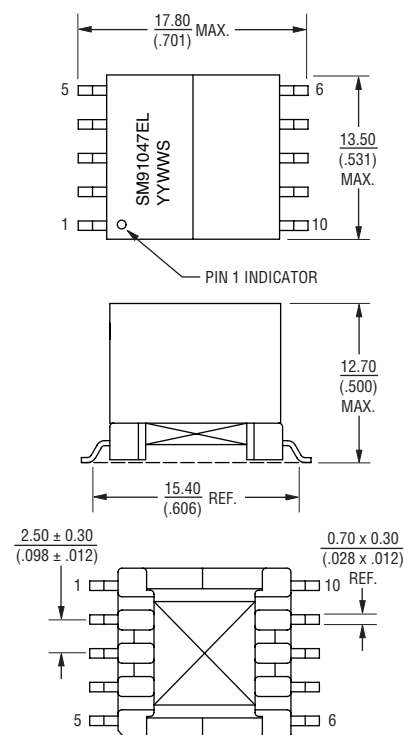
How To Order

Model **SM91047 E L**
 Packaging _____
 E = Tape and Reel (180 pcs./reel)
 Termination _____
 L = Tin (RoHS Compliant)

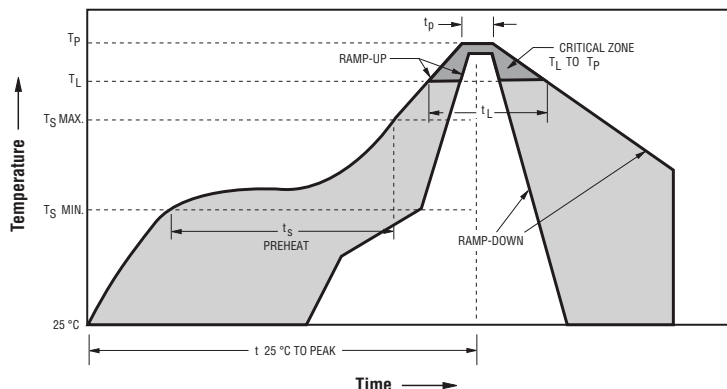
Recommended Layout



Product Dimensions



Reflow Solder Profile



Ramp-up rate = 3 °C/sec. max.
 Ramp-down rate = 6 °C/sec. max.
 $T_L = 217\text{ °C}$ $t_L = 60\text{--}150\text{ sec.}$
 $T_P = 245\text{ °C} \pm 5\text{ °C}$
 Time within 5 °C of actual Peak Temp (t_p) = 20–40 sec.
 $T_S \text{ min} = 150\text{ °C}$ $T_S \text{ max} = 200\text{ °C}$
 $T_S \text{ min to } T_S \text{ max} = 60\text{--}180\text{ sec.}$ 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.

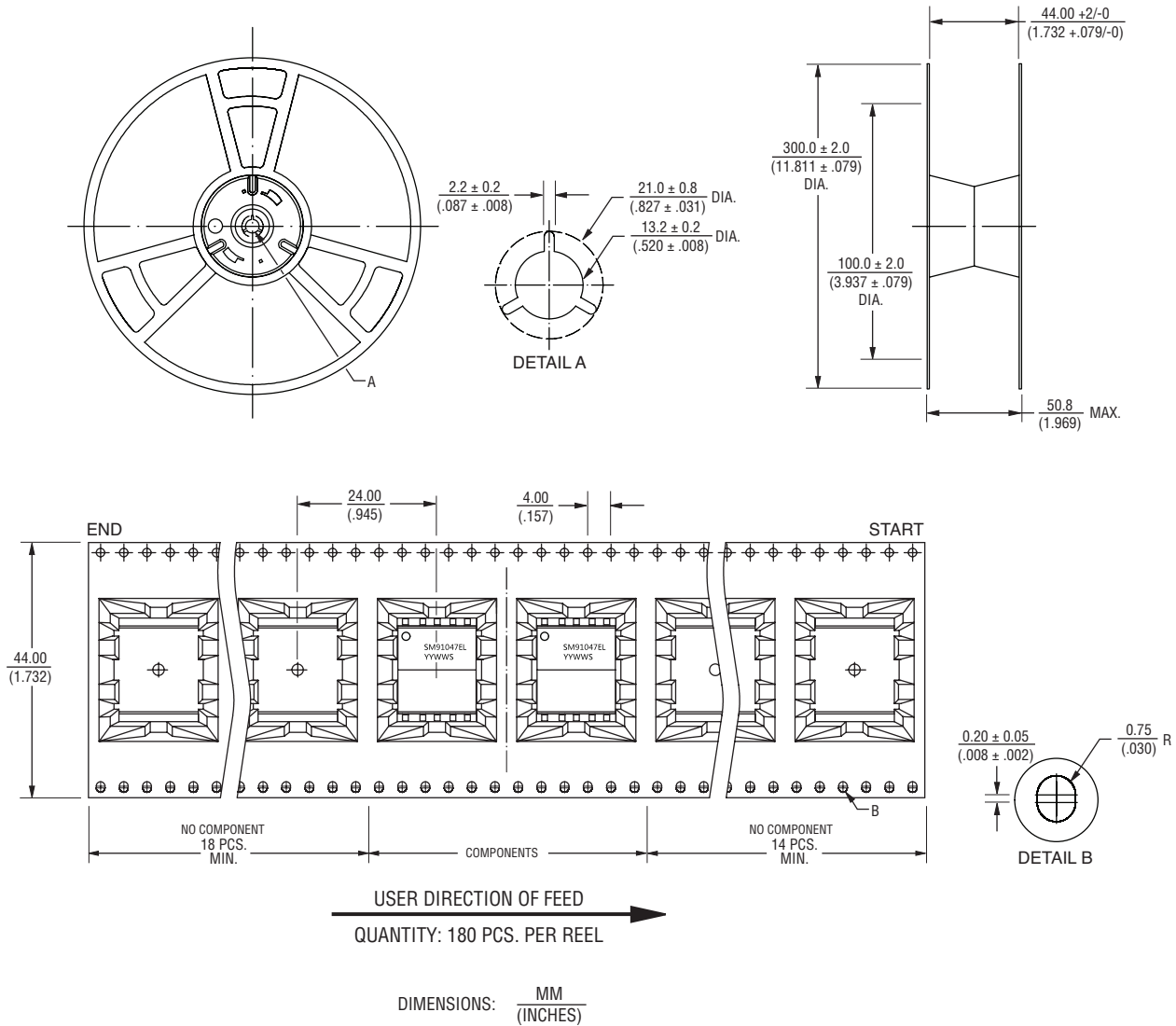
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Users should verify actual device performance in their specific applications.

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SM91047EL Flyback Transformer

BOURNS®

Packaging Specifications



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