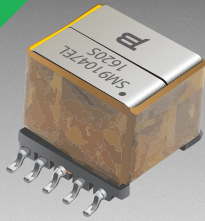


*RoHS COMPLIANT



BOURNS®

Features

- Wide operating input voltage range
- 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

SM91047EL Series Flyback Transformer

Electrical Specifications @ 25 °C

Bourns Part Number	L (Pin 9-7) ±15 % @10 kHz / 1 V	Rated Current	Hi-pot	
			NP to NS	NP, NS to Core
SM91047EL	5.0 mH	0.2 Adc	1.5 k Vrms, 2 mA, 2 S	200 Vrms, 2 mA, 2 S
SM91047-1EL	3.5 mH	0.3 Adc	1.5 k Vrms, 2 mA, 2 S	1.5 k Vrms, 2 mA, 2 S
SM91047-2EL	5.0 mH	0.2 Adc	3 k Vrms, 2 mA, 2 S	2 k Vrms, 2 mA, 2 S

Rated Current

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

Leakage Inductance @10 kHz, 1 V

Pin 9-7 100 μ H max.
(Pin 2,4 Short)

DCR

Pin 9-7 8.0 Ω ±20 %

Pin 2-4 104 m Ω ±30 %

Turns Ratio & Polarity @10 kHz, 1 V

Pin 9-7 : Pin 2-4 11.875 : 1 typ.

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

How To Order

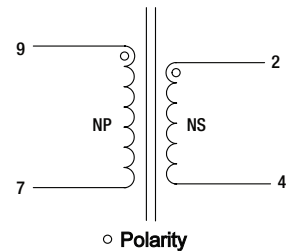
Model _____ **SM91047** _____ **E L**

L (see Electrical Specifications chart)
Blank = 5 mH, 1.5 kV / 200 V Hi-pot
-1 = 3.5 mH, 1.5 kV / 1.5 kV Hi-pot
-2 = 5 mH, 3 kV / 2 kV Hi-pot

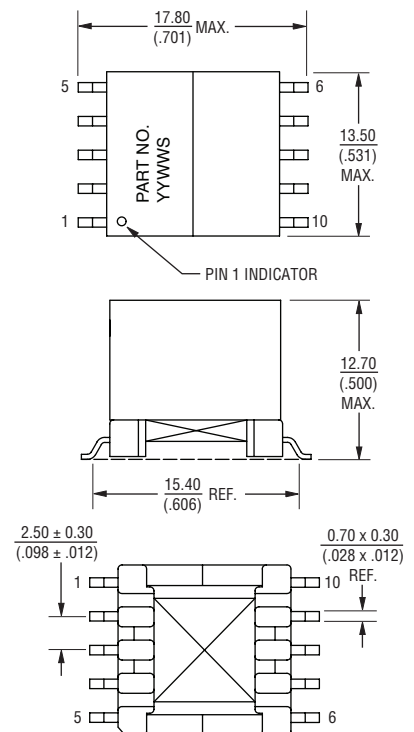
Packaging _____
E = Tape and Reel (180 pcs./reel)

Termination _____
L = Tin (RoHS Compliant)

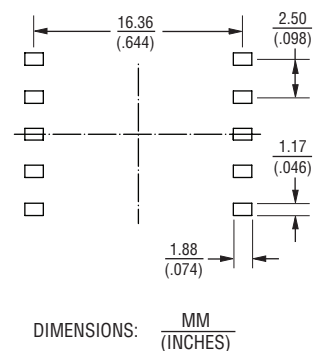
Electrical Schematic



Product Dimensions



Recommended Layout



*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.

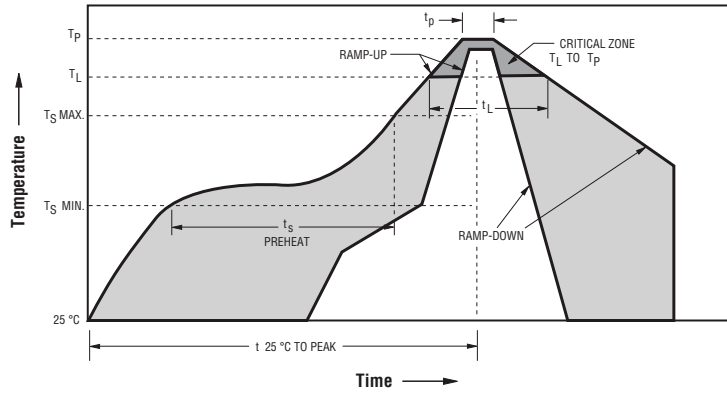
Users should verify actual device performance in their specific applications.

TI is a trademark or registered trademark of its respective owner.

SM91047EL Series Flyback Transformer

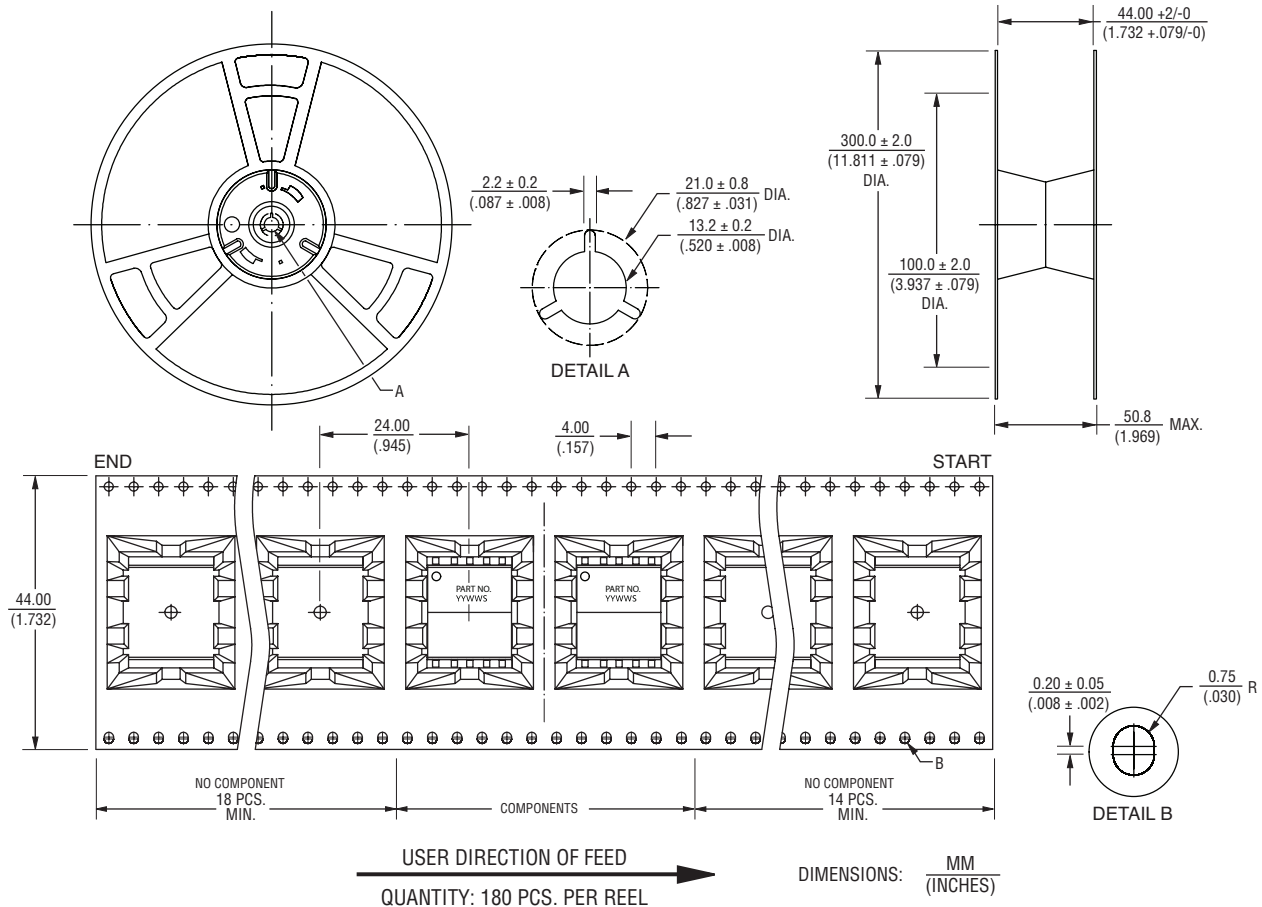
BOURNS®

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.

Packaging Specifications



REV. 01/18

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 Users should verify actual device performance in their specific applications.