

## Features

- Low profile: 5.65 mm
- Wide operating temperature range: -40 to +85 °C
- RoHS compliant\*

## Applications

- Telecom

# SM75057PEL - T1/E1 Transformer

### Electrical Specifications @ 25 °C

OCL (1-3 and 6-8)	mH min. (+25 to +85 °C)
@ 10 kHz, 0.1 V	1.2
OCL (1-3 and 6-8)	mH min. (-40 °C)
@ 10 kHz, 0.1 V	0.6
L-Leakage (1-3 with 14-16 short)	μH max. @ 100 kHz, 0.1 V
	0.6
L-Leakage (6-8 with 9-11 short)	μH max. @ 100 kHz, 0.1 V
	0.6
DCR (1-3 and 6-8)	0.5 - 0.8 Ω
DCR (9-11 and 14-16)	0.9 - 1.6 Ω
Cww (1-16 and 6-11)	pF max. @ 100 kHz, 0.1 V
	30
Turns Ratio	
(1-3) : (16-14)	1 : 2 ± 5 %
(6-8) : (11-9)	1 : 2 ± 5 %
HIPOT	2K Vrms for 60 sec.
Storage Temperature	-40 to +125 °C
Operating Temperature	-40 to +85 °C

### Packaging Specifications

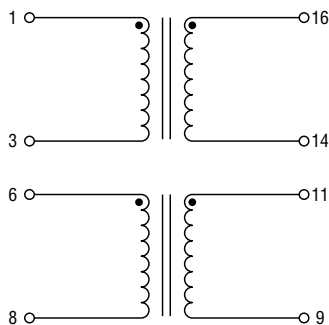
Tape & Reel\* ..... 600 pcs./reel

\*"E" suffix before "L" in part number designates tape & reel packaging, e.g. SM75057PEL.

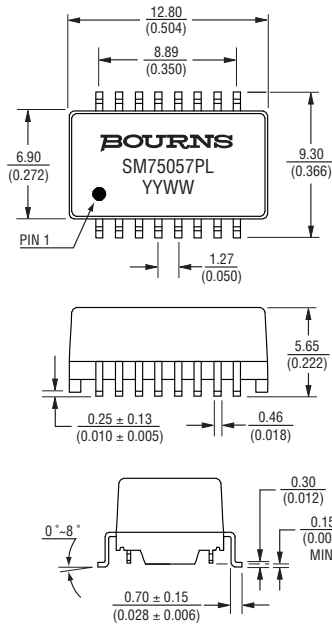
### How To Order

Model	SM75057 P E L
Construction	P = Potted
Packaging	E = Tape and Reel (600 pcs./reel)
Termination	L = Tin only (RoHS Compliant)

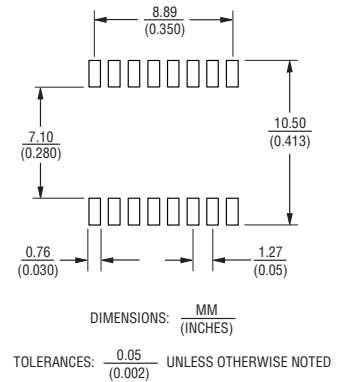
### Electrical Schematic



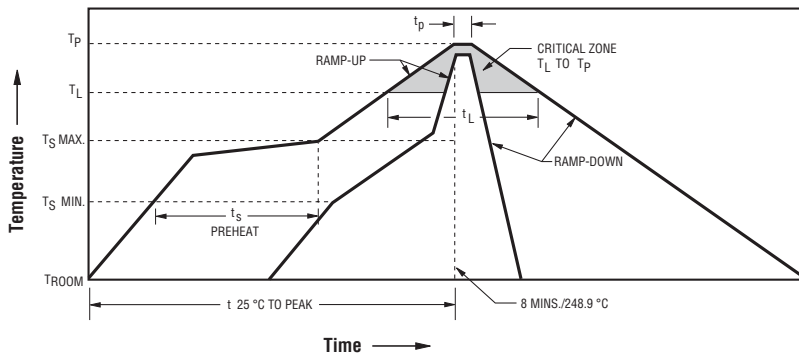
### Product Dimensions



### Recommended Layout



### Soldering Profile



- Ramp-up rate = 3 °C/sec. max.
- Ramp-down rate = 6 °C/sec. max.
- $T_L = 217\text{ °C}$   $t_L = 60\text{-}150\text{ sec.}$
- $T_P = 250\text{ °C} \pm 3\text{ °C}$
- 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 = 8 min. max.



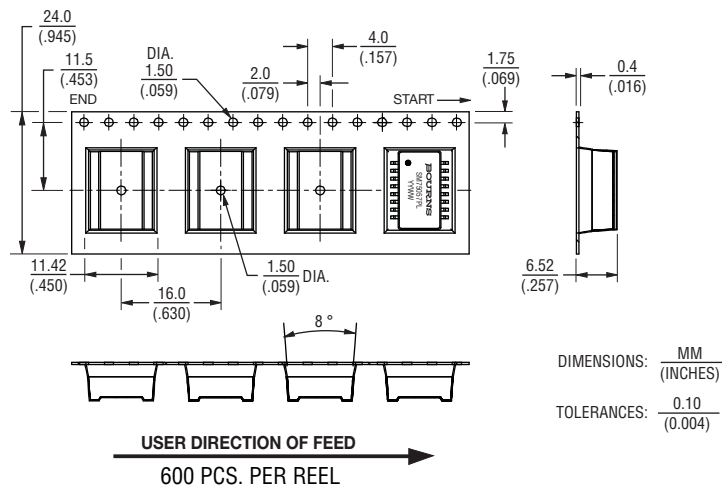
**WARNING Cancer and Reproductive Harm**  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

\*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. 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](http://www.bourns.com/docs/legal/disclaimer.pdf).

# SM75057PEL - T1/E1 Transformer

**BOURNS®**

## Packaging Specifications



**BOURNS®**

Asia-Pacific: Tel: +886-2 2562-4117 • Fax: +886-2 2562-4116

EMEA: Tel: +36 88 520 390 • Fax: +36 88 520 211

The Americas: Tel: +1-951 781-5500 • Fax: +1-951 781-5700

[www.bourns.com](http://www.bourns.com)

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