

### **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 V1.2
OCL (1-3 and 6-8)
mH min. (-40 °C)
@ 10 kHz, 0.1 V0.6
L-Leakage (1-3 with 14-16 short)
μH max. @ 100 kHz, 0.1 V0.6
L-Leakage (6-8 with 9-11 short)
μH max. @ 100 kHz, 0.1 V0.6
DCR (1-3 and 6-8)0.5 - 0.8 $\Omega$
DCR (9-11 and 14-16) $0.9 - 1.6 \Omega$
Cww (1-16 and 6-11)
pF max. @ 100 kHz, 0.1 V30
Turns Ratio
(1-3): (16-14)1:2 ±5 %
(6-8): (11-9)1:2 ±5 %
HIPOT 2K Vrms for 60 sec.
Storage Temperature40 to +125 °C
Operating Temperature40 to +85 °C

#### **Packaging Specifications**

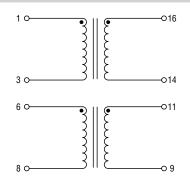
Tape & Reel\*..... 600 pcs./reel

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

#### **How To Order**

	SM75057	Р	Ε	L
Model —				
Construction ————————————————————————————————————				
Packaging — E = Tape and Reel (600	) pcs./reel)			
Termination — L = Tin only (RoHS Cor	mpliant)			

### **Electrical Schematic**

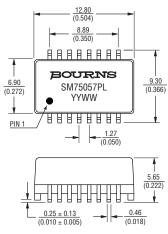


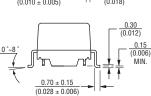


**WARNING Cancer and Reproductive Harm** 

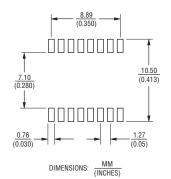
www.P65Warnings.ca.gov

## **Product Dimensions**



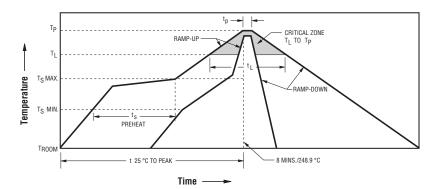


#### **Recommended Layout**



TOLERANCES:  $\frac{0.05}{(0.002)}$ - UNLESS OTHERWISE NOTED

#### **Soldering Profile**



Ramp-up rate = 3 °C/sec. max. Ramp-down rate = 6 °C/sec. max.  $T_L = 217 \, ^{\circ}C$   $t_L = 60-150 \, sec.$ 

 $T_D = 250 \, ^{\circ}\text{C} \pm 3 \, ^{\circ}\text{C}$ 

Time within 5 °C of actual Peak Temp  $(t_p)2 = 20~40$  sec.

 $T_S \min = 150 \, ^{\circ}C$  Ts max = 200  $^{\circ}C$ 

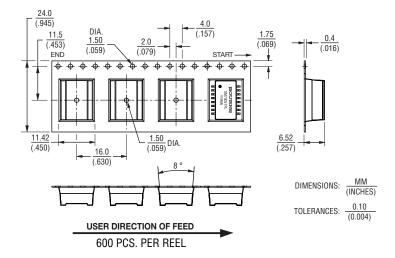
 $T_S$  min to  $T_S$  max = 60-180 sec., 25 °C to Peak Temperature = 8 min. max.

\*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. 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.

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## BOURNS

### **Packaging Specifications**



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