## **SMT Current Sense Transformer**

PMS9494,XXXNLT EE8 SMD Platform











@ Current Rating: up to 30A

@ Footprint: 13mm x 10.5mm x 7.2mm Max

@ Frequency Range: 20kHz to 1MHz

@ Insulation: Functional

@ **Hipot Isolation:** 1200Vrms, 6 sec

Woltage Rating: Up to 375Vpk

Electrical Specifications @ 25°C — Operating Temperature -40°C to +125°C										
Part Number	Turns Ratio ±1.50	Current <sup>2</sup> Rating (A)	Secondary Inductance (mH Min)	DO	Hipot					
				Primary (8-7)(m $\Omega$ Max)	Secondary (1-3)( $\Omega$ Max)	(Vrms)				
PMS9494.050NLT	50	30	0.55	0.35	0.66	1200				
PMS9494.100NLT	100	30	2.2	0.35	3.3	1200				
PMS9494.150NLT	150	30	5.0	0.35	8.2	1200				
PMS9494.200NLT	200	30	9.0	0.35	14	1200				

#### NOTES:

- The temperature of component (ambient temperature plus temper-ature rise) must be within the specified operating temperature range.
- The maximum current rating is based upon temperature rise of the component and represents the DC current which will cause a typical temperature rise of 40°C.
- To calculate value of terminating resistor (Rt) use the following formula: Rt (W) = VREF \* N / (Ipeak\_primary)

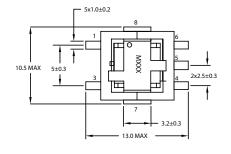
The peak flux density of the device must remain below 2200 Gauss. To calculate the peak flux density for uni-polar current use following formula:

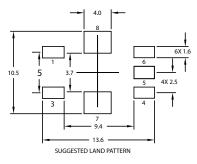
Bpk =  $18.8 \text{ VREF} * (Duty\_Cycle\_Max) * 10^5/(N * Freq\_kHz)$ 

\* for bi-polar current applications divide Bpk (as calculated above) by 2.

Rated voltage is based on a positive partial discharge test (discharge < 10pC) during the design
phase (not production tested) for a 375V repetitive peak voltage (Urp). The test condition was with
an extinction voltage, U2 = 1.1\* Urp, after an inception voltage, U1 = 1.25\*U2.</li>

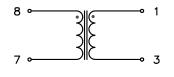
## Mechanical Schematic



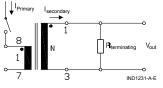








### SCHEMATIC



Application circuit and pinning

 Weight
 1.2 grams

 Tape & Reel
 450/reel

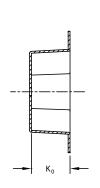
Dimensions: mm

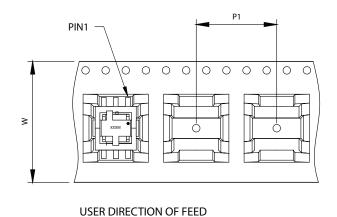
Unless otherwise specified, all tolerances are ± 0.25

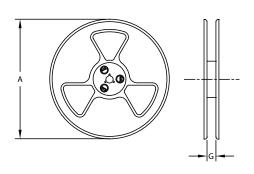
# **SMT Current Sense Transformer**

PMS9494.XXXNLT EE8 SMD Platform

## **TAPE & REEL INFO**







SURFACE MOUNTING TYPE, REEL/TAPE LIST										
DADT NUMDED	REEL SIZE (mm)		TAPE SIZE (mm)			QTY				
PART NUMBER	А	G	P <sub>1</sub>	W	<b>K</b> 0	PCS/REEL				
PMS9494.XXXNLT	330	24.4	16	24	7.9	450				

#### For More Information:

Americas - prodinfo\_power\_americas@ yageo.com | Europe - prodinfo\_power\_emea@yageo.com | Asia - prodinfo\_power\_asia@yageo.com

Performance warranty of products offered on this data sheet is limited to the parameters specified. Data is subject to change without notice. Other brand and product names mentioned herein may be trademarks or registered trademarks of their respective owners. © Copyright, 2023. Pulse Electronics, Inc. All rights reserved.

