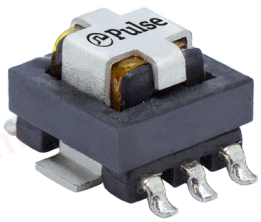
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SMT Current Sense Transformer

PMS9494.XXXNLT EE8 SMD Platform

Pulse
a YAGEO company



- **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*
- **Voltage Rating:** *Up to 375Vpk*

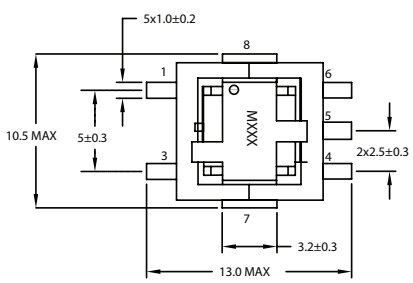
Electrical Specifications @ 25°C — Operating Temperature -40°C to +125°C

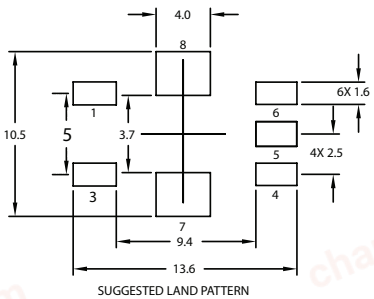
Part Number	Turns Ratio ±1.50	Current[2] Rating (A)	Secondary Inductance (mH Min)	DCR		Hipot (Vrms)
				Primary (8-7)(mΩ Max)	Secondary (1-3)(Ω Max)	
PMS9494.050NLT	50	30	0.55	0.35	0.66	1200
PMS9494.100NLT	100	30	2.2	0.35	3.3	1200
PMS9494.150NLT	150	30	5.0	0.35	8.2	1200
PMS9494.200NLT	200	30	9.0	0.35	14	1200

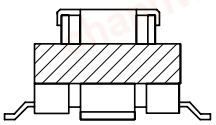
NOTES:

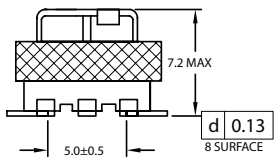
1. The temperature of component (ambient temperature plus temper-ature rise) must be within the specified operating temperature range.
2. The maximum current rating is based upon temperature rise of the component and represents the DC current which will cause a typical temperature rise of 40°C .
3. To calculate value of terminating resistor (Rt) use the following formula:
   Rt (W) = V_{REF} * N / (Ipeak_primary)
4. 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* V_{REF} * (Duty_Cycle_Max) * 10^5 / (N * Freq_kHz)
   * for bi-polar current applications divide Bpk (as calculated above) by 2.
5. 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.

Mechanical

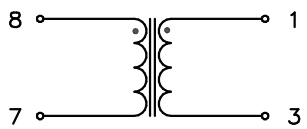




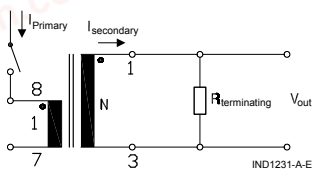

FINAL OUTLINE



Schematic



SCHEMATIC



Application circuit and pinning

Weight . . . . . 1.2 grams

Tape & Reel 450/reel

Dimensions: mm

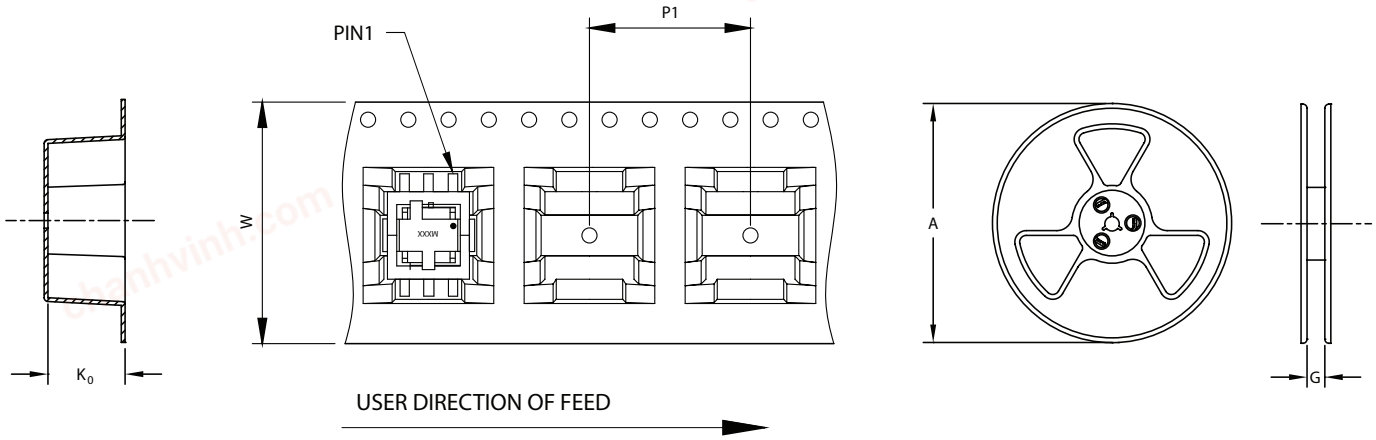
Unless otherwise specified, all tolerances are ± 0.25

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PMS9494.XXXNLT EE8 SMD Platform

TAPE & REEL INFO



SURFACE MOUNTING TYPE, REEL/TAPE LIST						
PART NUMBER	REEL SIZE (mm)		TAPE SIZE (mm)			QTY
	A	G	P1	W	K0	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

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