SMT Current Sense Transformers

PM820X Series









🔑 Height: 5.5mm Max

Prootprint: 8.4mm x 7.2mm Max

@ Current Rating: up to 10A

Prequency Range: 50kHz to 1MHz

Lower Primary DCR version available:

PA1005.XXX series

Electrical Specifications @ 25°C - Operating Temperature -40°C to +125°C						
			Committee	DCR (m Ω MAX)		
Part Number	Turns Ratio	Current ² Rating	Secondary Inductance	Primary	Secondary	Highpot
		(A)	(mH MIN)	(8-7)	(1-3)	(VRMS)
PM8208NL	1:100	10	2.00	6	5500	500

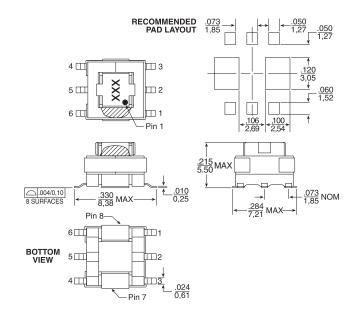
Notes:

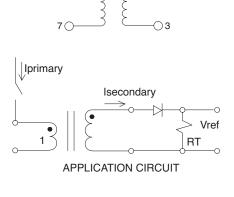
- The temperature of the component (ambient temperature plus temperature rise) must be within the specified operating temperature range.
- 2. The maximum current rating is based upon temperature rise of the component and represents the DC current which will cause a typical temperature rise of 40°C with no airflow when both one turn windings connected in parallel.
- To calculate the value of the terminating resistor (Rt) use the following formula:
 Rt (W) = Vref * N / (Ipeak_primary)
- 4. The peak flux density of the device must remain below 2000 Gauss. To calculate the peak flux density for uni-polar current use following formula: 1. The maximum volt-usec rating limits the peak flux density to 3600 gauss when used in bi-polar drive application with 200KHz. For unipolar drive applications or a bi-polar drive with 350kHz, a maximum volt-usec could be 60% of the listed value. For Push-Pull topology, where the voltage is applied across half the primary winding turns, the maximum volts-use needs to be derated by 50%.

Bpk = 37.59 * Vref * (Duty_Cycle_Max) * 105 / (N * Freq kHz)

- * for bi-polar current applications divide Bpk (as calculated above) by 2.
- 5. Optional Tape & Reel packaging can be ordered by adding a "T" suffix to the part number (i.e. P8202NL becomes P8202NLT). Pulse complies to industry standard tape and reel specification EIA481.
- 6. The "NI" suffix indicates an RoHS-compliant part number. Non-NL suffixed parts are not necessarily RoHS compliant, but are electrically and mechanically equivalent to NL versions. If a part number does not have the "NL" suffix, but an RoHS compliant version is required, please contact Pulse for availability.

Mechanical Schematic







For More Information Pulse Worldwide Pulse

Pulse Europe Pulse China Headquarters Pulse North China Pulse South Asia Pulse North Asia Headquarters Pulse Electronics GmbH Pulse Electronics (ShenZhen) CO., LTD Room 2704/2705 135 Joo Seng Road 1F, No.111 D708, Shenzhen Academy of 15255 Innovation Drive Ste 100 Am Rottland 12 Super Ocean Finance Ctr. #03-02 Xiyuan Road San Diego, CA 92128 58540 Meinerzhagen Aerospace Technology, 2067 Yan An Road West PM Industrial Bldg. Zhongli District U.S.A. The 10th Keji South Road, Shanghai 200336 Singapore 368363 Taoyuan City 32057 Germany Nanshan District, Shenzhen, P.R. China Taiwan (R.O.C) China 518057 Tel: 858 674 8100 Tel: 49 2354 777 100 Tel: 86 755 33966678 Tel: 86 21 62787060 Tel: 65 6287 8998 Tel: 886 3 4356768 Fax: 858 674 8262 Fax: 86 755 33966700 Fax: 49 2354 777 168 Fax: 86 2162786973 Fax: 65 6280 0080 Fax: 886 3 4356820

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, 2019. Pulse Electronics, Inc. All rights reserved.