Chipsmall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!
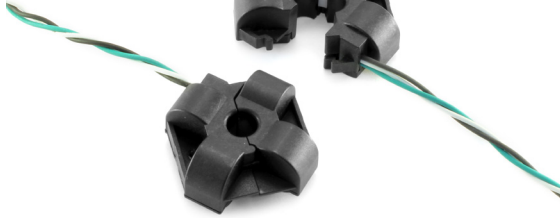
Contact us

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SIDEWINDER® - CURRENT SENSOR

PA3828NL Series

Pulse Electronics

- Unique, Clamp On AC current sensor
- Can be installed without disconnecting wires
- Multiple Open and Close, up to 100 times
- Current Range from 0.1 to 100 Amps AC
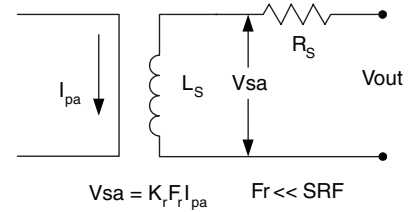- 1% Accuracy Class
- Patent Pending

Part Number	Electrical Specifications at 25ºC Temp Range -40ºC to 130ºC					Actual Secondary Output Voltage (Vsa)	
	Kr^4 ($\mu\Omega$/Hz typ)	Pri-Sec Isolation (V min)	Ls^5 (mH typ)	Rs^6 (Ohms typ)	SRF^7 (Hz typ)	@ 50 Hz (μV/A)[1]	@ 60 Hz (μV/A)[1]
PA3828NL	6.12	1,500	0.895	33.5	300,000	310	372

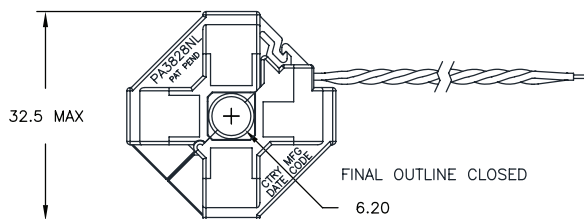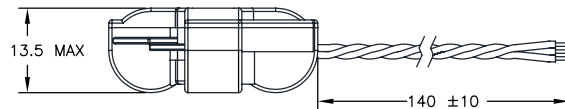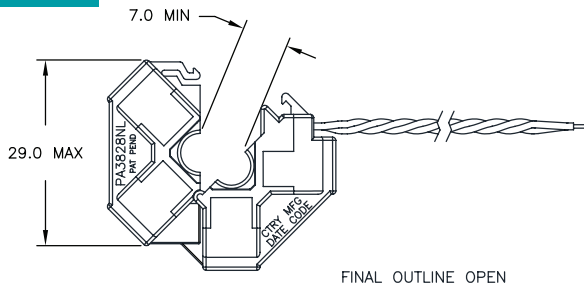**EQUATIONS:** $Vsa = K_r F_r I_{pa}$
$F_r << SRF$

NOTES:
1. Output Voltage is proportional to the derivative (di/dt) of the input current based on the Rogowski Coil principle.
2. All current and voltages assumed to be sinusoidal waveforms at Fr, the constant rated frequency in Hz, measured as RMS values.
3. Accuracy Class per IEC 60044-1 Table 11 where:
   - Percentage current error = ((Kr•Fr•Ipa - Vout) / Vout) x 100
   - Phase displacement = the difference between the primary current (Ipa) phase vector and the (secondary voltage (Vout) phase vector minus 90 degrees), in minutes
4. Kr = Rated transformation constant
5. Ls = Secondary winding inductance
6. Rs = Secondary winding resistance
7. SRF = Self Resonate Frequency
8. Ipa = Actual primary current
9. Vsa = Actual secondary output voltage

Low Frequency Equivalent Circuit

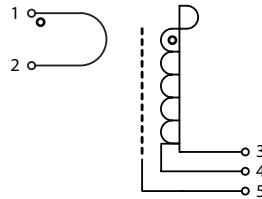$Vsa = K_r F_r I_{pa}$ $Fr << SRF$

Mechanical

PA3828NL

7.0 MIN

29.0 MAX

FINAL OUTLINE OPEN

13.5 MAX

140 ±10

32.5 MAX

FINAL OUTLINE CLOSED

6.20

SIDEWINDER® - CURRENT SENSOR
PA3828NL Series

Schematic

PA3828NL

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1 o─────╮
         )│    ⊙ ╮
2 o─────╯ │      §
          │      §
          │      §────o 3
          │      ╰────o 4
          ╰───────────o 5
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