SMT Current Sense Transformers

**PA0368.XXXNL**

- **Height:** 3.3mm Max
- **Footprint:** 8.38mm x 8.38mm Max
- **Current Rating:** up to 4A
- **Frequency Range:** 50kHz to 1MHz

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**Electrical Specifications @ 25°C - Operating Temperature -40°C to +130°C**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Turns Ratio</th>
<th>Current Rating</th>
<th>Secondary Inductance (mH MIN)</th>
<th>DCR (mΩ MAX)</th>
<th>Hipot (V RMS)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Primary</td>
<td>Secondary</td>
<td></td>
</tr>
<tr>
<td>PA0368.050NL</td>
<td>1:50</td>
<td>4</td>
<td>1.7</td>
<td>4</td>
<td>900</td>
</tr>
<tr>
<td>PA0368.070NL</td>
<td>1:70</td>
<td>4</td>
<td>3.3</td>
<td>4</td>
<td>1200</td>
</tr>
<tr>
<td>PA0368.080NL</td>
<td>1:80</td>
<td>4</td>
<td>4.3</td>
<td>4</td>
<td>1400</td>
</tr>
<tr>
<td>PA0368.100NL</td>
<td>1:100</td>
<td>4</td>
<td>6.7</td>
<td>4</td>
<td>1600</td>
</tr>
<tr>
<td>PA0368.125NL</td>
<td>1:125</td>
<td>4</td>
<td>10.4</td>
<td>4</td>
<td>1900</td>
</tr>
</tbody>
</table>

**Notes:**

1. 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.
2. To calculate value of terminating resistor (Rt) use the following formula:
   \[ R_t (W) = V_{ref} \times N / (I_{peak\_primary}) \]
3. 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:
   \[ B_{pk} = 64.9 \times V_{ref} \times (Duty\_Cycle\_Max) \times 10^5 / (N \times Freq\_kHz) \]
   * for bi-polar current applications divide B_{pk} (as calculated above) by 2.
4. Optional Tape & Reel packaging can be ordered by adding a “T” suffix to the part number (i.e. PA0368.050NL becomes PA0368.050NL T). Pulse complies to industry standard tape and reel specification EIA481.
5. The “NL” 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.
6. The temperature of the component (ambient plus temperature rise) must be within the stated operating temperature range.
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PA0368.XXXNL

**Mechanical**

**Schematic**

**PA0368.XXXNL**

**Application**

**For More Information:**

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