

# High Frequency Wire Wound Transformers

EE16 Platforms - THT Type



- AC/DC and DC/DC Switching Transformers
- Reinforced Insulation
- 3000Vrms Hi-pot
- Topology: Flyback
- Custom Design Available

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

PA3050NL	Pri. Inductance	(1-2)	980µH±10%		
	Lk. Inductance w/	(1-2) (7-6)	35 µH MAX shorted		
	DCR	(5-4)	300		mΩ MAX
		(1-2)	1800		
		(7-6)	35		
	Hi-Pot	Pri-Sec	3000 Vrms		
K1 Factor	6282				

### Notes:

- The temperature of the component (ambient plus temperature rise) must be within the stated operating temperature range.
- For flyback topology applications, it is necessary to ensure that the transformer will not saturate in the application. The peak flux density (Bpk) should remain below 2700Gauss. To calculate the peak density, use the following formula:  

$$B_{pk} \text{ (Gauss)} = K1\_Factor * I_{pk} \text{ (A)}$$
- In high volt-sec applications, it is important to calculate the core loss of the transformer. Approximate transformer core loss can be calculated as:

$$CoreLoss \text{ (W)} = 3.6E-14 * (Freq\_kHz)^{1.63} * (\Delta B\_Gauss)^{2.65}$$

where  $\Delta B$  can be calculated as:

- For Flyback Topology:  $\Delta B = K1\_Factor * \Delta(A)$
- For Forward Topology:  $\Delta B = K1\_Factor * Volt\text{-}\mu\text{sec}$

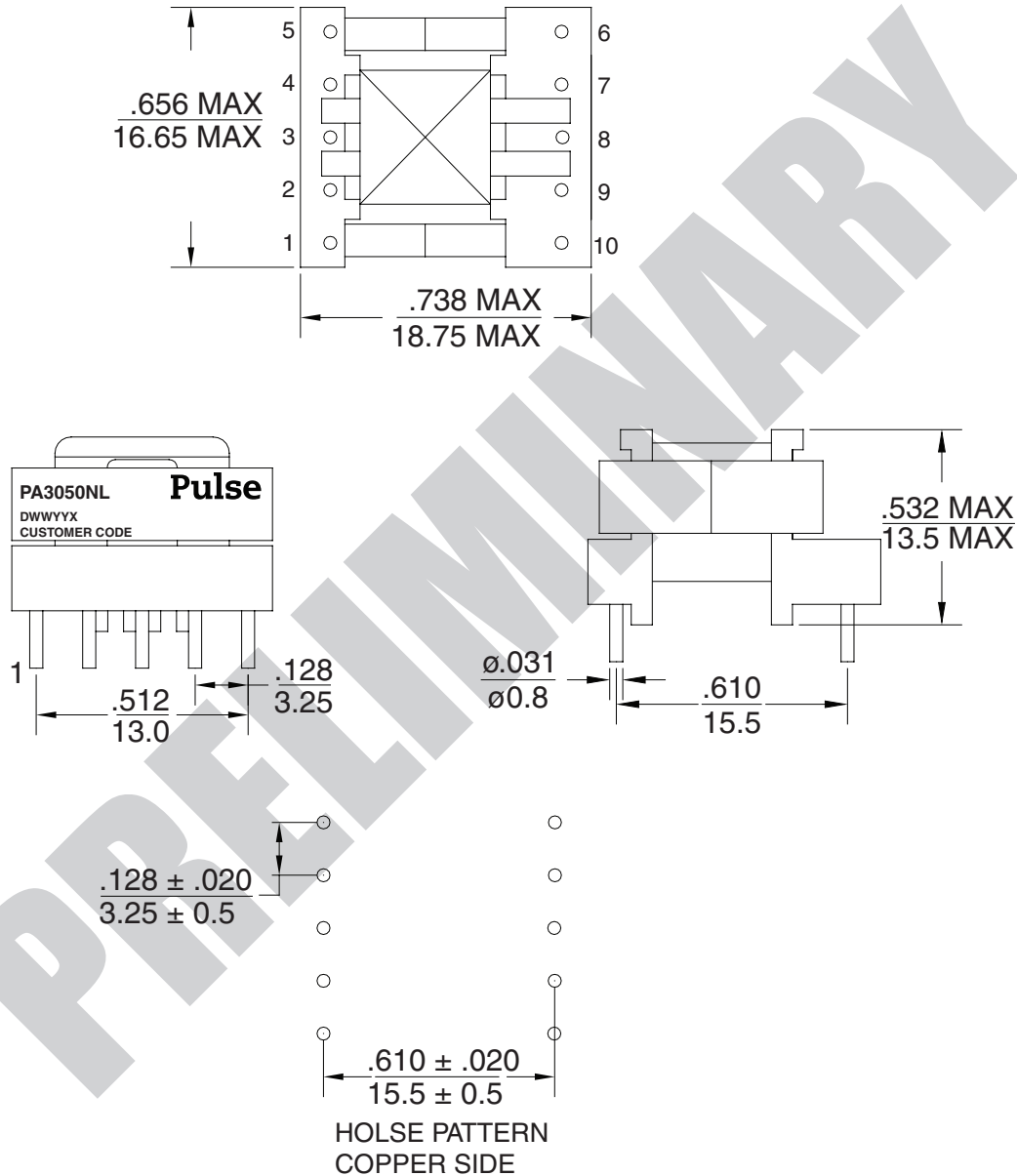
- The "NL" suffix indicates an RoHS-compliant part number. Non-NL suffixed parts are not necessarily RoHS compliant, but are electrically and mechanically equivalent to NL versions. If a part number does not have the "NL" suffix, but an RoHS compliant version is required, please contact Pulse for availability.  
 \* Contact Pulse for availability

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## Mechanical (continued)

PA3050NL



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