

Switch Mode Transformer for AC/DC offline Applications

EE16H, EE16V, EF20H and EF25V Platforms



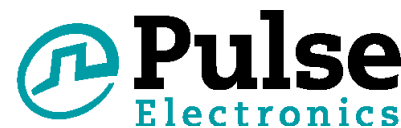
- AC/DC offline Switch Mode Transformer
- Hipot up to 3000Vrms
- Flyback Topology
- Operational Insulation
- Matched to Tiny Switch and Top Switch chipsets
- Custom Design Available: <60W with up to Reinforced Insulation

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

PH0256NL	Pri. Inductance	(3-2)	2800 μ H $\pm$ 15%		
	Lk. Inductance w/	(4,5,8,10)	65 μ H max shorted		
	DCR	(3-2) (10-8) (4-5)	3.3	Ω Max	
			0.02		
			0.13		
	Hi-Pot	Pri-Sec	500 Vrms		
	K1 Factor	10100			
PI IC's	TNY264/274				
PH0259NL	Pri. Inductance	(4-1)	1800 μ H $\pm$ 15%		
	Lk. Inductance w/	(5,6,7,8)	60 μ H max shorted		
	DCR	(4-1) (5-6) (8-6)	2.556	Ω Max	
			0.0168		
			0.174		
	Hi-Pot	Pri-Sec	500 Vrms		
	K1 Factor	7200			
PI IC's	TNY266/274				
PH0262NL	Pri. Inductance	(3-1)	790 μ H $\pm$ 10%		
	Lk. Inductance w/	(3-1) (4,5,9,10)	30 μ H max shorted		
	DCR	(3-1) (4-5) (10-9)	1.085	Ω Max	
			0.015		
			0.026		
	Hi-Pot	Pri-Sec	3000 Vrms		
	K1 Factor	4030			
PI IC's	TNY279				

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PH0270NL	Pri. Inductance	(3-1)	876 μ H $\pm$ 10%		FLYBACK TRANSFORMER
	Lk. Inductance w/	(3-1) (4,5,6,7,9,10)	28 μ H max shorted		
	DCR	(3-1)	0.5	Ω Max	
		(5-4)	0.026		
		(6-7)	0.025		
		(9-10)	0.025		
	Hi-Pot	Pri-Sec	1500	Vrms	
	K1 Factor	2900			
PI IC's	TOP244 / 245 / 246 / 254 / 264				

Notes:

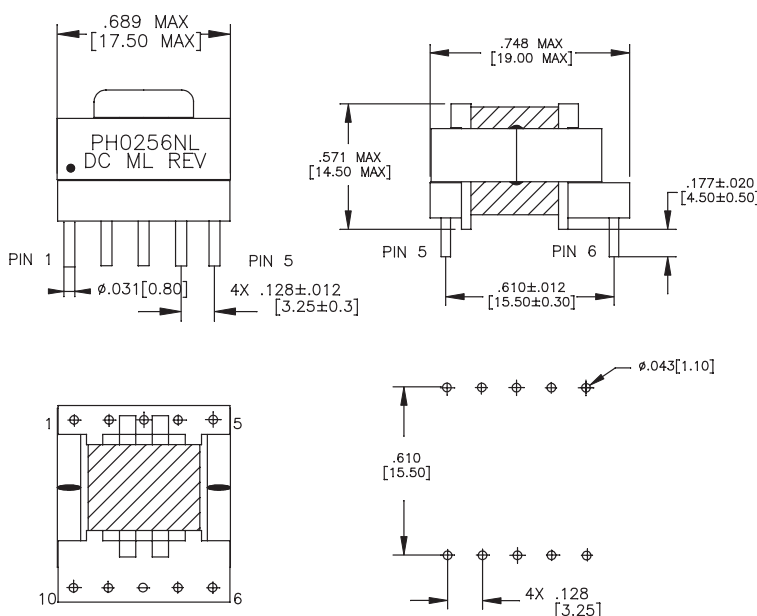
- The temperature of the component (ambient plus temperature rise) must be within the stated operating temperature range.
- The above transformers and inductors have been tested and approved by Pulse's power IC partners and are sited in the appropriate datasheet or evaluation board documentation at these companies. To determine which IC and IC partners are matched with the above Pulse part numbers please consult the IC Cross Reference on the Pulse website.
- 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:

$$CoreLoss \text{ (W)} = 3.6E-14 * (Freq_kHz)^{1.63} * (\Delta B_Gauss)^{2.63}$$
 where ΔB can be calculated as:
 For Flyback Topology: $\Delta B = K1_Factor * \Delta(A)$
 For Forward Topology: $\Delta B = K1_Factor * Volt\text{-}\mu sec$
- 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.

Mechanical

PH0256NL



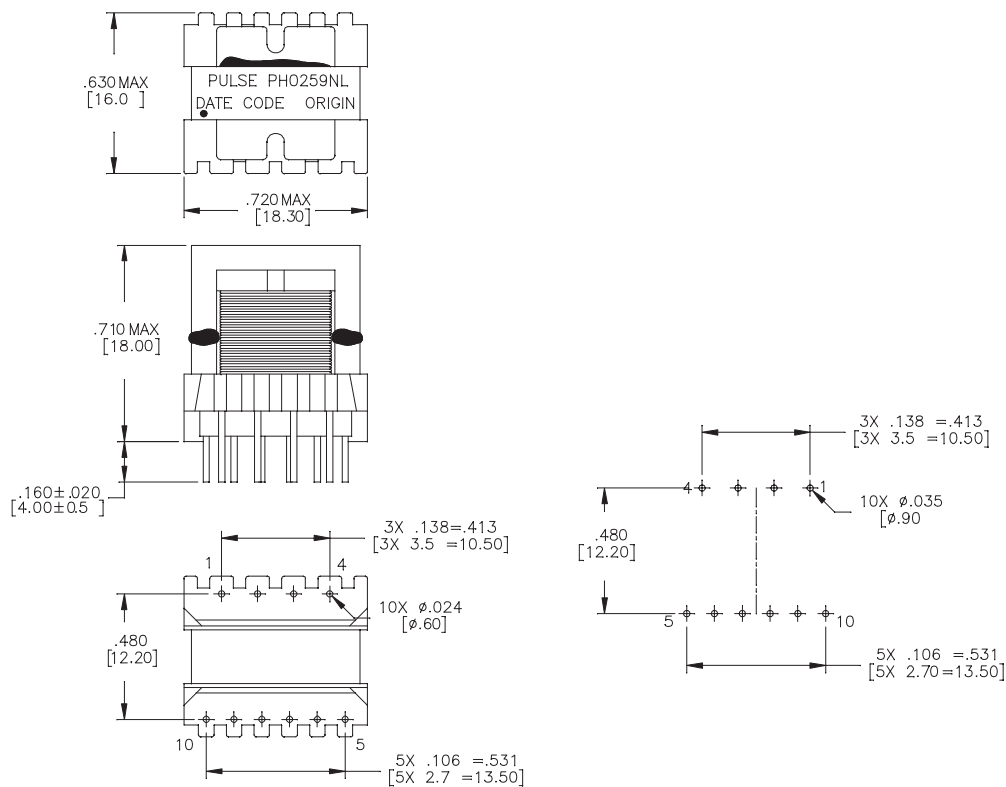
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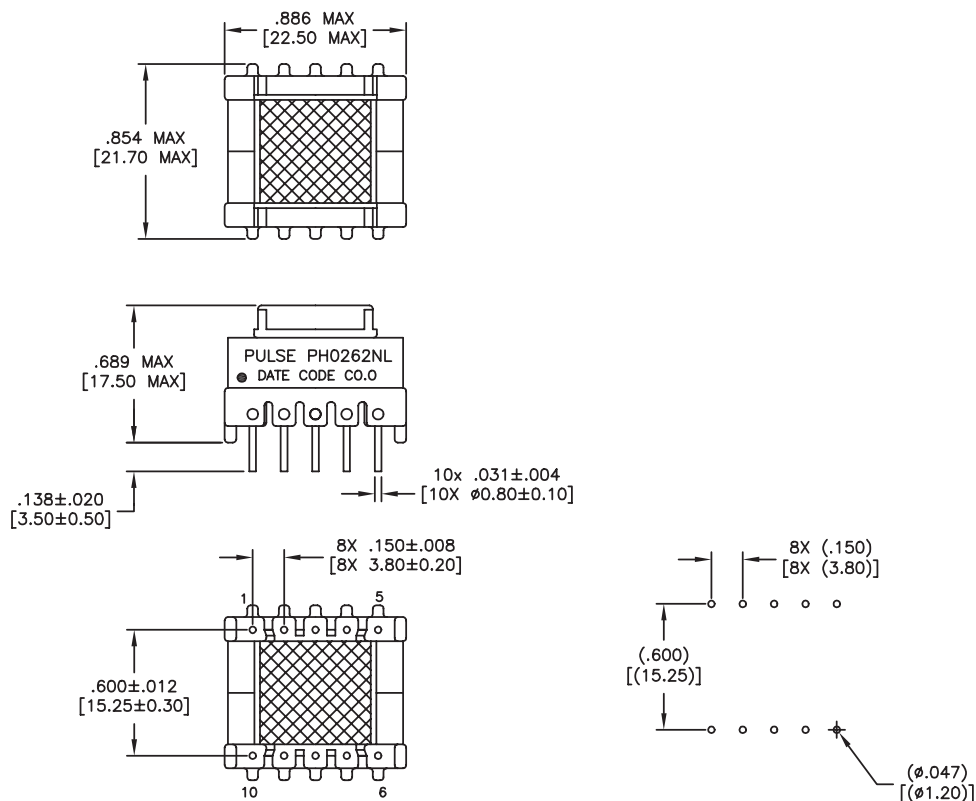


Mechanical

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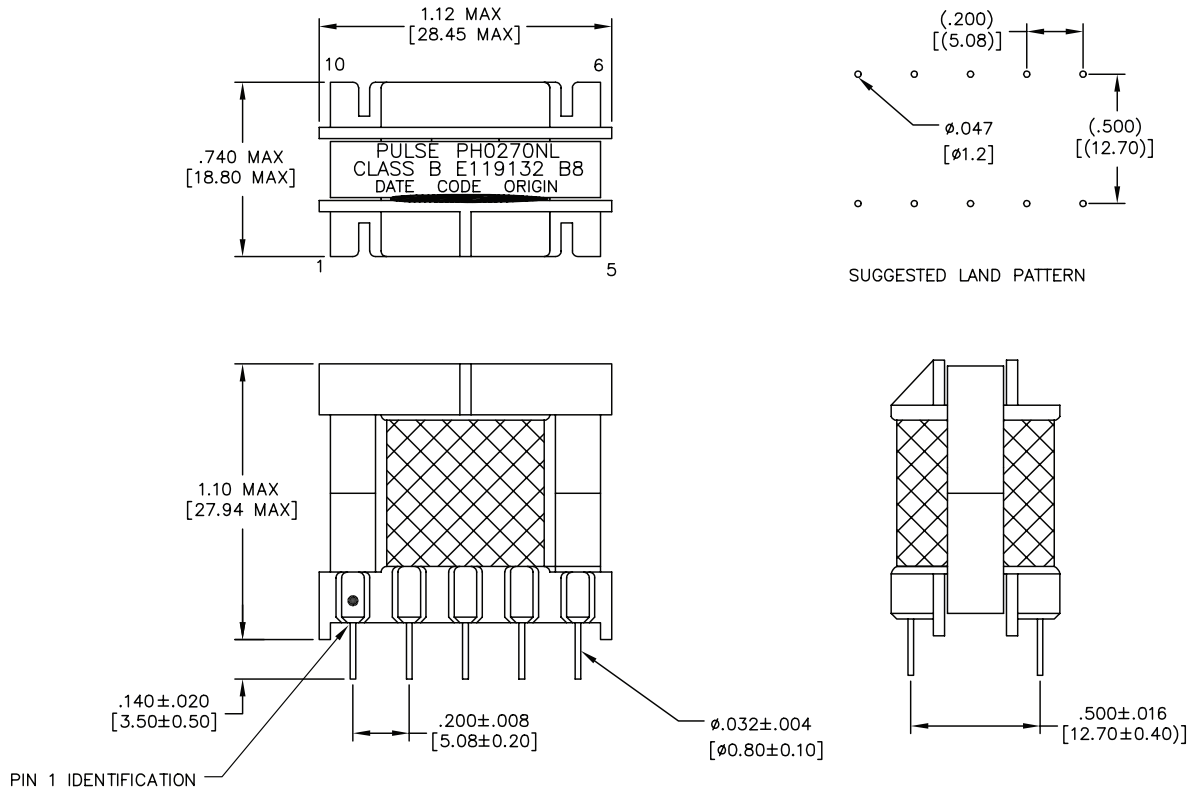


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Mechanical

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For More Information

Pulse Worldwide Headquarters

12220 World Trade Drive
San Diego, CA
92128
U.S.A.

Tel: 858 674 8100
Fax: 858 674 8262

Pulse Europe

Einsteinstrasse 1
D-71083 Herrenberg
Germany

Tel: 49 7032 78060
Fax: 49 7032 7806 135

Pulse China Headquarters

B402, Shenzhen Academy of
Aerospace Technology Bldg.
10th Kejian Road
High-Tech Zone
Nanshan District
Shenzhen, PR China
518057
Tel: 86 755 33966678
Fax: 86 755 33966700

Pulse North China

Room 2704/2705
Super Ocean Finance
Ctr.
2067 Yan An Road
West
Shanghai 200336
China

Tel: 86 21 62787060
Fax: 86 2162786973

Pulse South Asia

135 Joo Seng Road
#03-02
PM Industrial Bldg.
Singapore 368363

Tel: 65 6287 8998
Fax: 65 6287 8998

Pulse North Asia

3F, No. 198
Zhongyuan Road
Zhongli City
Taoyuan County 320
Taiwan R. O. C.
Tel: 886 3 4356768
Fax: 886 3 4356823 (Pulse)
Fax: 886 3 4356820 (FRE)

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