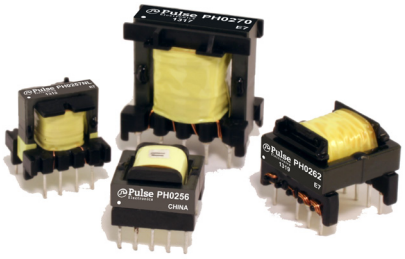
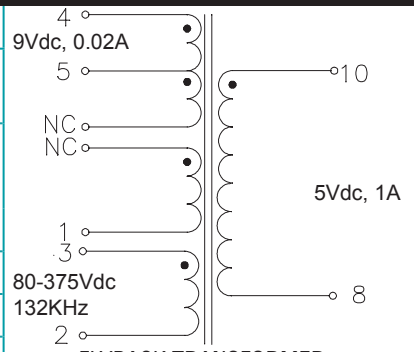
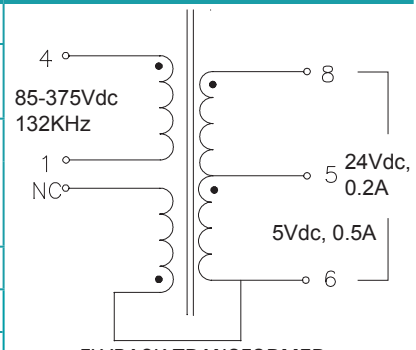
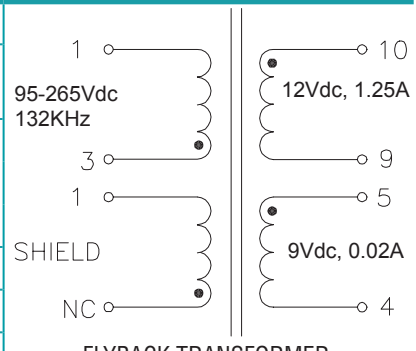
Switch Mode Transformer for AC/DC offline Applications

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*

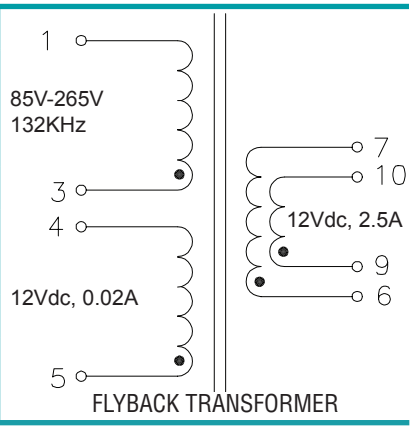
Electrical Specifications @ 25°C - Operating Temperature -40°C to +125°C					
PH0256NL	Pri. Inductance	(3-2)	2800 µH±15%		
	Lk. Inductance w/	(4,5,8,10)	65 µH max shorted		
	DCR	(3-2)	3.3	Ω Max	
		(10-8)	0.02		
		(4-5)	0.13		
	Hi-Pot	Pri-Sec	500	Vrms	
	K1 Factor		10100		
	PI IC's	TNY264/274			
PH0259NL	Pri. Inductance	(4-1)	1800 µH±15%		
	Lk. Inductance w/	(5,6,7,8)	60 µH max shorted		
	DCR	(4-1)	2.556	Ω Max	
		(5-6)	0.0168		
		(8-6)	0.174		
	Hi-Pot	Pri-Sec	500	Vrms	
	K1 Factor		7200		
	PI IC's	TNY266/274			
PH0262NL	Pri. Inductance	(3-1)	790µH ±10%		
	Lk. Inductance w/	(3-1) (4,5,9,10)	30 µH max shorted		
	DCR	(3-1)	1.085	Ω Max	
		(4-5)	0.015		
		(10-9)	0.026		
	Hi-Pot	Pri-Sec	3000	Vrms	
	K1 Factor		4030		
	PI IC's	TNY279			

USA 858 674 8100 Germany 49 7032 7806 0 Singapore 65 6287 8998 Shanghai 86 21 62787060 China 86 755 33966678 Taiwan 886 3 4356768

Switch Mode Transformer for AC/DC offline Applications

EE16H, EE16V, EF20H and EF25V Platforms

PH0270NL	Pri. Inductance	(3-1)	876 µH ±10%		
	Lk. Inductance w/	(3-1) (4,5,6,7,9,10)	28 µH 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:

1. The temperature of the component (ambient plus temperature rise) must be within the stated operating temperature range.
2. 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.
3. 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:

   Bpk (Gauss) = K1_Factor * Ipk (A)

4. 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 (W) = 3.6E-14 * (Freq_kHz) $^{1.63}$ * (ΔB_Gauss) $^{2.63}$

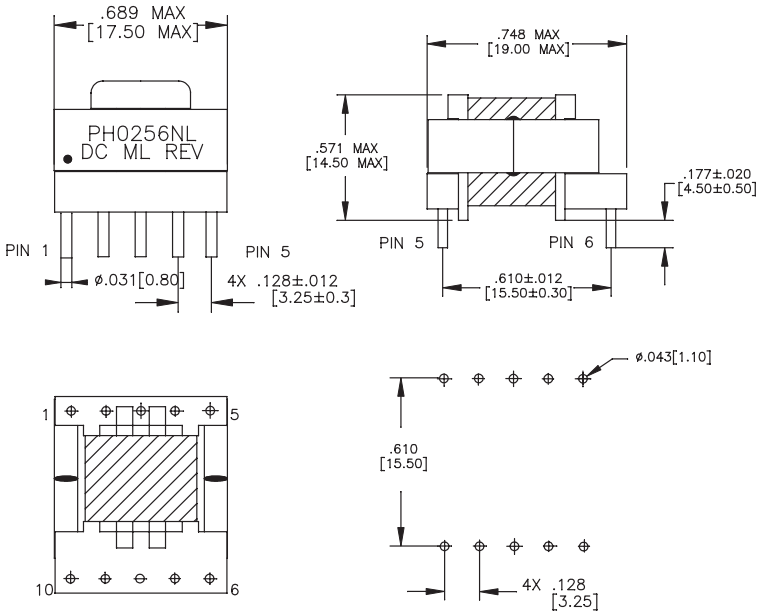
   where ΔB can be calculated as:

   For Flyback Topology: ΔB = K1_Factor * Δ(A)

   For Forward Topology: ΔB = K1_Factor * Volt-µsec
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.

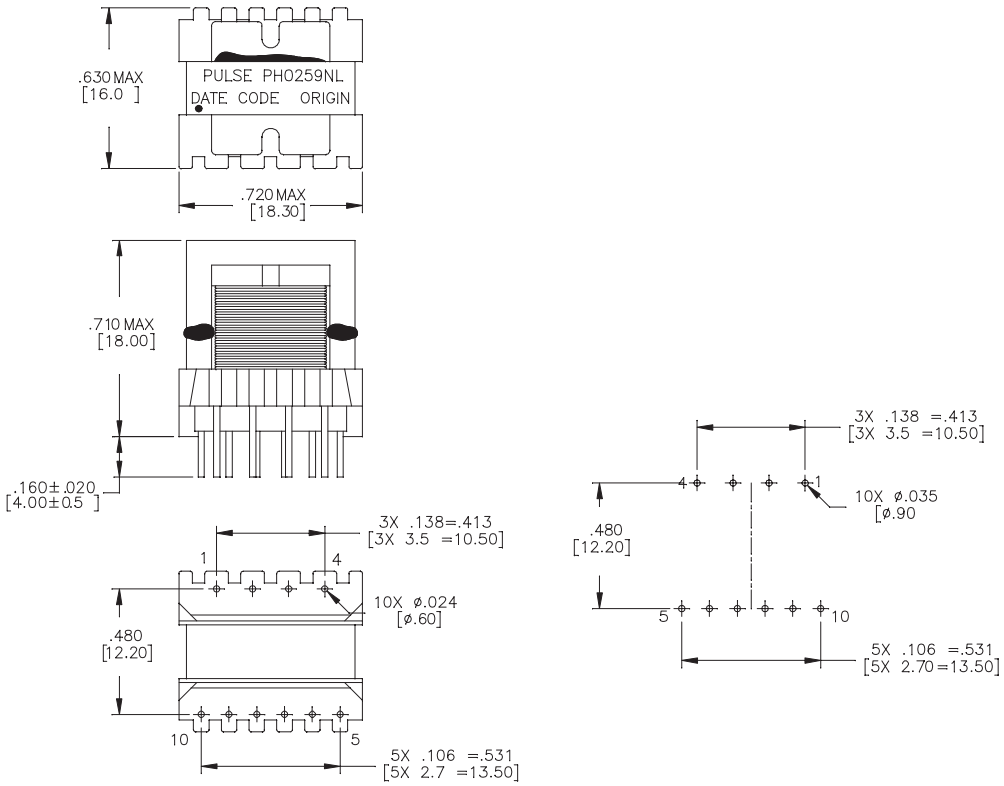
Mechanical

PH0256NL

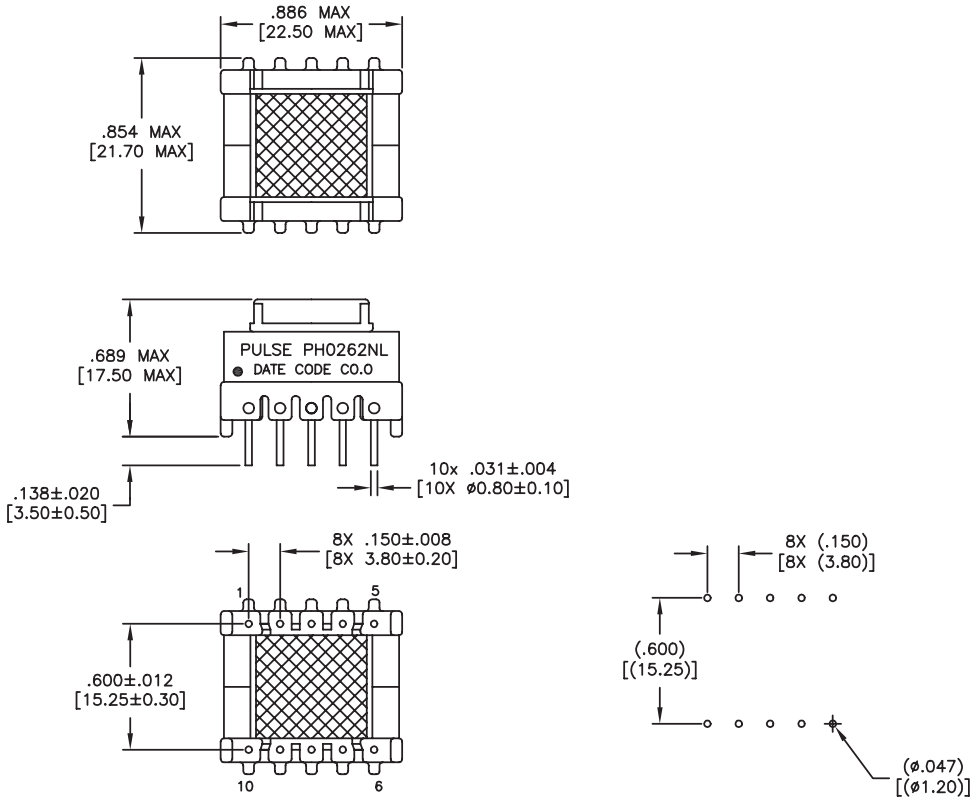


Mechanical

PH0259NL



PH0262NL

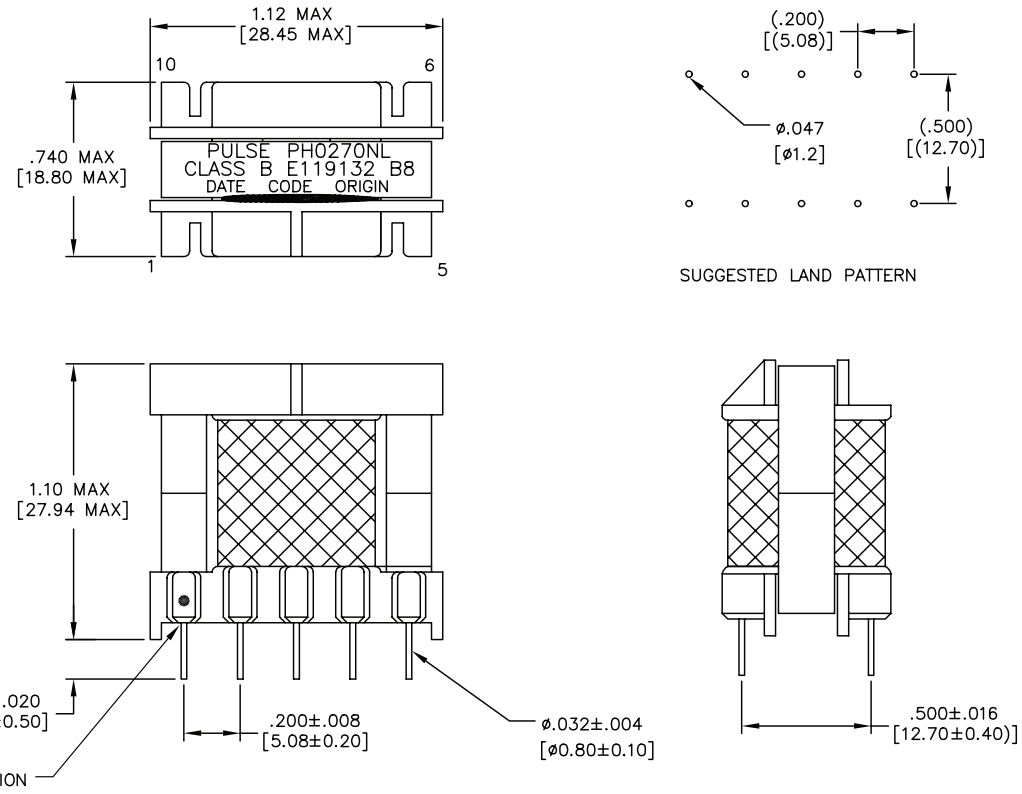


Switch Mode Transformer for AC/DC offline Applications

EE16H, EE16V, EF20H and EF25V Platforms

Mechanical

PH0270NL



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 Kejinan Road
High-Tech Zone
Nanshan District
Shenzen, 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)