

# Mosfet Gate Drive Transformers

PA3815NL Series



- International safety construction, VDE approval with IEC62368-1
- 3750V<sub>RMS</sub> gate to drive winding test
- Useful operating frequency from 20kHz to 100kHz

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

Part Number	Turns Ratio (±5%)	Inductance TV <sub>RMS</sub> 1 kHz Term 1-2 (μH MIN)	Leakage <sup>1</sup> Inductance Term 1-2 (μH MAX)	DCR Drive Winding (Ω MAX)	DCR Gate Winding (Ω MAX)	C <sub>ww</sub> Drive Winding (pf MAX)	C <sub>ww</sub> Gate To Gate (pf MAX)	Typical Operating Frequency (kHz)
PE-63385NL	1:1	1500	4.0	0.40	0.75	50	NA	20-100
PE-63387NL *	1:1:1	1500	4.0	0.40	0.75	50	130	20-100
PE-63386NL	1:1.5	1500	4.0	0.40	2.50	50	NA	20-100
PE-63388NL	1:1.5:1.5	1500	4.0	0.40	2.50	50	130	20-100

Notes: \*Tested to 4400Vrms for 1 minute as PE-68448NL.

## Maximum Ratings

Rating	Sym	PE-63385 PE-63386	PE-63387 PE-63388	Unit
Drive Excitation, Unipolar	ET <sub>U</sub> <sup>6</sup>	200	320	V-μs
Drive Excitation, Bipolar	ET <sub>B</sub> <sup>6</sup>	400	640	V-μs
Secondary RMS Current	I <sub>SR</sub> <sup>7</sup>	640	500	ma
Operating & Storage Temp.	T <sub>OP</sub> , T <sub>STG</sub>	105	105	°C

## Dielectric Strength

Test Between	RMS Test Volts 60Hz, 1 Minute Hold
Gate-Drive	3750
Gate-Gate	1500
Gate-Core	2000
Drive-Core	1750

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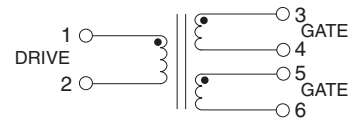
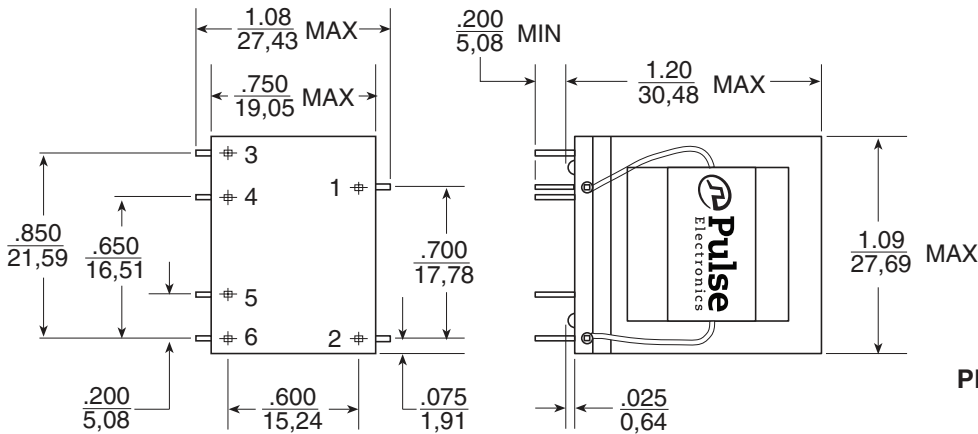
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## Mechanical

## Schematic

PE-XXXXNL



**Dimensions:** Inches  
mm

Unless otherwise specified,  
all tolerances are  $\pm .010$   
0,25

### Notes:

1. Measured with secondaries shorted
2. Pins .025/0.64 square solderable
3. Unused pins not provided
4. Pin numbers not marked on par
5. Mounting header flammability rating: UL-94V0
6. At 2480 Gauss
7. At 200 CM/AMP

## For More Information

### Pulse Worldwide Headquarters

15255 Innovation Drive Ste 100  
San Diego, CA 92128  
U.S.A.

### Pulse Europe

Pulse Electronics GmbH  
Am Rottland 12  
58540 Meinerzhagen  
Germany

### Pulse China Headquarters

Pulse Electronics (ShenZhen) CO., LTD  
D708, Shenzhen Academy of  
Aerospace Technology,  
The 10th Keji South Road,  
Nanshan District, Shenzhen, P.R.  
China 518057

### Pulse North China

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

### Pulse South Asia

3 Fraser Street  
0428 DUO Tower  
Singapore 189352

### Pulse North Asia

1F, No.111  
Xiyuan Road  
Zhongli District  
Taoyuan City 32057  
Taiwan (R.O.C)

Tel: 858 674 8100  
Fax: 858 674 8262

Tel: 49 2354 777 100  
Fax: 49 2354 777 168

Tel: 86 755 33966678  
Fax: 86 755 33966700

Tel: 86 21 62787060  
Fax: 86 2162786973

Tel: 65 6287 8998  
Fax: 65 6280 0080

Tel: 886 3 4356768  
Fax: 886 3 4356820

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