

# 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 $I_{V_{RMS}}$ 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

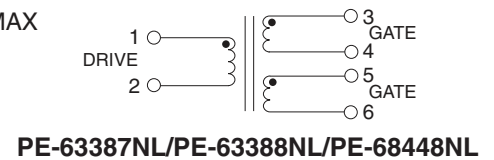
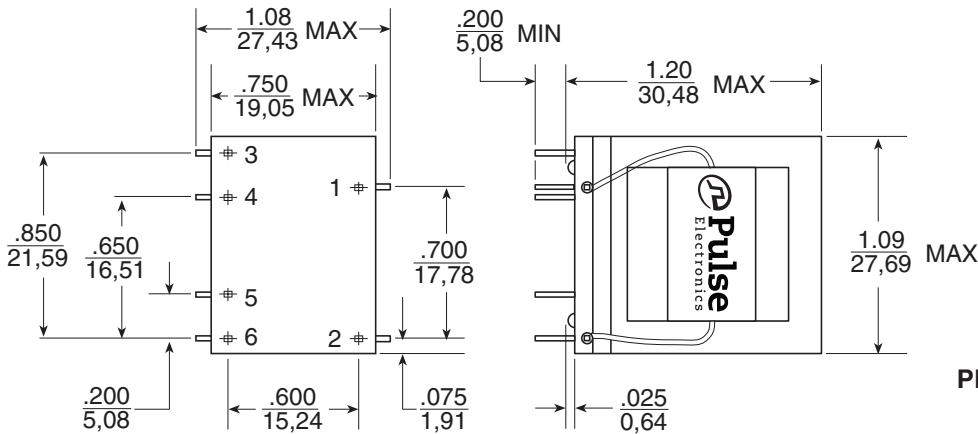
# Mosfet Gate Drive Transformers

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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

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