




# DC/DC SURFACE MOUNT GATE DRIVE TRANSFORMERS

## For SELV Operation



-  Low profile, small footprint
-  1500 Vdc isolation between gate and drive
-  Designed to operate between 50 KHz and 500 KHz

### Electrical Specifications @ 25°C — Operating Temperature -30°C to 130°C

Part Number	Turns Ratio	Primary Inductance (μH MIN)	Leakage Inductance (μH MAX)	DCR Drive (Ω MAX)	DCR Gate (Ω MAX)	Hi-Pot Drive-Gate (Vdc)	Hi-Pot Gate-Gate (Vdc)	B_pk Gauss	KF
PE-68386	1:1	785	0.5	0.52	0.52	1500	N/A	2900	227.3
P0926	1:1:1	330	0.5	2.00	2.00	1500	500	2900	92.6
P0544	1:1:1	3950	0.5	1.60	1.60	1500	500	2900	48.8

**NOTES:**

- These gate drive transformers are designed to operate between 50-500 KHz.
- In order to avoid saturating the transformer, the peak AC Flux must remain below the value listed in the table. The peak AC flux (B\_pk) is calculated using the following formula:  

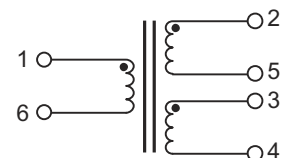
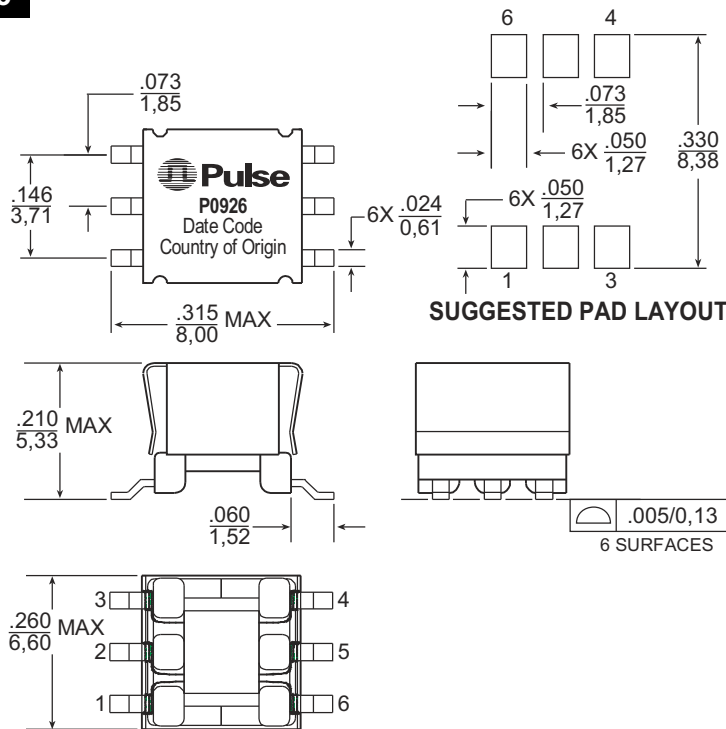
$$B\_pk = \text{Volt-}\mu\text{sec}/(\text{KT} \cdot \text{KF})$$

- where: Volt-μsec = 1000\*Drive Voltage\*Duty Cycle/(Freq\_KHz)  
 KT = 1 for UniPolar Drive Circuits, 2 for BiPolar Drive Circuits  
 KF = value listed in table
- Add suffix "T" to part number for Tape & Reel package (i.e. P0544T).

### Mechanical

### Schematic

#### P0926



Weight .....0.48 grams  
 Tape & Reel .....1300/reel  
 Tube .....80/tube

Dimensions:  $\frac{\text{Inches}}{\text{mm}}$   
 Unless otherwise specified,  
 all tolerances are  $\pm \frac{.010}{0.25}$

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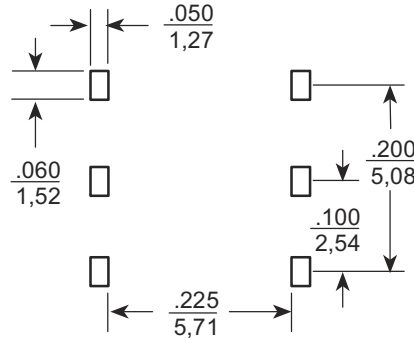
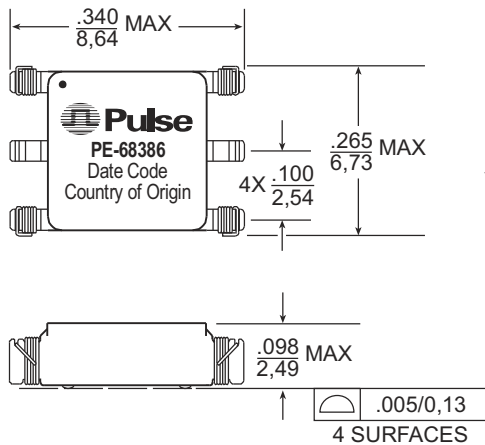
## For SELV Operation



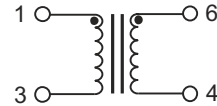
### Mechanicals

### Schematics

#### PE-68386



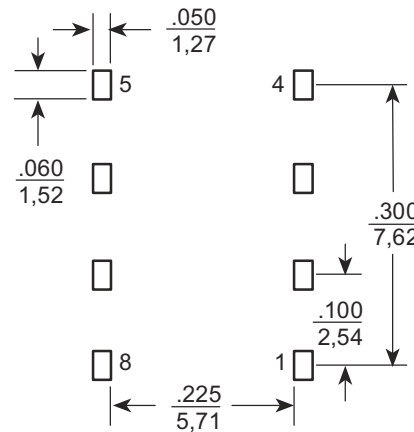
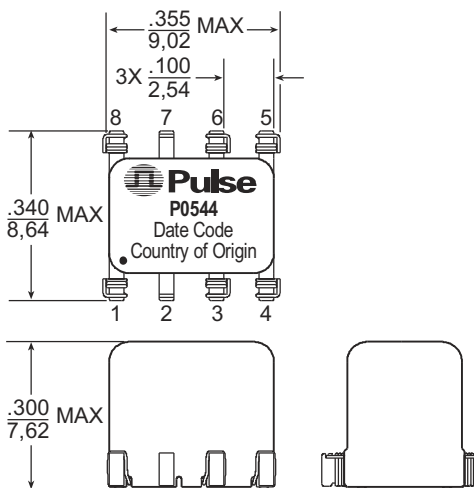
SUGGESTED PAD LAYOUT



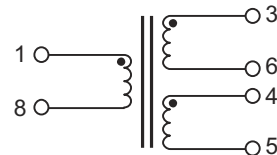
Weight .....0.28 grams  
Tape & Reel .....1500/reel  
Tube .....60/tube

Dimensions:  $\frac{\text{Inches}}{\text{mm}}$   
Unless otherwise specified,  
all tolerances are  $\pm \frac{.010}{0.25}$

#### P0544



SUGGESTED PAD LAYOUT



Weight .....0.60 grams  
Tape & Reel .....400/reel  
Tube .....50/tube

Dimensions:  $\frac{\text{Inches}}{\text{mm}}$   
Unless otherwise specified,  
all tolerances are  $\pm \frac{.010}{0.25}$

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