

High Isolation Gate Drive Transformer

Encapsulation Toroid Platform SMD



-  Forward Transformer
-  Reinforced insulation
-  10mm Creepage Distance
-  3750Vrms Isolation
-  Encapsulation Construction
-  15.8x12.5x10.2mm Max

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

Part Number	Inductance (4-1) (uH Min.)	▲ Leakage Inductance (4-1) (uH Max)	DCR (4-1) (Ω Max)	DCR (6-8) (Ω Max)	DCR (5-7) (Ω Max)	ET MAX (4-1) (V*usec Max)	Turns Ratio 4-1:5-7:6-8	Isolated Voltage Pri to Sec
PMG3045NL	110	0.4	0.3	0.3	0.3	33.1	1:1:0.909	3750Vac

Notes:

1. The ET Max is calculated to limit the core loss and temperature rise at 100KHz based on a bipolar flux swing of 180mT Peak.
2. The applied ET may need to be further derated for higher frequencies based on the temperature rise which results from the core and copper losses
 - A. To calculate total copper loss (W), use the following formula:
Copper Loss (W)=I_{rms_Primary}²*DCR_Primary+I_{rms_Secondary}²*DCR_Secondary
 - B. To calculate total core loss (mW), use the following formula:
Core Loss (mW)=1.477E-8*(Frequency in kHz)^{1.847}*(180*[ET/ET Max])^{2.545}
Where ET is the applied Volt Second, ET Max is the rated Volt Second for 180mT flux swing.
3. Inductance is measured at 100KHz, 0.1V, and leakage inductance is measured at 100KHz, 0.1V(Shorted PIN 5,6,7,8)
4. The AEC-Q200 temperature and humidity operational life testing was completed using a dielectric strength test of 3750Vac/60S, and the Hipot is measured at 4125Vac/3S on mass production.
5. Optional Tape & Reel packing can be ordered by adding a "T" suffix to the part number (i.e. PMG3045NL becomes PMG3045NLT). Pulse complies to industry standard tape and reel specification EIA481.
6. Special Characteristics ▲

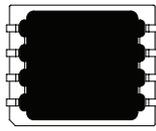
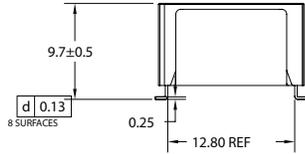
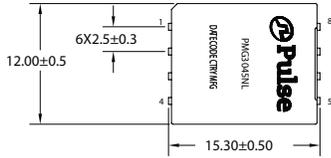
Isolation Power Transformers

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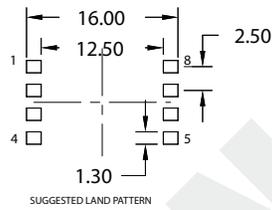
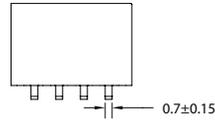
Mechanical

Schematic

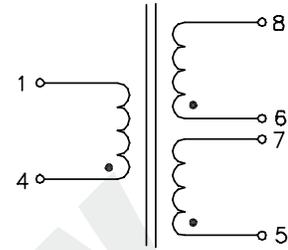
PMG3045NLT



FINAL OUTLINE



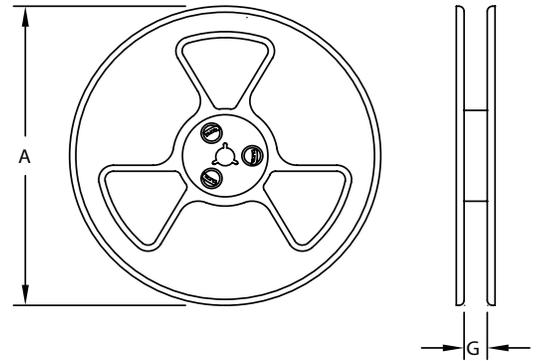
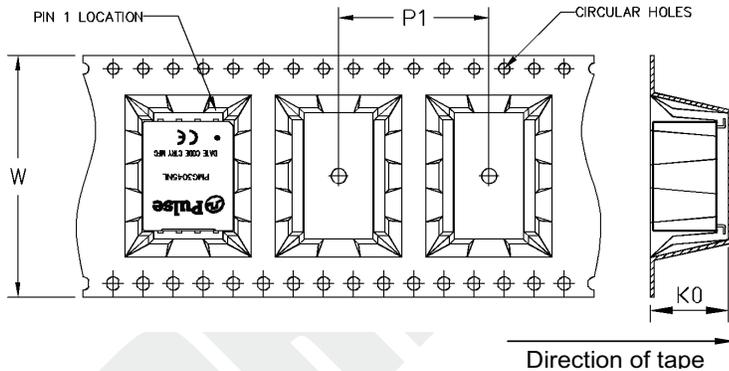
SUGGESTED LAND PATTERN



Weight3.12grams
Tape & Reel.....250/Reel

Dimensions: mm
Unless otherwise specified,
all tolerances are ±0.25

TAPE & REEL INFO



SURFACE MOUNTING TYPE, REEL/TAPE LIST

PART NUMBER	REEL SIZE (mm)	TAPE SIZE (mm)				QTY
	A	G	P ₁	W	K ₀	PCS/REEL
PMG3045NLT	Ø330	32.4	20	32	10.8	250

For More Information:

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