High Frequency Wire Wound Transformers

EFD15 flyback transformer - pin 5+5





- 4000Vrms Hi-Pot
- Power Range: Up to 12.5W
- *Height:* 11mm Max
- Footprint: 21.9mm x 16.5mm Max
- ⑦ Topology: Flyback transformer
- Creepage: PRI To SEC 5.1mm MIN
- @ Clearance: PRI To SEC 5.1mm MIN

Pulse PN	Electrical Specifica	itions @25°C — Operating Ter	nperature -4	0°C to 130°C 1	Schematic
PGT6465NL	Pri. Inductance		205uH	+/-10%	
	Lk. Inductance	(1~5)W/(6,7,9,10) shorted	10	uH Max	$\begin{array}{c c} & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & & \\ & & & & \\ & & &$
	DCR	(1-5)	650	$m\Omega$ Max	
		(6-7)	280		
		(9-10)	65		
	Hi-Pot	Pri-Sec	4000	Vrms	
	K1 Factor ^{5,6}	2679			
PGT6466NL	Pri. Inductance		1.8uH	+/-15%	PRI 2 0 0 10 SEC1 1 5 V 6-28 V 1 500 kHz 5 0 0 7 SEC2 2.83 15 V 0 6 50 mA
	Lk. Inductance	(2~5)W/(6,7,9,10) shorted	0.2uH	uH Max	
	DCR	(2-5)	20	mΩ Max	
		(6-7)	150		
		(9-10)	50		
	Hi-Pot	Pri-Sec	3000	Vdc	
	K1 Factor ^{5,6}	200			

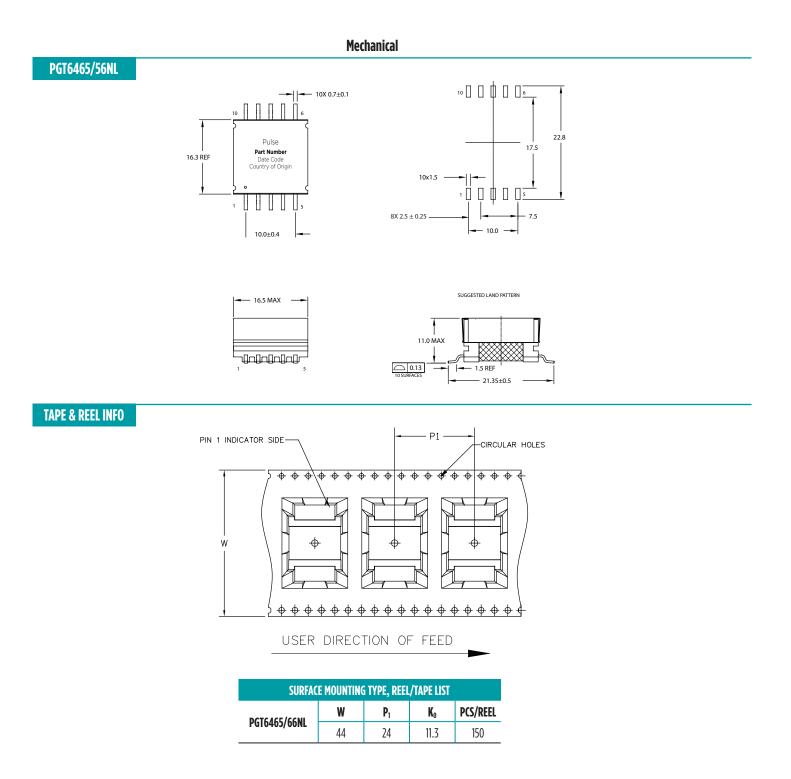
Notes:

- 1. Storage Temperature: -40°C to 125°C
- 2. The temperature of the component (ambient plus temperature rise) must be within the stated operating temperature range.
- 3. Pri/Lk. Inductance value is measured at 100Khz/0.1Vrms.
- Optional Tape & Reel packaging can be ordered by adding a "T" suffix to the part number (i.e. (PGT6465NL becomes PGT6465NLT). Pulse complies with industry standard tape and reel specification EIA481.
- 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 flux density use the following formula: Bpk (Gauss) = K1 Factor * lpk(A)
- 6. In high volt-µsec applications, it is important to calculate the core loss of the transformer. Approximate transformer core loss can be calculated as:

CoreLoss (W) = 4.6E-14 * (Freq_kHz)^{1.63} * (Δ B_Gauss)^{2.63} where Δ B can be calculated as: For Flyback Topology: Δ B = K1_Factor * Δ (A)

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For More Information:

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