




THROUGH HOLE CURRENT SENSE TRANSFORMERS

VDE Approved



-  Meets IEC950 insulation requirements
-  3750V_{RMS} primary to secondary breakdown voltage
-  Frequency range 10kHz to 200kHz

Electrical Specifications @ 25°C — Operating Temperature -40°C to 130°C

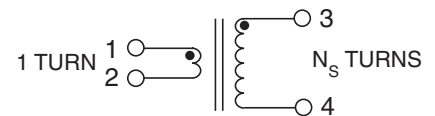
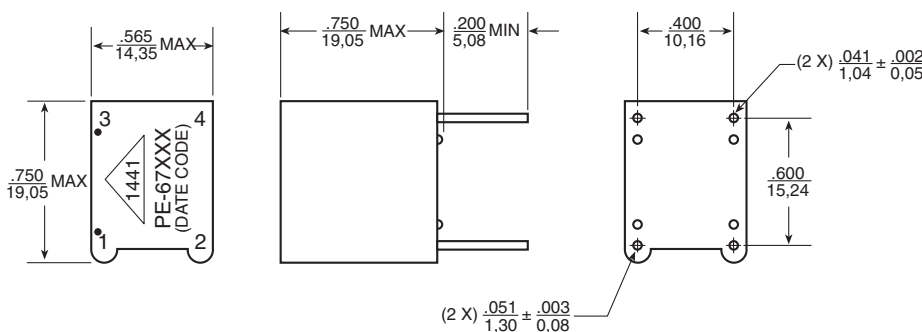
Part Number	I _{PK} (Amps)	R _T (Ω)	Droop (%)	K _{VI} (Volt/Amp)	L _s (mH MIN)	DCR R _s (Ω MAX)	Turns (N _s ± 1%)	K _B	K _{CL}	R _{EQ} (mΩ)
PE-67050	35	15	2.4	0.30	5.0	0.70	50	.269x10 ⁶	51.2x10 ⁻⁶	.95
PE-67100	37	56	2.2	0.56	20	1.40	100	.0671x10 ⁶	1.56x10 ⁻⁶	.85
PE-67200	38	200	2.0	1.00	80	4.50	200	.0168x10 ⁶	47.3x10 ⁻⁹	.82
PE-67300	37	510	2.2	1.70	180	11.0	300	.00746x10 ⁶	6.13x10 ⁻⁹	.84

NOTES:

- These current sense transformers have a 1 turn primary winding, secondary turns (N_s) as indicated in the table, and a 130°C insulation system.
- The reference values are for unipolar operation, 50kHz, 40% duty factor, and an estimated 55°C temperature rise.
- The maximum useable peak sense current (I_{PK}) depends on temperature rise or core saturation, which should be evaluated for the operating conditions.
- These Current Sense Transformers are recommended for switch mode power supply applications, unipolar or bipolar, operating at frequencies from 10kHz to 200kHz.
- The maximum recommended operating flux density (B_{OP}) is 2000 gauss to prevent saturation at an operating temperature of 105°C.
- The core loss factor (K_{CL}) is valid from 10kHz to 200kHz at 105°C.
- The terminating resistor (R_T) may be varied to adjust operating flux (B_{OP}), droop, or scale factor (K_{VI}).
- The scale factor (K_{VI}) is proportional to the terminating resistor (R_T) and is equal to 1 volt/amp when R_T=N_s.
- The secondary inductance (L_s) is measured at 15kHz and .5V for PE-67050, 1V for PE-67100, 2V for PE-67200 and 3V for PE-67300.
- To order RoHS compliant part, add the suffix "NL" to the part number (i.e. PE-67050 becomes PE-67050NL).

Mechanical

Schematic



Parts per package80

Dimensions: $\frac{\text{Inches}}{\text{mm}}$

Unless otherwise specified, all tolerances are ± $\frac{.005}{0,13}$

For More Information:

Pulse Worldwide Headquarters

12220 World Trade Dr.
San Diego, CA 92128
U.S.A.
www.pulseeng.com

Tel: 858 674 8100
Fax: 858 674 8262

Pulse Europe

Einsteinstrasse 1
D-71083 Herrenberg
Germany

Tel: 49 7032 7806 0
Fax: 49 7032 7806 12

Pulse China Headquarters

B402, Shenzhen
Tech-Innovation International
Tenth Kejinan Rd.
High-Tech Industrial Park
Nanshan District, Shenzhen
China

Tel: 86 755 33966678
Fax: 86 755 33966700

Pulse North China

Room 1503
XinYin Building
No. 888 YiShan Rd.
Shanghai 200233
China

Tel: 86 21 54643211/2
Fax: 86 21 54643210

Pulse South Asia

150 Kampong Ampat
#07-01/02
KA Centre
Singapore 368324

Tel: 65 6287 8998
Fax: 65 6280 0080

Pulse North Asia

No. 26
Kao Ching Rd.
Yang Mei Chen
Tao Yuan Hsien
Taiwan, R. O. C.

Tel: 886 3 4641811
Fax: 886 3 4641911

Performance warranty of products offered on this data sheet is limited to the parameters specified. Data is subject to change without notice. Other brand and product names mentioned herein may be trademarks or registered trademarks of their respective owners. © Copyright, 2007. Pulse Engineering, Inc. All rights reserved.