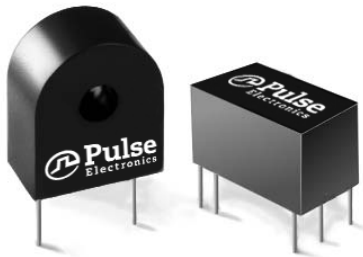


# THT Current Sense Transformers & Inductors



-  VDE Approved
-  Designed for switching power supply applications
-  Transformer meets EN62368-1 insulation requirements
-  Frequency range from 20kHz to 200kHz

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

| Part Number<br>Transformer<br>with 2-1 T<br>Primaries | Schem.<br>Figure | Part Number<br>Transformer<br>with 1T<br>Primary | Schem.<br>Figure | Part Number<br>Inductor<br>without<br>Primary | Schem.<br>Figure | Turns<br>Ns | Secondary<br>Inductance<br>MH<br>(MIN) | Secondary<br>Inductance<br>Test Voltage<br>(15.75 KHz) | RS<br>(Ω MAX) | RT<br>(Ω MAX) | Primary<br>Unipolar<br>Amp μ Sec.<br>Rating (MAX) | Primary<br>Bipolar<br>Amp μ Sec.<br>Rating (MAX) |
|-------------------------------------------------------|------------------|--------------------------------------------------|------------------|-----------------------------------------------|------------------|-------------|----------------------------------------|--------------------------------------------------------|---------------|---------------|---------------------------------------------------|--------------------------------------------------|
| —                                                     | 1C               | PE-63586NL                                       | 1A               | PE-51686NL                                    | 2A               | 50          | 5.0                                    | 0.5                                                    | 0.7           | 50            | 150                                               | 300                                              |
| PE-64487NL                                            | 1C               | PE-63587NL                                       | 1A               | PE-51687NL                                    | 2A               | 100         | 2.0                                    | 1.0                                                    | 1.40          | 100           | 300                                               | 600                                              |
| PE-64488NL                                            | 1C               | PE-63588NL                                       | 1A               | PE-51688NL                                    | 2A               | 200         | 80.0                                   | 2.0                                                    | 4.50          | 200           | 600                                               | 1200                                             |
| PE-64517NL                                            | 1D               | —                                                | —                | PE-51717NL                                    | 2B               | 50CT        | 5.0                                    | 0.5                                                    | 0.7           | 50            | 150                                               | 300                                              |
| PE-64518NL                                            | 1D               | PE-63618NL                                       | 1B               | PE-51718NL                                    | 2B               | 100CT       | 20.0                                   | 1.0                                                    | 1.40          | 100           | 300                                               | 600                                              |
| PE-64519NL                                            | 1D               | PE-63619NL                                       | 1B               | PE-51719NL                                    | 2B               | 200CT       | 80.0                                   | 2.0                                                    | 4.50          | 200           | 600                                               | 1200                                             |
| —                                                     | —                | PE-63691NL                                       | 1B               | —                                             | —                | 300CT       | 180.0                                  | 3.0                                                    | 11.0          | 300           | 900                                               | 1800                                             |

## Notes:

- Maximum ratings specified with rated secondary terminating resistance and 1 turn primary.
- Amp-microsend (AμSec.) rating of primary equals volt microsend (VμSec.) rating of secondary when secondary is terminated in rated resistance. (Amp - microsend is equal to the product of a square pulse of current in amps, times the current pulse width in microseconds.
- Maximum operating temperature 105°C (ambient plus rise).
- When terminated with rated terminating resistance, the inductor scale factor is  $V_{out} = 1$  volt per amp. for center tapped units terminating resistance for each half of winding is listed value divided by two.
- 1 turn primary peak sense current is 20 amps for all parts listed above.



## PE-XXXX

