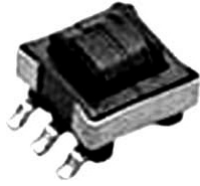


Surface Mount Transformers/Inductors, Gapped and Ungapped, Custom Configurations Available


FEATURES

- Compliant to RoHS Directive 2002/95/EC
- Halogen-free according to IEC 61249-2-21 definition


ELECTRICAL SPECIFICATIONS

Inductance Range: 10 μH to 3900 μH , measured at 0.10 V_{RMS} at 10 kHz without DC current, using an HP 4263A or 4284A impedance analyzer

DC Resistance Range: 0.06 Ω to 18.0 Ω , measured at + 25 $^{\circ}\text{C} \pm 5^{\circ}\text{C}$

Rated Current Range: 1.00 A to 0.06 A

Dielectric Withstanding Voltage: 500 V_{RMS} , 60 Hz, 5 s

RoHS
COMPLIANT
HALOGEN
FREE

| STANDARD ELECTRICAL SPECIFICATIONS | | | | | | |
|------------------------------------|------------------------|------------|------------------|-----------------------|--|---------------------------------------|
| MODEL | IND. (μH) | IND. TOL. | SCHEMATIC LETTER | DCR MAX. (Ω) | MAX. RATED DC CURRENT (A) ⁽¹⁾ | SATURATING CURRENT (A) ⁽²⁾ |
| LPE3325ER100NU | 10 | $\pm 30\%$ | A | 0.06 | 1.01 | N/A |
| LPE3325ER150NU | 15 | $\pm 30\%$ | A | 0.08 | 0.91 | N/A |
| LPE3325ER220NU | 22 | $\pm 30\%$ | A | 0.09 | 0.83 | N/A |
| LPE3325ER330NU | 33 | $\pm 30\%$ | A | 0.11 | 0.75 | N/A |
| LPE3325ER470NU | 47 | $\pm 30\%$ | A | 0.14 | 0.69 | N/A |
| LPE3325ER680NU | 68 | $\pm 30\%$ | A | 0.16 | 0.63 | N/A |
| LPE3325ER101NU | 100 | $\pm 30\%$ | A | 0.20 | 0.57 | N/A |
| LPE3325ER151NU | 150 | $\pm 30\%$ | A | 0.76 | 0.29 | N/A |
| LPE3325ER221NU | 220 | $\pm 30\%$ | A | 0.92 | 0.26 | N/A |
| LPE3325ER331NU | 330 | $\pm 30\%$ | A | 1.13 | 0.24 | N/A |
| LPE3325ER471NU | 470 | $\pm 30\%$ | A | 1.35 | 0.22 | N/A |
| LPE3325ER681NU | 680 | $\pm 30\%$ | A | 1.62 | 0.20 | N/A |
| LPE3325ER102NU | 1000 | $\pm 30\%$ | A | 1.97 | 0.18 | N/A |
| LPE3325ER152NU | 1500 | $\pm 30\%$ | A | 2.41 | 0.16 | N/A |
| LPE3325ER222NU | 2200 | $\pm 30\%$ | A | 3.00 | 0.15 | N/A |
| LPE3325ER332NU | 3300 | $\pm 30\%$ | A | 5.96 | 0.10 | N/A |
| LPE3325ER392NU | 3900 | $\pm 30\%$ | A | 7.00 | 0.10 | N/A |
| LPE3325ER100MG | 10 | $\pm 20\%$ | A | 0.22 | 0.54 | 1.480 |
| LPE3325ER150MG | 15 | $\pm 20\%$ | A | 0.27 | 0.48 | 1.240 |
| LPE3325ER220MG | 22 | $\pm 20\%$ | A | 0.42 | 0.39 | 1.050 |
| LPE3325ER330MG | 33 | $\pm 20\%$ | A | 0.65 | 0.31 | 0.872 |
| LPE3325ER470MG | 47 | $\pm 20\%$ | A | 0.97 | 0.26 | 0.740 |
| LPE3325ER680MG | 68 | $\pm 20\%$ | A | 1.45 | 0.21 | 0.622 |
| LPE3325ER101MG | 100 | $\pm 20\%$ | A | 2.22 | 0.17 | 0.518 |
| LPE3325ER151MG | 150 | $\pm 20\%$ | A | 3.55 | 0.13 | 0.426 |
| LPE3325ER221MG | 220 | $\pm 20\%$ | A | 4.31 | 0.12 | 0.354 |
| LPE3325ER331MG | 330 | $\pm 20\%$ | A | 6.72 | 0.10 | 0.290 |
| LPE3325ER471MG | 470 | $\pm 20\%$ | A | 9.83 | 0.08 | 0.244 |
| LPE3325ER681MG | 680 | $\pm 20\%$ | A | 14.8 | 0.07 | 0.204 |
| LPE3325ER102MG | 1000 | $\pm 20\%$ | A | 18.0 | 0.06 | 0.169 |

Notes

⁽¹⁾ DC current that will create a maximum temperature rise of 30 $^{\circ}\text{C}$ when applied at + 25 $^{\circ}\text{C}$ ambient.

⁽²⁾ DC current that will typically reduce the initial inductance by 20 %.

- UNGAPPED MODELS:** Highest possible inductance with the lowest DCR and highest Q capability. Beneficial in filter, impedance matching and line coupling devices.

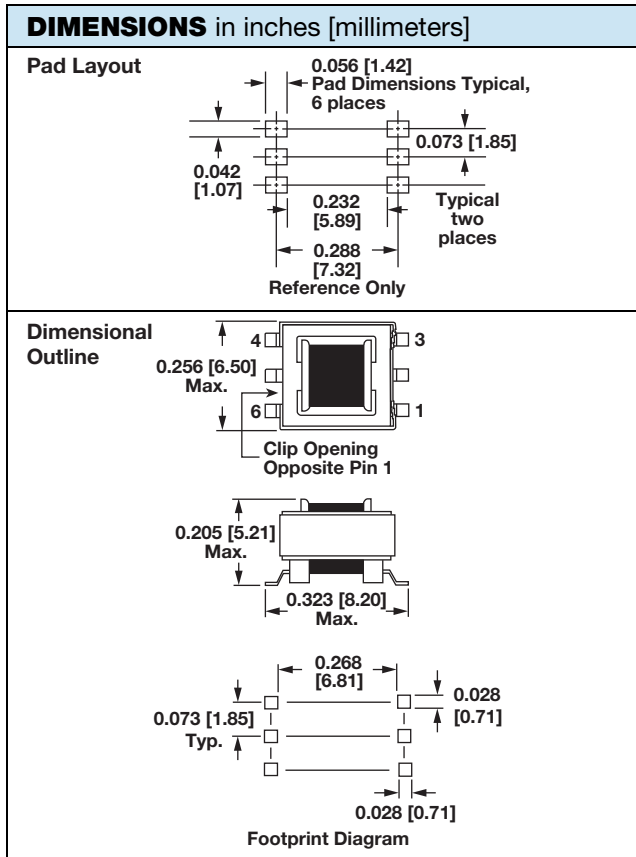
GAPPED MODELS: Capable of handling large amounts of DC current, tighter inductance tolerance with better temperature stability than ungapped models. Beneficial in DC/DC converters or other circuits carrying DC currents or requiring inductance stability over a temperature range.

| DESCRIPTION | | | | | | |
|-------------|------|--------------------|----------------------|------|--------------|-------------------------------|
| MODEL | SIZE | INDUCTANCE VALUE | INDUCTANCE TOLERANCE | CORE | PACKAGE CODE | JEDEC LEAD (Pb)-FREE STANDARD |
| LPE | 3325 | 1000 μH | $\pm 30\%$ | A | ER | e2 |

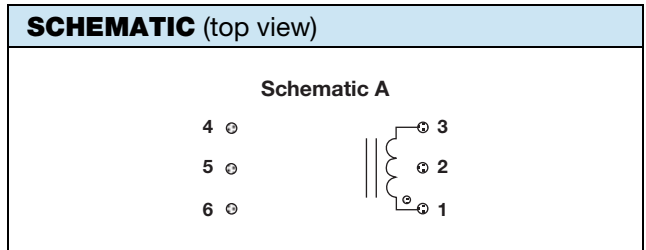
| GLOBAL PART NUMBER | | | | | | | | | | | | | |
|--------------------|---|---|------|---|---|--------------|---|------------------|---|---|------|------|---|
| L | P | E | 3 | 3 | 2 | 5 | E | R | 1 | 0 | 2 | N | U |
| PRODUCT FAMILY | | | SIZE | | | PACKAGE CODE | | INDUCTANCE VALUE | | | TOL. | CORE | |

Note

- Series is also available with SnPb terminations by using package code RY for tape and reel (in place of ER) or SM for bulk (in place of EB).



- Notes**
- Pad layout guidelines per MIL-STD-275E (printed wiring for electronic equipment).
 - Tolerances: xx ± 0.01" [± 0.25 mm]; xxx ± 0.005" [± 0.12 mm].



- Note**
- Schematic A for both gapped and ungapped LPE series

ENVIRONMENTAL PERFORMANCE

| TEST | CONDITIONS |
|------------------------------|------------------------------------|
| Thermal Cycling | Withstands - 55 °C to + 125 °C |
| Operating Temperature | - 55 °C to + 125 °C ⁽¹⁾ |
| High Humidity | 85 % |
| Soldering Heat | Tested to + 230 °C |
| Mechanical Shock | Per MIL-STD-202, method 213 (100G) |
| Vibration | Per MIL-STD-202, method 204 (20G) |
| Solderability | Per industry standards |

- Note**
- ⁽¹⁾ Must be checked in end use application

PART MARKING

- Vishay Dale
- Date code
- Marking code (suffix of model #)
- Pin 1 indicator

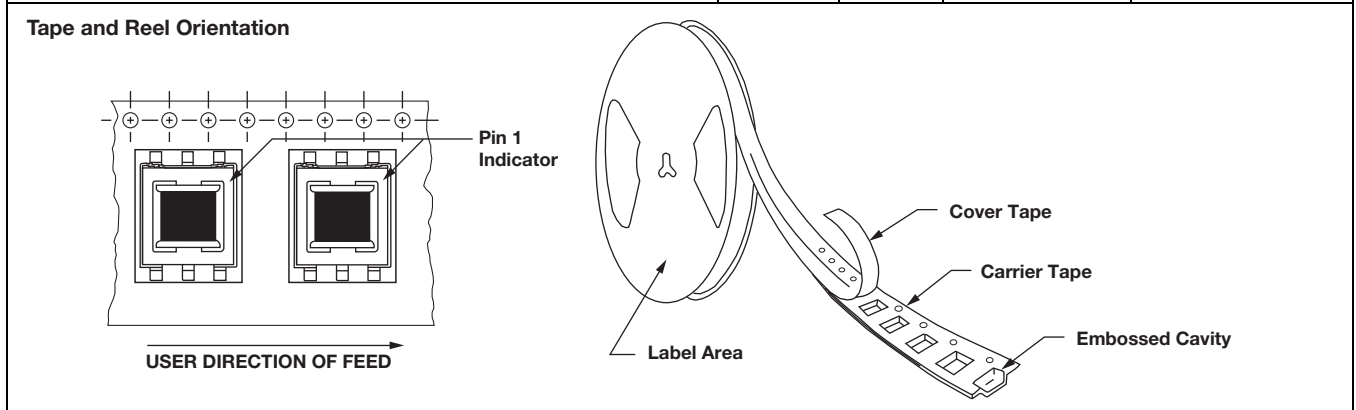
PACKAGING

TAPE SPECIFICATIONS:
Carrier Tape Type: Conductive
Cover Tape Type: Anti-static
Cover Tape Adhesion to Carrier: 40 g ± 30 g

REEL SPECIFICATIONS:
Diameter (flange): 13" [330.2 mm]
Maximum Width (over flanges): 1.197" [30.4 mm]

STANDARDS: All embossed carrier tape packaging will be accomplished in compliance with latest revision of EIA-481 "Taping of Surface Mount Components for Automatic Placement".

| MODEL | TAPE WIDTH | COMPONENT PITCH | UNITS PER 13" REEL |
|----------|------------|-----------------|--------------------|
| LPE-3325 | 24 mm | 12 mm | 1000 |



- Note**
- Top view shown with cover tape removed



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