

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



### ELECTRICAL SPECIFICATIONS

**Inductance Range:** 10  $\mu$ H to 3900  $\mu$ H, 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  $\Omega$  to 18.0  $\Omega$ , measured at + 25 °C  $\pm$  5 °C

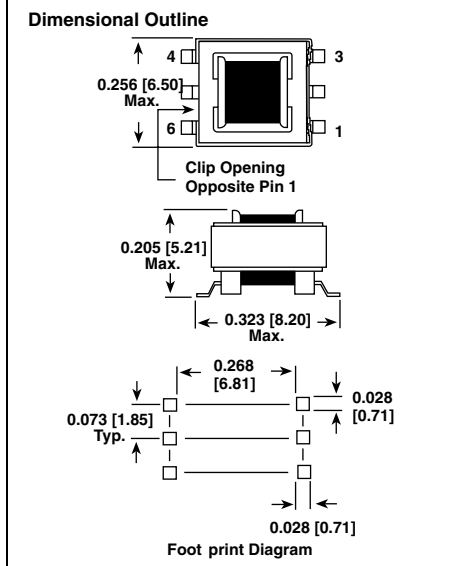
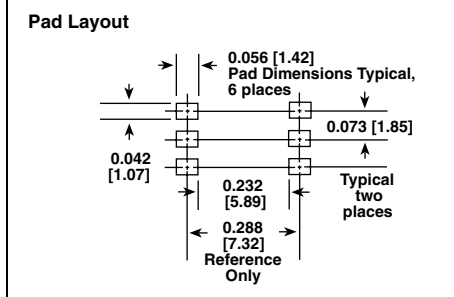
**Rated Current Range:** 1.00 amps to 0.06 amps

**Dielectric Withstanding Voltage:** 500 V RMS, 60 Hz, 5 seconds



**RoHS  
COMPLIANT**

### DIMENSIONS in inches [millimeters]



**NOTE:** Pad layout guidelines per MIL-STD-275E (printed wiring for electronic equipment).

Tolerances: xx  $\pm$  0.01" [ $\pm$  0.25 mm]. xxx  $\pm$  0.005" [ $\pm$  0.12 mm]

### STANDARD ELECTRICAL SPECIFICATIONS

MODEL	IND. ( $\mu$ H)	IND. TOL.	SCHEMATIC LETTER	DCR MAX. (Ohms)	MAX. RATED* DC CURRENT (Amps)	SATURATING CURRENT** (Amps)
<b>Ungapped Models</b>						
LPE-3325-100NA	10	$\pm$ 30 %	A	0.06	1.01	N/A
LPE-3325-150NA	15	$\pm$ 30 %	A	0.08	0.91	N/A
LPE-3325-220NA	22	$\pm$ 30 %	A	0.09	0.83	N/A
LPE-3325-330NA	33	$\pm$ 30 %	A	0.11	0.75	N/A
LPE-3325-470NA	47	$\pm$ 30 %	A	0.14	0.69	N/A
LPE-3325-680NA	68	$\pm$ 30 %	A	0.16	0.63	N/A
LPE-3325-101NA	100	$\pm$ 30 %	A	0.20	0.57	N/A
LPE-3325-151NA	150	$\pm$ 30 %	A	0.76	0.29	N/A
LPE-3325-221NA	220	$\pm$ 30 %	A	0.92	0.26	N/A
LPE-3325-331NA	330	$\pm$ 30 %	A	1.13	0.24	N/A
LPE-3325-471NA	470	$\pm$ 30 %	A	1.35	0.22	N/A
LPE-3325-681NA	680	$\pm$ 30 %	A	1.62	0.20	N/A
LPE-3325-102NA	1000	$\pm$ 30 %	A	1.97	0.18	N/A
LPE-3325-152NA	1500	$\pm$ 30 %	A	2.41	0.16	N/A
LPE-3325-222NA	2200	$\pm$ 30 %	A	3.00	0.15	N/A
LPE-3325-332NA	3300	$\pm$ 30 %	A	5.96	0.10	N/A
LPE-3325-392NA	3900	$\pm$ 30 %	A	7.00	0.10	N/A
<b>Gapped Models</b>						
LPE-3325-100MB	10	$\pm$ 20 %	A	0.22	0.54	1.480
LPE-3325-150MB	15	$\pm$ 20 %	A	0.27	0.48	1.240
LPE-3325-220MB	22	$\pm$ 20 %	A	0.42	0.39	1.050
LPE-3325-330MB	33	$\pm$ 20 %	A	0.65	0.31	0.872
LPE-3325-470MB	47	$\pm$ 20 %	A	0.97	0.26	0.740
LPE-3325-680MB	68	$\pm$ 20 %	A	1.45	0.21	0.622
LPE-3325-101MB	100	$\pm$ 20 %	A	2.22	0.17	0.518
LPE-3325-151MB	150	$\pm$ 20 %	A	3.55	0.13	0.426
LPE-3325-221MB	220	$\pm$ 20 %	A	4.31	0.12	0.354
LPE-3325-331MB	330	$\pm$ 20 %	A	6.72	0.10	0.290
LPE-3325-471MB	470	$\pm$ 20 %	A	9.83	0.08	0.244
LPE-3325-681MB	680	$\pm$ 20 %	A	14.8	0.07	0.204
LPE-3325-102MB	1000	$\pm$ 20 %	A	18.0	0.06	0.169

\* DC current that will create a maximum temperature rise of 30 °C when applied at + 25 °C ambient. \*\* 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 to DC converters or other circuits carrying DC currents or requiring inductance stability over a temperature range.

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

GLOBAL PART NUMBER						
L	P	E	3	3	2	5
PRODUCT FAMILY			SIZE		PACKAGE CODE	
			INDUCTANCE VALUE		TOL.	CORE

**SCHEMATIC (TOP VIEW)**

**Schematic A**



**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*
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

\* 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 ± 30 grams

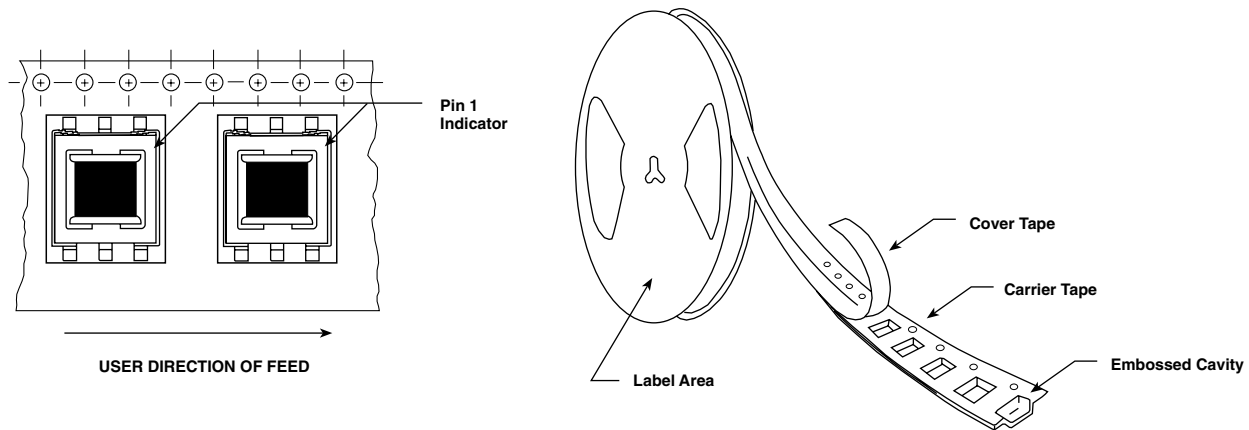
**REEL SPECIFICATIONS:**

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 INCH REEL
LPE-3325	24 mm	12 mm	1000

**Tape and Reel Orientation**



**NOTE:** Top view shown with cover tape removed



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