

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


**FEATURES**

- Material categorization: for definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)


**RoHS**  
COMPLIANT

**ELECTRICAL SPECIFICATIONS**

(multiple winds are connected in parallel)

**Inductance Range:** 10  $\mu$ H to 330 000  $\mu$ H, measured at 0.10  $V_{RMS}$  at 10 kHz without DC current, using an HP 4263A or HP 4284A impedance analyzer

**DC Resistance Range:** 0.03  $\Omega$  to 53.7  $\Omega$ , measured at +25  $^{\circ}$ C  $\pm$  5  $^{\circ}$ C

**Rated Current Range:** 3.00 A to 0.06 A

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

STANDARD ELECTRICAL SPECIFICATIONS						
MODEL	IND. ( $\mu$ H)	IND. TOL. (%)	SCHEMATIC LETTER	DCR MAX. ( $\Omega$ )	MAX. RATED DC CURRENT (A) <sup>(1)</sup>	SATURATING CURRENT (A) <sup>(2)</sup>
LPE6562ER221NU	220	$\pm$ 30	A	0.28	0.90	N/A
LPE6562ER331NU	330	$\pm$ 30	A	0.34	0.81	N/A
LPE6562ER471NU	470	$\pm$ 30	A	0.40	0.74	N/A
LPE6562ER681NU	680	$\pm$ 30	A	0.48	0.67	N/A
LPE6562ER102NU	1000	$\pm$ 30	A	0.59	0.61	N/A
LPE6562ER152NU	1500	$\pm$ 30	A	0.72	0.55	N/A
LPE6562ER222NU	2200	$\pm$ 30	A	0.87	0.50	N/A
LPE6562ER332NU	3300	$\pm$ 30	A	1.07	0.45	N/A
LPE6562ER472NU	4700	$\pm$ 30	A	1.27	0.41	N/A
LPE6562ER682NU	6800	$\pm$ 30	A	1.53	0.38	N/A
LPE6562ER103NU	10 000	$\pm$ 30	A	1.86	0.34	N/A
LPE6562ER153NU	15 000	$\pm$ 30	A	2.27	0.31	N/A
LPE6562ER223NU	22 000	$\pm$ 30	A	8.67	0.16	N/A
LPE6562ER333NU	33 000	$\pm$ 30	A	10.6	0.14	N/A
LPE6562ER473NU	47 000	$\pm$ 30	A	12.7	0.13	N/A
LPE6562ER683NU	68 000	$\pm$ 30	A	15.2	0.12	N/A
LPE6562ER104NU	100 000	$\pm$ 30	A	18.5	0.11	N/A
LPE6562ER154NU	150 000	$\pm$ 30	A	37.7	0.08	N/A
LPE6562ER224NU	220 000	$\pm$ 30	A	45.6	0.07	N/A
LPE6562ER334NU	330 000	$\pm$ 30	A	53.7	0.06	N/A
LPE6562ER100MG	10	$\pm$ 20	B	0.03	3.09	5.055
LPE6562ER150MG	15	$\pm$ 20	B	0.04	2.79	4.160
LPE6562ER220MG	22	$\pm$ 20	B	0.05	2.26	3.460
LPE6562ER330MG	33	$\pm$ 20	B	0.08	1.81	2.840
LPE6562ER470MG	47	$\pm$ 20	D	0.12	1.48	2.390
LPE6562ER680MG	68	$\pm$ 20	C	0.19	1.20	1.990
LPE6562ER101MG	100	$\pm$ 20	D	0.29	0.98	1.650
LPE6562ER151MG	150	$\pm$ 20	E	0.45	0.78	1.350
LPE6562ER221MG	220	$\pm$ 20	E	0.54	0.71	1.115
LPE6562ER331MG	330	$\pm$ 20	E	0.84	0.57	0.912
LPE6562ER471MG	470	$\pm$ 20	E	1.24	0.47	0.765
LPE6562ER681MG	680	$\pm$ 20	E	1.89	0.38	0.637
LPE6562ER102MG	1000	$\pm$ 20	E	2.91	0.31	0.526
LPE6562ER152MG	1500	$\pm$ 20	E	4.50	0.25	0.430
LPE6562ER222MG	2200	$\pm$ 20	E	6.90	0.20	0.355
LPE6562ER332MG	3300	$\pm$ 20	E	10.4	0.16	0.290
LPE6562ER472MG	4700	$\pm$ 20	E	15.7	0.13	0.243

UNGAPPED MODELS (A)

GAPPED MODELS (B)

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

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

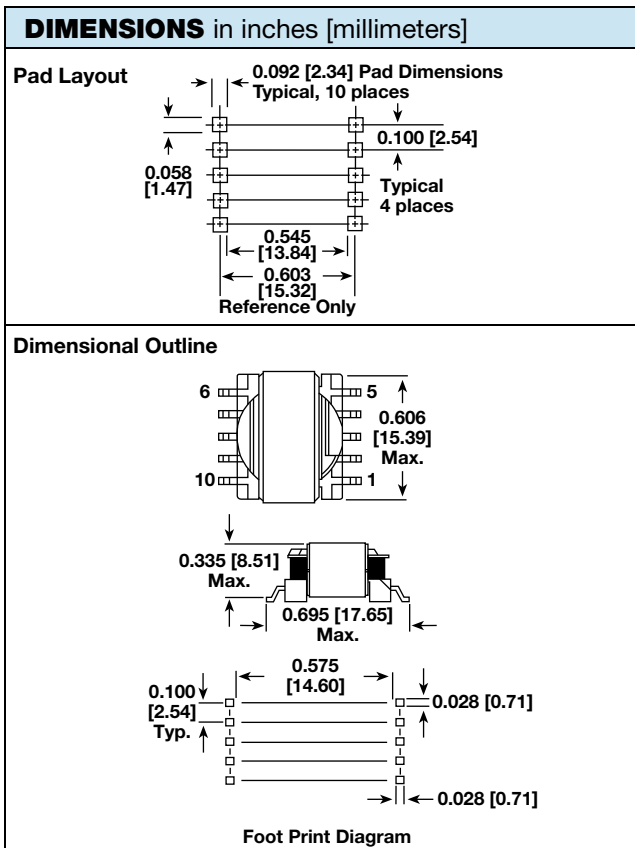
- UNGAPPED MODELS:** Highest possible inductance with the lowest DCR and highest Q capability. Beneficial in filter, impedance matching and line coupling devices.
- GAPPED MODELS:** Capable of handling large amounts of DC current, tighter inductance tolerance with better temperature stability than ungapped models. Beneficial in DC/DC converters or other circuits carrying DC currents or requiring inductance stability over a temperature range.

DESCRIPTION						
LPE	6562	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	6	5	6	2	E	R	1	0	2	N	T
PRODUCT FAMILY			SIZE			PACKAGE CODE		INDUCTANCE VALUE			TOLERANCE		CORE
								102 = 1000 $\mu$ H			N = 30 %		

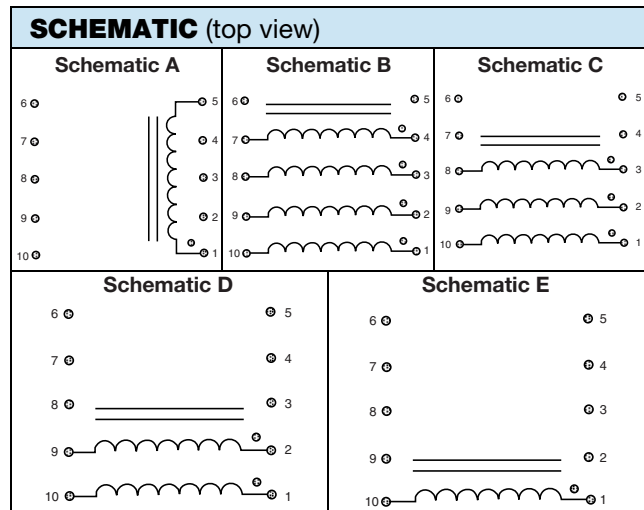
**Note**

- 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  $\pm 0.01$ " [ $\pm 0.25$  mm]; xxx  $\pm 0.005$ " [ $\pm 0.12$  mm].
- The underside of these components contains metal and thus should not come in contact with active circuit traces.



**Note**

- Schematic A is for ungapped LPE series.

ENVIRONMENTAL PERFORMANCE	
TEST	CONDITIONS
Thermal cycling	Withstands -55 °C to +125 °C
Operating temperature	-55 °C to +125 °C <sup>(1)</sup>
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**

- <sup>(1)</sup> 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

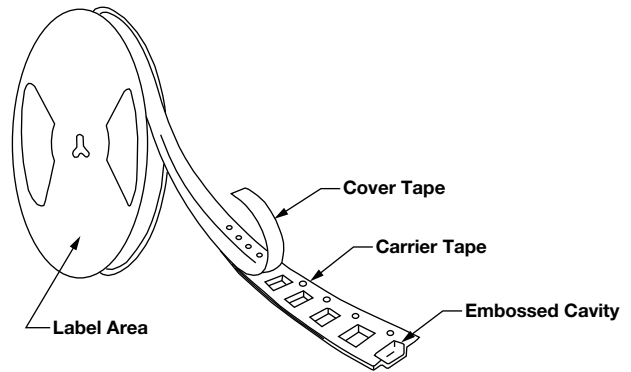
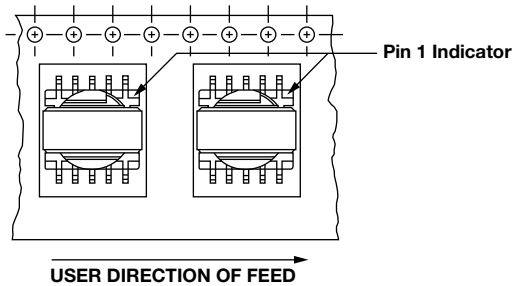
**REEL SPECIFICATIONS:**

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-6562 (RY)	32 mm	20 mm	300
LPE-6562 (ER)	24 mm	20 mm	300

**Tape and Reel Orientation**



**Note**

- Top view shown with cover tape removed.



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