

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



## **FEATURES**

 Material categorization: for definitions of compliance please www.vishay.com/doc?99912



## **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 °C ± 5 °C

Rated Current Range: 3.00 A to 0.06 A

Dielectric Withstanding Voltage: 500 V<sub>RMS</sub>, 60 Hz, 5 s

MODEL	IND.	IND. TOL.	SCHEMATIC	DCR MAX.	MAX. RATED DC CURRENT	SATURATING CURRENT	
MODEL	(µH)	(%)	LETTER	<b>(</b> Ω <b>)</b>	(A) <sup>(1)</sup>	(A) <sup>(2)</sup>	
LPE6562ER221NU	220	± 30	Α	0.28	0.90	N/A	
LPE6562ER331NU	330	± 30	Α	0.34	0.81	N/A	
LPE6562ER471NU	470	± 30	Α	0.40	0.74	N/A	
LPE6562ER681NU	680	± 30	Α	0.48	0.67	N/A	
LPE6562ER102NU	1000	± 30	Α	0.59	0.61	N/A	
LPE6562ER152NU	1500	± 30	Α	0.72	0.55	N/A	
LPE6562ER222NU	2200	± 30	Α	0.87	0.50	N/A	
LPE6562ER332NU	3300	± 30	Α	1.07	0.45	N/A	
LPE6562ER472NU	4700	± 30	Α	1.27	0.41	N/A	
LPE6562ER682NU	6800	± 30	Α	1.53	0.38	N/A	
LPE6562ER103NU	10 000	± 30	A	1.86	0.34	N/A	
LPE6562ER153NU	15 000	± 30	Α	2.27	0.31	N/A	
LPE6562ER223NU	22 000	± 30	Α	8.67	0.16	N/A	
LPE6562ER333NU	33 000	± 30	A	10.6	0.14	N/A	
LPE6562ER473NU	47 000	± 30	A	12.7	0.13	N/A	
LPE6562ER683NU	68 000	± 30	A	15.2	0.12	N/A	
LPE6562ER104NU	100 000	± 30	A	18.5	0.11	N/A	
LPE6562ER154NU	150 000	± 30	A	37.7	0.08	N/A	
LPE6562ER224NU	220 000	± 30	A	45.6	0.07	N/A	
LPE6562ER334NU	330 000	± 30	A	53.7	0.06	N/A	
LPE6562ER100MG	10	± 20	В	0.03	3.09	5.055	
LPE6562ER150MG	15	± 20	В	0.04	2.79	4.160	
_PE6562ER220MG	22	± 20	В	0.05	2.26	3.460	
PE6562ER330MG	33	± 20	В	0.08	1.81	2.840	
_PE6562ER470MG	47	± 20	D	0.12	1.48	2.390	
PE6562ER680MG	68	± 20	C	0.12	1.20	1.990	
PE6562ER101MG	100	± 20	D	0.19	0.98	1.650	
LPE6562ER151MG	150	± 20	Ē	0.45	0.78	1.350	
_PE6562ER221MG	220	± 20	Ē	0.43	0.71	1.115	
LPE6562ER331MG	330	± 20	Ē	0.84	0.57	0.912	
LPE6562ER471MG	470	± 20 ± 20	E	1.24	0.37	0.912	
_PE6562ER681MG	680	± 20 ± 20	E	1.24	0.47	0.763	
_PE6562ER102MG	1000	± 20 ± 20	E	2.91	0.36	0.526	
_PE6562ER152MG	1500	± 20 ± 20	E	4.50	0.31	0.526	
PE6562ER222MG	2200	± 20 ± 20	E	6.90	0.25	0.355	
LPE6562ER222MG LPE6562ER332MG		± 20 ± 20	E	10.4	0.20	0.355	
LPE6562ER332MG LPE6562ER472MG	3300 4700	± 20 ± 20	E	15.7	0.16	0.290	

#### Notes

DC current that will create a maximum temperature rise of 30 °C when applied at +25 °C ambient.

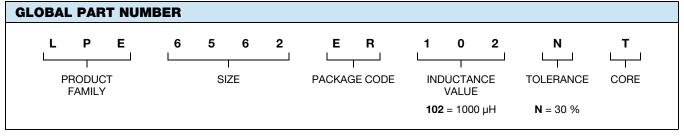
- DC current that will typically reduce the initial inductance by 20 %.

  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/DC converters or other circuits carrying DC currents or requiring inductance stability over a temperature range.

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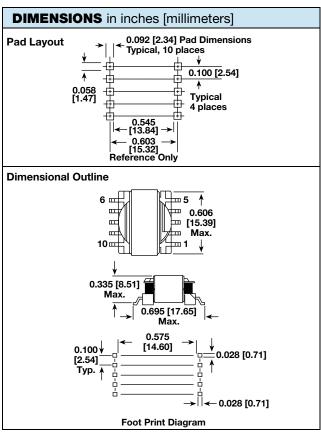


# DESCRIPTION LPE 6562 1000 μH ± 30 % A ER e2 MODEL SIZE INDUCTANCE VALUE INDUCTANCE TOLERANCE CORE PACKAGE CODE JEDEC® LEAD (Pb)-FREE STANDARD



#### 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].
- The underside of these components contains metal and thus should not come in contact with active circuit traces.

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SCHEMATIC (top view)					
Schematic A		Schematic B		Schematic C	
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Schematic D			Schematic E		
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#### 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

(1) Must be checked in end use application.

# **PART MARKING**

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



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# Vishay Dale

## **PACKAGING**

## **TAPE SPECIFICATIONS:**

Carrier Tape Type: Conductive Cover Tape Type: Anti-static

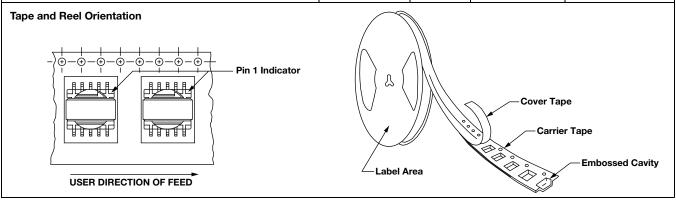
Cover Tape Adhesion to Carrier: 40 g ± 30 g

## **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



#### Note

• Top view shown with cover tape removed.



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