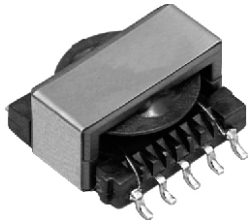
Surface Mount Transformers/Inductors, Gapped and Ungapped, Custom Configurations Available



FEATURES

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

Pb-free

RoHS COMPLIANT

ELECTRICAL SPECIFICATIONS

(multiple winds are connected in parallel)

Inductance Range: 10 µH to 330 000 µH, 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 Ω to 53.7 Ω, measured at +25 °C ± 5 °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. (µH)	IND. TOL.	SCHEMATIC LETTER	DCR MAX. (Ω)	MAX. RATED DC CURRENT (A) (1)	SATURATING CURRENT (A) (2)	
LPE6562ER221NU	220	± 30 %	A	0.28	0.90	N/A	UNGAPPED MODELS (A)
LPE6562ER331NU	330	± 30 %	A	0.34	0.81	N/A	
LPE6562ER471NU	470	± 30 %	A	0.40	0.74	N/A	
LPE6562ER681NU	680	± 30 %	A	0.48	0.67	N/A	
LPE6562ER102NU	1000	± 30 %	A	0.59	0.61	N/A	
LPE6562ER152NU	1500	± 30 %	A	0.72	0.55	N/A	
LPE6562ER222NU	2200	± 30 %	A	0.87	0.50	N/A	
LPE6562ER332NU	3300	± 30 %	A	1.07	0.45	N/A	
LPE6562ER472NU	4700	± 30 %	A	1.27	0.41	N/A	
LPE6562ER682NU	6800	± 30 %	A	1.53	0.38	N/A	
LPE6562ER103NU	10 000	± 30 %	A	1.86	0.34	N/A	
LPE6562ER153NU	15 000	± 30 %	A	2.27	0.31	N/A	
LPE6562ER223NU	22 000	± 30 %	A	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 %	B	0.03	3.09	5.055	GAPPED MODELS (B)
LPE6562ER150MG	15	± 20 %	B	0.04	2.79	4.160	
LPE6562ER220MG	22	± 20 %	B	0.05	2.26	3.460	
LPE6562ER330MG	33	± 20 %	B	0.08	1.81	2.840	
LPE6562ER470MG	47	± 20 %	D	0.12	1.48	2.390	
LPE6562ER680MG	68	± 20 %	C	0.19	1.20	1.990	
LPE6562ER101MG	100	± 20 %	D	0.29	0.98	1.650	
LPE6562ER151MG	150	± 20 %	E	0.45	0.78	1.350	
LPE6562ER221MG	220	± 20 %	E	0.54	0.71	1.115	
LPE6562ER331MG	330	± 20 %	E	0.84	0.57	0.912	
LPE6562ER471MG	470	± 20 %	E	1.24	0.47	0.765	
LPE6562ER681MG	680	± 20 %	E	1.89	0.38	0.637	
LPE6562ER102MG	1000	± 20 %	E	2.91	0.31	0.526	
LPE6562ER152MG	1500	± 20 %	E	4.50	0.25	0.430	
LPE6562ER222MG	2200	± 20 %	E	6.90	0.20	0.355	
LPE6562ER332MG	3300	± 20 %	E	10.4	0.16	0.290	
LPE6562ER472MG	4700	± 20 %	E	15.7	0.13	0.243	

Notes

(1) DC current that will create a maximum temperature rise of 30 °C when applied at +25 °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

LPE	6562	1000 µH	± 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			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).

For technical questions, contact: magnetics@vishay.com

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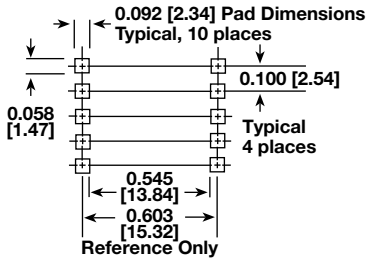
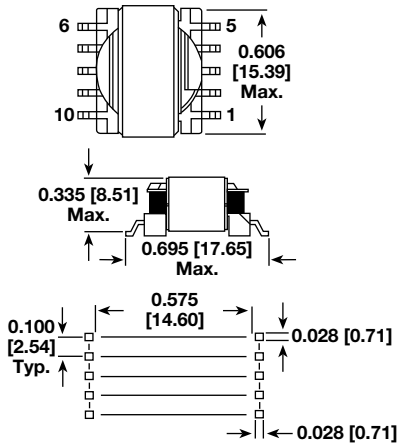
DIMENSIONS in inches [millimeters]

Pad Layout



Dimensional Outline

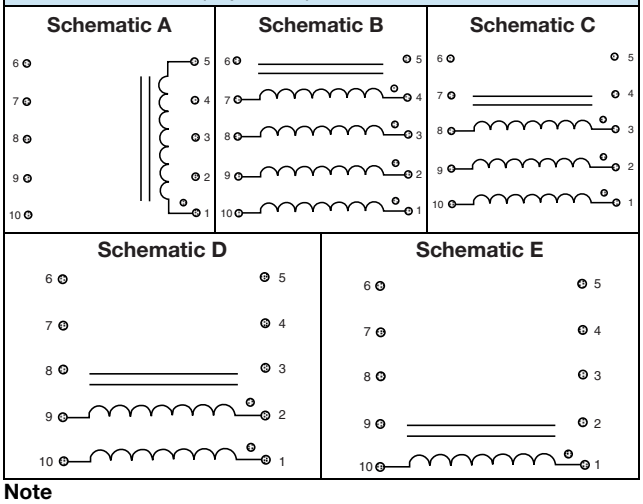


Foot Print Diagram

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.

SCHEMATIC (top view)



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 (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

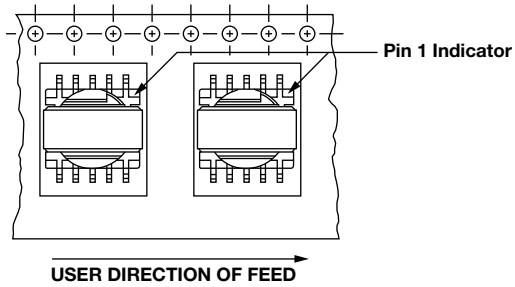
TAPE SPECIFICATIONS:
Carrier Tape Type: Conductive
Cover Tape Type: Anti-static
Cover Tape Adhesion to Carrier: 40 g ± 30 g

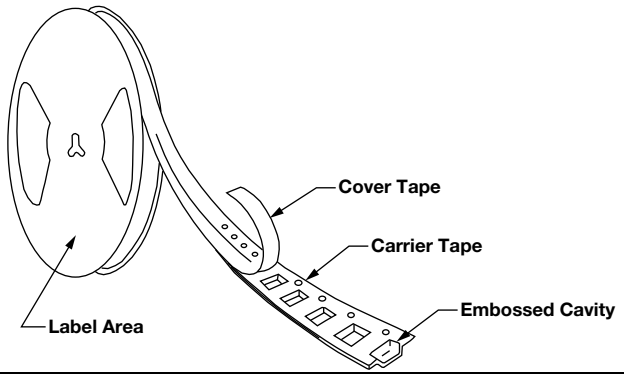
REEL SPECIFICATIONS:
Diameter (flange): 13" [330.2 mm]
Maximum Width (over flanges): 1.197" [30.4 mm]

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-6562	32 mm	20 mm	300

Tape and Reel Orientation





Note

- Top view shown with cover tape removed.

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