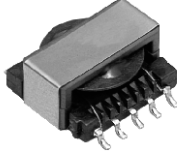


## Surface Mount Transformers/Inductors, Gapped and Ungapped, Custom Configurations Available



### 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

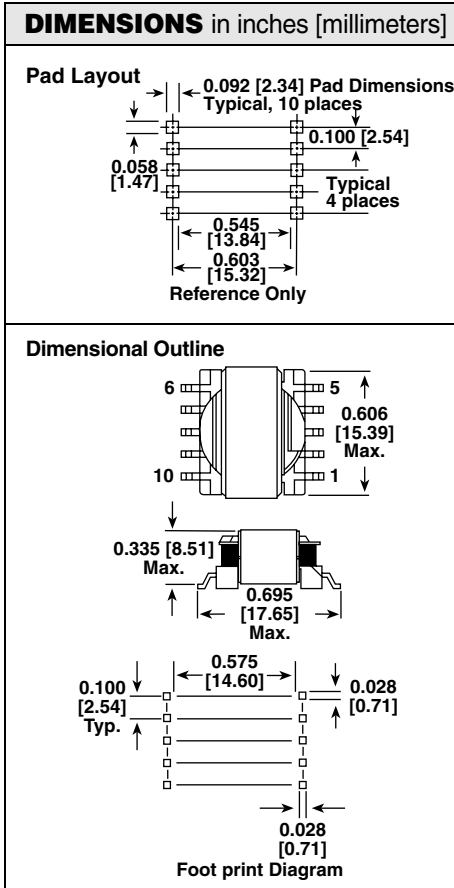
**DC Resistance Range:** 0.03  $\Omega$  to 53.7  $\Omega$ , measured at + 25 °C  $\pm$  5 °C

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

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



**RoHS  
COMPLIANT**



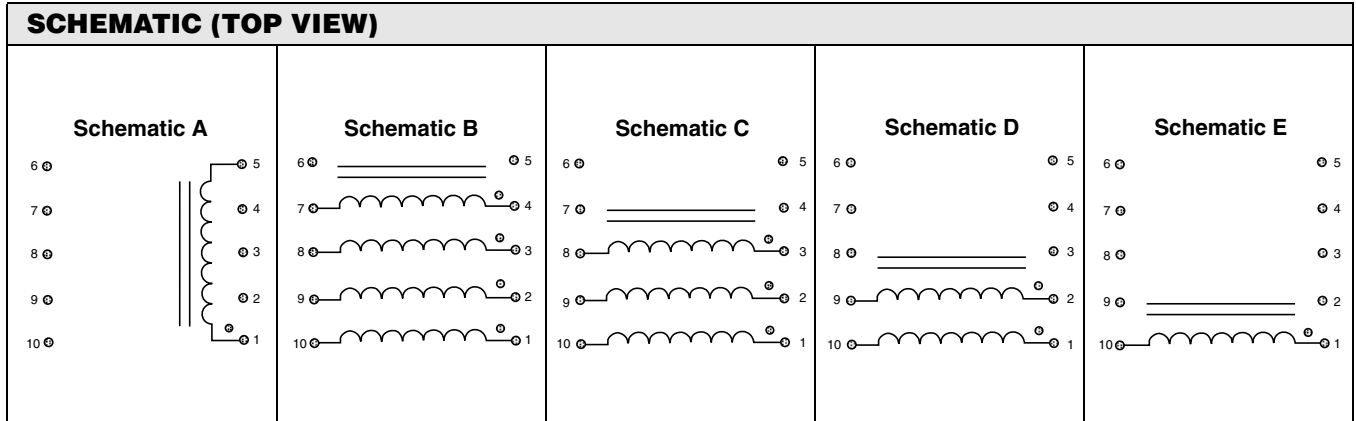
STANDARD ELECTRICAL SPECIFICATIONS						
MODEL	IND. ( $\mu$ H)	IND. TOL.	SCHEMATIC LETTER	DCR MAX. ( $\Omega$ )	MAX. RATED* DC CURRENT (Amps)	SATURATING CURRENT** (Amps)
<b>Ungapped Models (A)</b>						
LPE6562ER221NU	220	$\pm$ 30 %	A	0.28	0.90	N/A
LPE6562ER331NU	330	$\pm$ 30 %	A	0.34	0.81	N/A
LPE6562ER471NU	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	10 000	$\pm$ 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
<b>Gapped Models (B)</b>						
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

**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].  
The underside of these components contains metal and thus should not come into contact with active circuit traces.

\* 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	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		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).



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*
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-6562	32 mm	20 mm	300

**Tape and Reel Orientation**



## Disclaimer

All product specifications and data are subject to change without notice.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained herein or in any other disclosure relating to any product.

Vishay disclaims any and all liability arising out of the use or application of any product described herein or of any information provided herein to the maximum extent permitted by law. The product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein, which apply to these products.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications unless otherwise expressly indicated. Customers using or selling Vishay products not expressly indicated for use in such applications do so entirely at their own risk and agree to fully indemnify Vishay for any damages arising or resulting from such use or sale. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

Product names and markings noted herein may be trademarks of their respective owners.