



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

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: 0.03Ω to 53.7Ω , measured at $+25 ^{\circ}\text{C} \pm 5 ^{\circ}\text{C}$

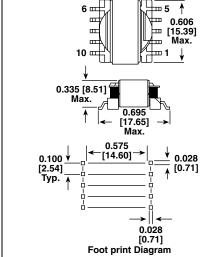
Rated Current Range: 3.00 amps to 0.06 amps

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



Rohs

DIMENSIONS in inches [millimeters]			
Pad Layout -0.092 [2.34] Pad Dimensions Typical, 10 places -0.100 [2.54] 0.058 -1.47 Typical 4 places -0.545 -1.384] -1.603 Reference Only			
Dimensional Outline			
6			



NOTE: Pad layout guidelines per MIL-STD-275E (printed wiring for electronic equipment). Tolerances: $xx \pm 0.01$ " [± 0.25 mm]. $xxx \pm 0.005$ " [± 0.12 mm].

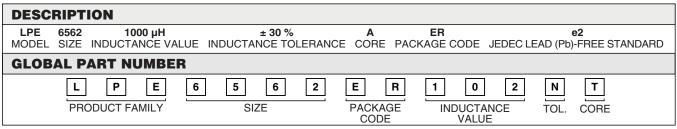
The underside of these components contains metal and thus should not come into contact with active circuit traces.

STANDARD ELECTRICAL SPECIFICATIONS						
MODEL	IND. (µH)	IND. TOL.	SCHEMATIC LETTER	DCR MAX. (Ω)	MAX. RATED* DC CURRENT (Amps)	SATURATING CURRENT** (Amps)
Ungapped Models (A) LPE6562ER221NU LPE6562ER331NU LPE6562ER471NU LPE6562ER681NU	220 330 470 680	±30 % ±30 % ±30 % ±30 %	A A A A	0.28 0.34 0.40 0.48	0.90 0.81 0.74 0.67	N/A N/A N/A N/A
LPE6562ER102NU LPE6562ER152NU LPE6562ER222NU LPE6562ER332NU LPE6562ER472NU LPE6562ER682NU	1000 1500 2200 3300 4700 6800	±30 % ±30 % ±30 % ±30 % ±30 %	>>>>>	0.59 0.72 0.87 1.07 1.27 1.53	0.61 0.55 0.50 0.45 0.41 0.38	N/A N/A N/A N/A N/A
LPE6562ER103NU LPE6562ER153NU LPE6562ER223NU LPE6562ER333NU LPE6562ER473NU LPE6562ER683NU	10 000 15 000 22 000 33 000 47 000 68 000	±30 % ±30 % ±30 % ±30 % ±30 %	>>>>>	1.86 2.27 8.67 10.6 12.7 15.2	0.34 0.31 0.16 0.14 0.13 0.12	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
LPE6562ER104NU LPE6562ER154NU LPE6562ER224NU LPE6562ER334NU	10 000 150 000 220 000 330 000	±30 % ±30 % ±30 % ±30 %	A A A	18.5 37.7 45.6 53.7	0.11 0.08 0.07 0.06	N/A N/A N/A N/A
Gapped Models (B) LPE6562ER100MG LPE6562ER150MG LPE6562ER330MG LPE6562ER330MG LPE6562ER470MG LPE6562ER680MG	10 15 22 33 47 68	±20% ±20% ±20% ±20% ±20%	റഠയയയയ	0.03 0.04 0.05 0.08 0.12 0.19	3.09 2.79 2.26 1.81 1.48 1.20	5.055 4.160 3.460 2.840 2.390 1.990
LPE6562ER101MG LPE6562ER151MG LPE6562ER221MG LPE6562ER331MG LPE6562ER471MG LPE6562ER681MG	100 150 220 330 470 680	±20 % ±20 % ±20 % ±20 % ±20 % ±20 %	Ошшшшп	0.29 0.45 0.54 0.84 1.24 1.89	0.98 0.78 0.71 0.57 0.47 0.38	1.650 1.350 1.115 0.912 0.765 0.637
LPE6562ER102MG LPE6562ER152MG LPE6562ER222MG LPE6562ER332MG LPE6562ER472MG	1000 1500 2200 3300 4700	±20 % ±20 % ±20 % ±20 % ±20 %	шшшшш	2.91 4.50 6.90 10.4 15.7	0.31 0.25 0.20 0.16 0.13	0.526 0.430 0.355 0.290 0.243

* 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.



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).

Vishay Dale

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SCHEMATIC (TOP VIEW)					
Schematic A	Schematic B	Schematic C	Schematic D	Schematic E	
6 6	6 0 0 5	6	6 ② ③ 5	6 © 5	
7 🛛 📗 🖢 🐧	70	7 🛈 🔞 4	7 0 0 4	7	
80 63	80	80	8 0 0 3	7 0 0 4 8 0 0 3 9 0 0 2 10 0 1	
9 0 0 2	9 @	9 0 2	9 0 2	9 • • • • • • • • • • • • • • • • • • •	
10 🔮	10 @	10 0 1	10 0 1	100-001	

NOTE: Schematic A is for Ungapped LPE Series

ENVIRONMENT	ENVIRONMENTAL PERFORMANCE			
TEST	CONDITIONS			
Thermal Cycling	Withstands - 55 °C to + 125 °C			
Operating	- 55 °C to + 125 °C*			
Temperature				
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:

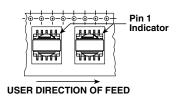
Diameter (flange): 13" [330.2 mm]

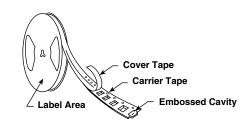
Maximum Width (over flanges): 1.197" [30.4 mm]

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





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