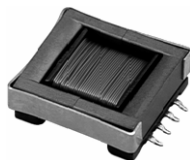


Surface Mount Transformers/Inductors, Gapped and Ungapped, Custom Configurations Available



FEATURES

- Compliant to RoHS directive 2002/95/EC

ELECTRICAL SPECIFICATIONS

(Multiple winds are connected in parallel)

Inductance Range: 10 μ H to 150 000 μ 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: 0.02 Ω to 46.2 Ω , measured at + 25 °C \pm 5 °C

Rated Current Range: 3.20 A to 0.17 A

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



**RoHS
COMPLIANT**

STANDARD ELECTRICAL SPECIFICATIONS

MODEL	IND. (μ H)	IND. TOL.	SCHEMATIC LETTER	DCR MAX. (Ω)	MAX. RATED DC CURRENT (A) ⁽¹⁾	SATURATING CURRENT (A) ⁽²⁾	
LPE6855ER151NU	150	\pm 30 %	A	0.28	0.84	N/A	UNGAPPED MODELS (A)
LPE6855ER221NU	220	\pm 30 %	A	0.34	0.76	N/A	
LPE6855ER331NU	330	\pm 30 %	A	0.41	0.69	N/A	
LPE6855ER471NU	470	\pm 30 %	A	0.49	0.63	N/A	
LPE6855ER681NU	680	\pm 30 %	A	0.59	0.57	N/A	
LPE6855ER102NU	1000	\pm 30 %	A	0.72	0.52	N/A	
LPE6855ER152NU	1500	\pm 30 %	A	0.88	0.47	N/A	
LPE6855ER222NU	2200	\pm 30 %	A	1.07	0.43	N/A	
LPE6855ER332NU	3300	\pm 30 %	A	1.31	0.39	N/A	
LPE6855ER472NU	4700	\pm 30 %	A	1.56	0.35	N/A	
LPE6855ER682NU	6800	\pm 30 %	A	1.88	0.32	N/A	
LPE6855ER103NU	10 000	\pm 30 %	A	7.17	0.16	N/A	
LPE6855ER153NU	15 000	\pm 30 %	A	8.78	0.15	N/A	
LPE6855ER223NU	22 000	\pm 30 %	A	10.6	0.14	N/A	
LPE6855ER333NU	33 000	\pm 30 %	A	13.0	0.12	N/A	
LPE6855ER473NU	47 000	\pm 30 %	A	15.5	0.11	N/A	
LPE6855ER683NU	68 000	\pm 30 %	A	18.7	0.10	N/A	
LPE6855ER104NU	100 000	\pm 30 %	A	37.7	0.07	N/A	
LPE6855ER154NU	150 000	\pm 30 %	A	46.2	0.06	N/A	
LPE6855ER100MG	10	\pm 20 %	B	0.02	3.21	3.375	GAPPED MODELS (B)
LPE6855ER150MG	15	\pm 20 %	B	0.03	2.90	2.790	
LPE6855ER220MG	22	\pm 20 %	B	0.04	2.64	2.325	
LPE6855ER330MG	33	\pm 20 %	B	0.05	2.12	1.910	
LPE6855ER470MG	47	\pm 20 %	B	0.08	1.73	1.610	
LPE6855ER680MG	68	\pm 20 %	B	0.12	1.41	1.350	
LPE6855ER101MG	100	\pm 20 %	B	0.15	1.28	1.120	
LPE6855ER151MG	150	\pm 20 %	C	0.23	1.02	0.915	
LPE6855ER221MG	220	\pm 20 %	D	0.35	0.83	0.757	
LPE6855ER331MG	330	\pm 20 %	D	0.55	0.67	0.620	
LPE6855ER471MG	470	\pm 20 %	D	0.82	0.54	0.520	
LPE6855ER681MG	680	\pm 20 %	E	1.23	0.45	0.433	
LPE6855ER102MG	1000	\pm 20 %	E	1.89	0.36	0.358	
LPE6855ER152MG	1500	\pm 20 %	E	2.90	0.29	0.292	
LPE6855ER222MG	2200	\pm 20 %	E	4.50	0.23	0.242	
LPE6855ER332MG	3300	\pm 20 %	E	5.50	0.21	0.197	
LPE6855ER472MG	4700	\pm 20 %	E	8.30	0.17	0.166	

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

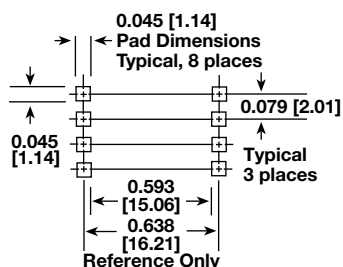
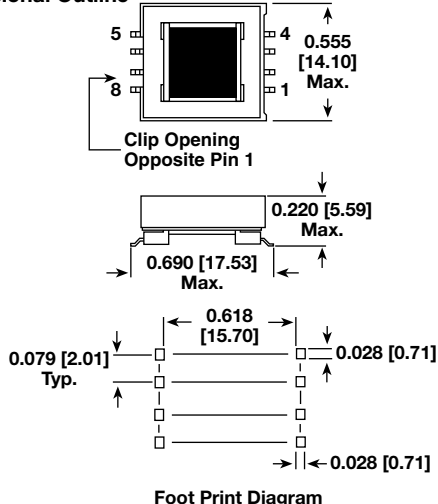
LPE	6855	1000 μ H	\pm 30 %	A	ER	e2
MODEL	SIZE	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	CORE	PACKAGE CODE	JEDEC LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER

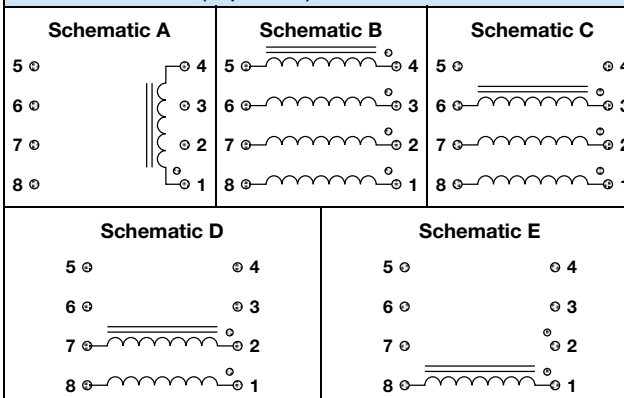
L	P	E	6	8	5	5	E	R	1	0	2	N	U
PRODUCT FAMILY			SIZE				PACKAGE CODE		INDUCTANCE VALUE			TOL.	CORE

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).

DIMENSIONS in inches [millimeters]**Pad Layout****Dimensional Outline****Notes**

- 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].

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

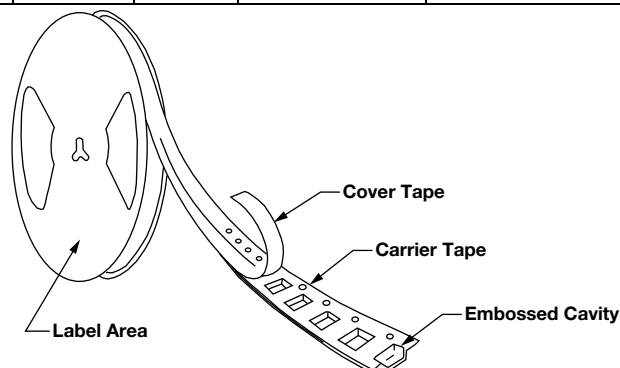
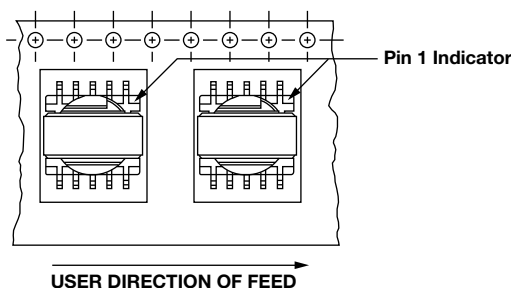
Cover Tape Adhesion to Carrier: 40 g \pm 30 g**REEL SPECIFICATIONS:**

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-6855	32 mm	20 mm	450

Tape and Reel Orientation**Note**

- Top view shown with cover tape removed



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