

MID-ILTFly

Transformers for Linear Technology Isolated Flyback Converters



Characteristics

- Interleaved winding for low leakage inductance
- High saturation current for low-power, DC/DC transformers
- Bifilar windings on secondary to handle high currents
- Self-shielding and space efficient
- Functional insulation
- Isolation voltage: 1875V_{AC} at 1 second
- Lead free and RoHS compliant
- Operating temp: -40°C to 125°C
- Package sizes: EP7, EP10 and EP13
- Designed to meet IEC/UL/EN60950-1

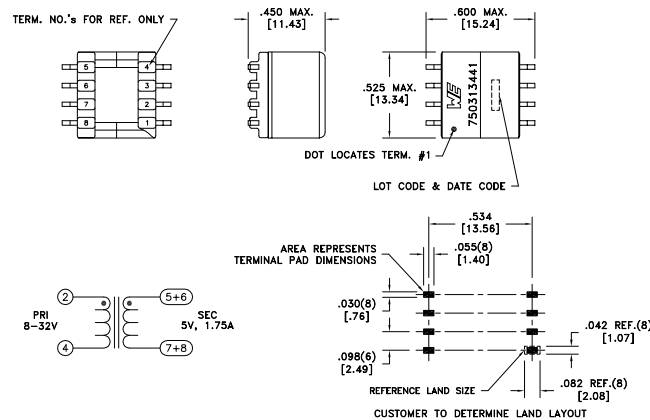
Applications

- Industrial & medical power supplies
- Isolated auxiliary/housekeeping power supplies
- Isolated DC/DC supplies, home automation, telecom and automotive

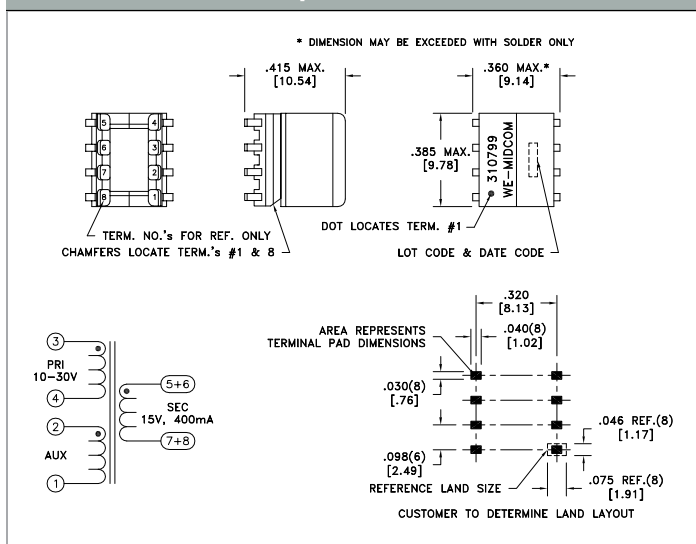
IC Characteristics

- Micropower isolated flyback converter
- Boundary mode operation at heavy load
- Low-Ripple Burst Mode® operation at light load
- No transformer aux winding or opto-isolator required for regulation

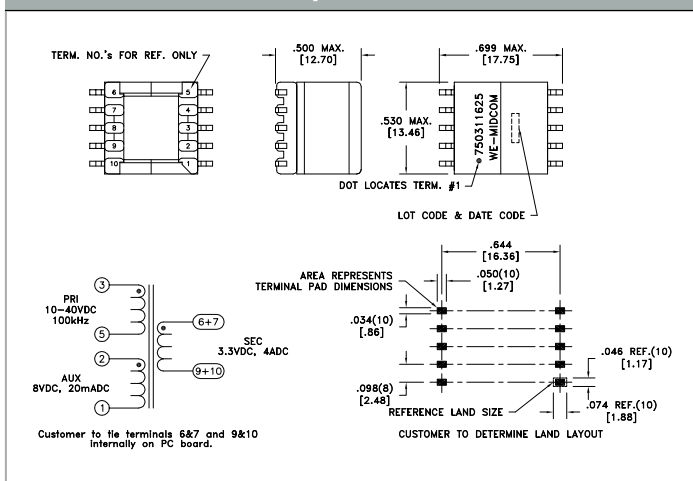
EP10 Dimensions & Footprint



EP7 Dimensions & Footprint



EP13 Dimensions & Footprint



*transformers are not AECQ200 qualified

MID-ILFLY

Transformers for Linear Technology Isolated Flyback Converters



LT8300 - 100V_{IN} Micropower Isolated Flyback Converter with 150V/260mA Switch

Order Code	Package Size	U _I (V _{AC})	U _O (V)	I _O (A)	U _{AUX} (V)	L (mH)	I _{SAT} (A)	N _{PRI} :N _{SEC} :N _{AUX}	f _{SWITCH} (kHz)	U _T (V _{AC})
750312557	EP7	12, 24, or 48	5 or 3.3	0.170 to 0.420		0.300	0.450	6 : 1	70	1875
750312365	EP7	12, 24, or 48	5.0	0.150 to 0.290		0.300	0.600	4 : 1	100	1875
750312366	EP7	22-75	5.0	0.250		0.400	0.580	7.11 : 1	100	1875
750312367	EP7	12, 24, or 48	3.3	0.240 to 0.510		0.300	0.450	8.4 : 1	100	1875
750312558	EP7	12, 24, or 48	15 or 12	0.028 to 0.067		0.300	0.540	2 : 1:1	70	1875
750312559	EP7	12, 24, or 48	24.0	0.033 to 0.037		0.300	0.450	1 : 1	70	1875
750311019	EP7	12, 24, or 48	5 or 3.3	0.170 to 0.420	6.6	0.400	0.750	6 : 1 : 2	200-300	1875
750311558	EP7	12, 24, or 48	5.0	0.150 to 0.290	5.0	0.300	0.500	4 : 1 : 1	200-300	1875
750311559	EP7	12, 24, or 48	5.0	0.150 to 0.290	5.0	0.175	0.800	4 : 1 : 1	200-300	1875
750311659	EP7	12, 24, or 48	24.0	0.033 - 0.067	5.0	0.300	0.560	5 : 5 : 1	180	1875
750311660	EP7	12, 24, or 48	15 or 12	0.056 - 0.134	5.0	0.350	0.520	6 : 3 : 1	190	1875
750311838	EP7	12, 24, or 48	15 or 12	0.028 - 0.067		0.350	0.520	2 : 1:1	190	1875



LT8301 - 42V_{IN} Micropower No-Opto Isolated Flyback Converter with 65V/1.2A Switch

Order Code	Package Size	U _I (V _{DC})	U _{O1} (V)	I _{O1} (A)	U _{O2} (V)	I _{O2} (A)	U _{AUX} (V)	L (mH)	I _{SAT} (A)	N _{PRI} :N _{SEC} :N _{AUX}	f _{SWITCH} (kHz)	U _T (V _{AC})
750310799	EP7	8-30	12.0	0.22			5	0.025	2.0	1 : 1 : 0.33	200-300	1875
750313970	EP10	18-42	3.3	0.75	3.3	0.75		0.040	2.0	2 : 1	200-300	1875
750313972	EP10	18-42	5.0	0.42	5.0	0.42		0.040	2.0	1 : 1	200-300	1875
750313973	EP10	8-36	3.3	0.80	3.3	0.80		0.040	2.0	4 : 1	200-300	1875
750313974	EP10	8-36	5.0	0.55	5.0	0.55		0.040	2.0	3 : 1	200-300	1875
750313975	EP10	8-36	24.0	0.12	24.0	0.12		0.040	2.0	1 : 2	200-300	1875
750313976	EP10	8-32	48.0	0.05	48.0	0.05		0.040	2.0	1 : 4	200-300	1875
750370047	EP7	8-32	5.0	0.55			5	0.030	1.7	3 : 1 : 1	200-300	1875

LT8302 - 42V_{IN} Micropower No-Opto Isolated Flyback Converter with 65V/3.6A Switch

Order Code	Package Size	U _I (V _{DC})	U _{O1} (V)	I _{O1} (A)	L (mH)	I _{SAT} (A)	N _{PRI} :N _{SEC} :N _{AUX}	U _T (V _{AC})
750311625	EP13	8 to 32	3.3	2.10	0.009	8.00	4 : 1 : 2.25	1875
750311564	EP13	8 to 32	5.0	1.50	0.009	8.00	3 : 1 : 1.75	1875
750313441	EP10	8 to 32	5.0	1.30	0.009	8.00	2 : 1	1875
750311624	EP13	8 to 32	8.0	0.90	0.009	8.00	3 : 2 : 1	1875
750313443	EP10	8 to 32	12.0	0.30	0.009	7.30	1 : 1	1875
750313445	EP10	8 to 32	24.0	0.30	0.009	7.50	1 : 2	1875
750313457	EP10	8 to 32	48.0	0.15	0.009	7.50	1 : 4	1875
750313460	EP10	4 to 18	5.0	0.90	0.012	7.75	4 : 1	1875
750311342	EP10	4 to 18	12.0	0.40	0.015	5.80	2 : 1 : 1	1500
750313439	EP10	8 to 42	3.3	2.10	0.012	8.00	2 : 1	1875
750313442	EP10	8 to 42	5.0	1.60	0.012	7.30	3 : 2	1875



Other Würth Electronics Components

- 7443551221: WE-HCI SMD Flat Wire High Current Inductor
- 744770112: WE-PD SMD Shielded Power Inductor