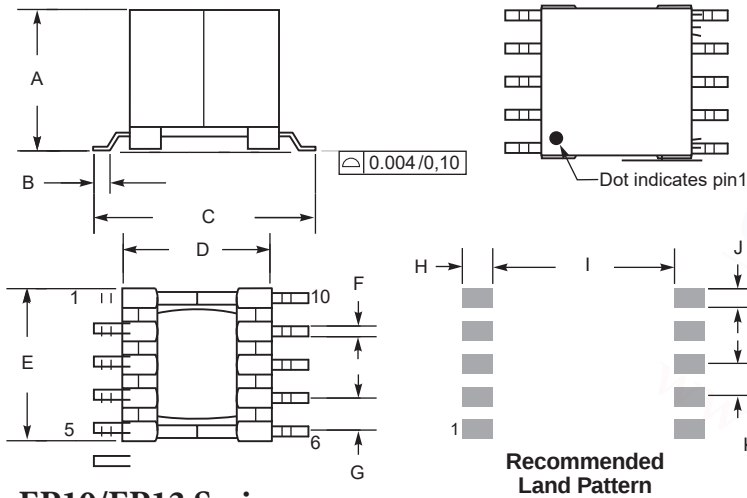


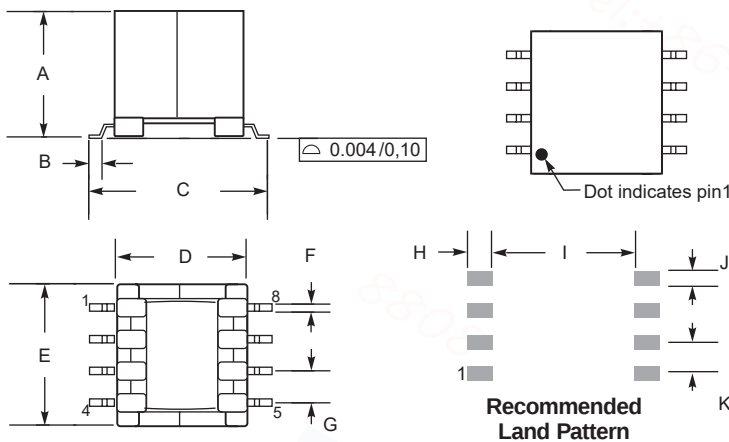
Flyback Transformers

SHAPE AND DIMENSIONS(UNIT:mm):

EP13A



EP10/EP13 Series



Features

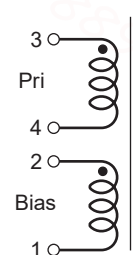
- Flyback transformers for EP applications
- Designed to operate in continuous mode at 250 kHz with an input of 36-72 Vdc



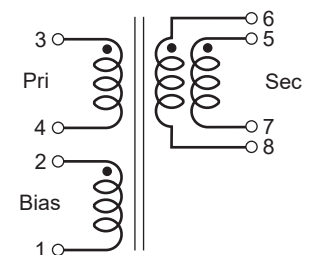
1500 Vrms isolation from primary and bias to secondary
Ambient temperature -40°C to $+85^{\circ}\text{C}$
Storage temperature Component: -40°C to $+85^{\circ}\text{C}$.
Inductance is for the primary, measured at 250 kHz, 0.1 Vrms, 0 Adc.
Pk is peak primary current drawn at minimum input voltage.
DCR for the secondary is per winding.
Leakage inductance measured between pins 3 and 4 with all other pins shorted.
Turns ratio is with the secondary windings connected in parallel.
Output of the secondary is with the windings connected in parallel.
Bias winding output is 12 V, 20 mA.
Electrical specifications at 25°C .

Schematics

EP13A



EP10,EP13



Secondary windings to be connected in parallel on PC board.

Eastever P/N	A (max)	B	C (max)	D	E (max)	F	G	H	I	J	K
EP10	9.02	1.05	13.21	8.60	10.92	0.70	2.50	2.03	9.40	1.27	2.50
EP13	11.00	1.05	15.24	10.50	12.7	0.60	2.50	2.03	11.68	1.27	2.50
EP13A	12.7	1.00	17.75	13.00	13.46	0.70	2.50	2.03	14.99	1.27	2.50

Electrical Characteristics @25°C:

Eastever P/N	Power (W)	Inductance at 0 A $\pm 10\%$ (μH)	Inductance at I_{pk} min (μH)	DCR max (Ohms)			Leakage inductance max (μH)	Turns ratio		I_{pk} (A)	Output	Coilcraft P/N
				pri	bias	sec		pri : sec	pri : bias			
EP10-311-00	3	310	279.0	1.02	2.01	0.066	4.75	1 : 0.19	1 : 0.70	0.3	3.3 V, 0.91 A	POE30P-33L
EP10-311-01	3	310	279.0	1.02	2.01	0.118	4.50	1 : 0.28	1 : 0.70	0.3	5.0 V, 0.6 A	POE30P-50L
EP10-311-02	3	310	279.0	1.04		0.700	4.25	1 : 0.70	1 : 0.70	0.3	12 V, 0.25 A	POE30P-12L
EP13-1550-00	7	155	139.5	0.414	0.822		4.00	1 : 0.19	1 : 0.667	0.65	3.3 V, 2.12 A	POE70P-33L
EP13-1550-01	7	155	139.5	0.414	0.822		3.60	1 : 0.262	1 : 0.667	0.65	5.0 V, 1.4 A	POE70P-50L
EP13-1550-02	7	155	139.5	0.414	0.822		3.25	1 : 0.667	1 : 0.667	0.65	12 V, 0.6 A	POE70P-12L
EP13A-1270-00	13	127	114.3	0.255	0.310		1.25	1 : 0.166	1 : 0.50	1.0	3.3 V, 4.0 A	POE13P-33L
EP13A-1270-01	13	127	114.3	0.222	0.348		0.950	1 : 0.25	1 : 0.50	1.0	5.0 V, 2.6 A	POE13P-50L
EP13A-1270-02	13	127	114.3	0.199	0.308		0.650	1 : 0.50	1 : 0.50	1.0	12 V, 1.08 A	POE13P-12L
EP13A-1270-03	13	127	114.3	0.290	0.355		0.800	1 : 0.567	1 : 0.50	1.0	19.5 V, 0.67 A	POE13P-19L
EP13A-1270-04	13	127	114.3	0.255	0.315		0.600	1 : 0.667	1 : 0.50	1.0	24 V, 0.54 A	POE13P-24L