

Description:

- Transformers for Power over Ethernet (PoE)
- Designed for 200KHz switching frequency
- Power: 3W~27W
- Hipot voltage: 1500Vrms
- Custom designs available

Other:

- Operating temperature range: -40°C to +125°C
- Storage temperature range: -55°C to +125°C
- Solder reflow temperature: +245°C for 10 second max
- RoHS Compliant version is available

YUAN DEAN SCIENTIFIC

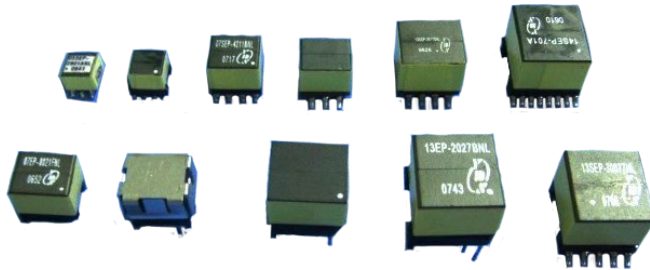


High Frequency
Transformer
PoE EP SERIES

PoE

3W~27W

SMD

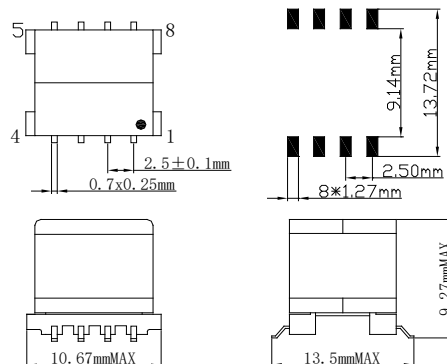


EP7 8PIN SMD

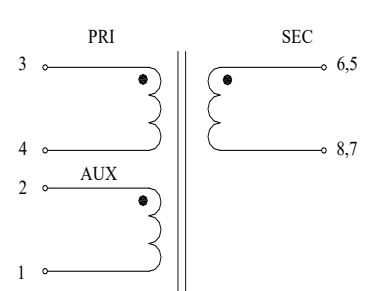
Part Number	Turn Ratio Pri:Sec:AUX ①	L ② (uH±10%)	Input	LK ③ max(uH)	DCR ④ (Ohms MAX)			Output Voltage ⑤
					Pri	Aux	Sec	
07SEP-5011SNL	1:0.083:0.208	500	33~57V,200KHZ	7.5	1.75	0.215	0.015	Vo=3.3V/3W, 8V/20mA
07SEP-3111SNL	1:0.182:0.682	310	33~57V,200KHZ	5.0	1.60	2.60	0.045	Vo=3.3V/3W, 12V/20mA
07SEP-5012SNL	1:0.125:0.208	500	33~57V,200KHZ	7.5	1.75	0.215	0.035	Vo=5.00V/3W, 8V/20mA
07SEP-3112SNL	1:0.273:0.682	310	33~57V,200KHZ	5.0	1.60	2.65	0.087	Vo=5.00V/3W,12V/20mA
07SEP-5211SNL	1:0.286:0.204	521	33~57V,200KHZ	7.5	1.75	0.22	0.100	Vo=12V/3W, 8V/20mA
07SEP-3113SNL	1:0.682:0.682	310	33~57V,200KHZ	5.0	1.60	2.60	0.55	Vo=12V/3W, 12V/20mA

- ① Turns ratio is with the secondary windings connected in parallel.
- ② L(NOM)=Nominal Inductance is for pri winding, measured at 200KHz,0.1Vrms,0Adc.
- ③ Leakage inductance measured between Pri other pins shorted.
- ④ DCR for the secondary windings connected in parallel.
- ⑤ Output is with the secondary windings connected in parallel.

Mechanical Diagrams



Schematic

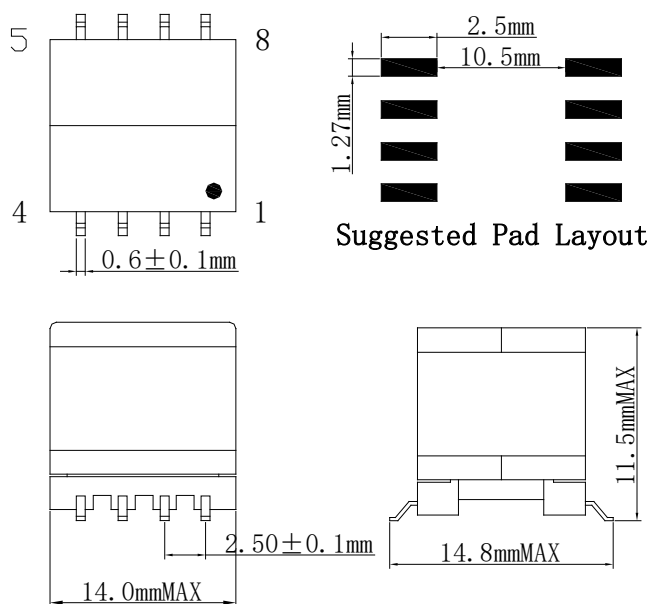


EP10 8PIN SMD

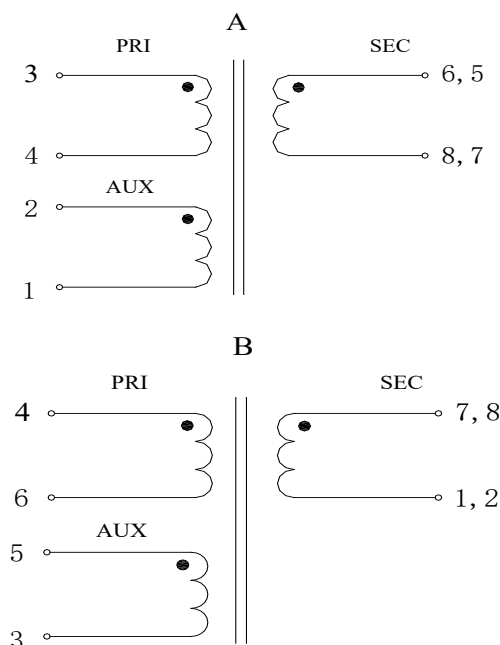
Part Number	Turn Ratio Pri:Sec:AUX ①	L ② (uH±10%)	Input	LK ③ max(uH)	DCR ④ (Ohms MAX)			Schematic	Output Voltage ⑤
					Pri	Aux	Sec		
10SEP-2502TNL	1:0.100:0.150	25.2	36~72V, 300KHZ	2.0	0.25	0.02	0.0035	B	Vo=3.3V/10W, 5V/100mA
10SEP-2512SNL	1:0.083:0.208	253	33~57V, 200KHZ	7.5	0.42	0.115	0.0075	A	Vo=3.3V/7W, 8V/20mA
10SEP-1511SNL	1:0.182:0.682	155	33~57V, 200KHZ	5.0	0.53	0.90	0.031	A	Vo=3.3V/7W, 12V/20mA
10SEP-2001SNL	1:0.222:0.555	20.4	9~50V, 200KHZ	1.5	0.08	0.15	0.0075	A	Vo=3.3V/10W,8V/20mA
10SEP-2001FNL	1:0.444:0.388	20.4	9~50V, 200KHZ	1.5	0.08	0.105	0.03	A	Vo=3.3V/10W, 5V/20mA
10SEP-2513SNL	1:0.125:0.208	253	33~57V, 200KHZ	7.5	0.42	0.115	0.016	A	Vo=5V/7W, 8V/20mA
10SEP-1512SNL	1:0.273:0.682	155	33~57V, 200KHZ	5.0	0.57	1.00	0.040	A	Vo=5V/7W, 12V/20mA
10SEP-2611SNL	1:0.286:0.204	264	33~57V, 200KHZ	7.5	0.80	0.115	0.045	A	Vo=12V/7W, 8V/20mA
10SEP-1611SNL	1:0.682:0.682	155	33~57V, 200KHZ	5.0	0.54	0.92	0.37	A	Vo=12V/7W, 12V/20mA

- ① Turns ratio is with the secondary windings connected in parallel.
- ② L(NOM)=Nominal Inductance is for pri winding, measured at 200KHz,0.1Vrms,0Adc.
- ③ Leakage inductance measured between Pri with other pins shorted.
- ④ DCR for the secondary windings connected in parallel.
- ⑤ Output is with the secondary windings connected in parallel.

Mechanical Diagrams



Schematic



EP13 10PIN SMD

Part Number	Turn Ratio Pri:Sec:AUX ①	L ② (uH±10%)	Input	LK ③ max(uH)	DCR ④ (Ohms MAX)			Schematic	Output Voltage ⑤
					Pri	Aux	Sec		
13SEP-1213ZNL	1:0.083:0.208	127	33~57V, 200KHZ	7.5	0.44	0.088	0.006	A	Vo=3.3V/13.5W,8V/20mA
13SEP-1611AUNL	1:0.167:0.639	155.5	33~57V, 200KHZ	5.0	0.33	0.65	0.011	B	Vo=3.3V/11W, 12V/20mA
13SEP-7801ZNL	1:0.182:0.682	77.4	33~57V, 200KHZ	5.0	0.10	0.27	0.0085	A	Vo=3.3V/13.5W,12V/20mA
13SEP-1212ZNL	1:0.125:0.208	127	33~57V, 200KHZ	7.5	0.46	0.094	0.012	A	Vo=5V/13.5W,8V/20mA
13SEP-7701ZNL	1:0.273:0.682	77.4	33~57V, 200KHZ	0.8	0.22	0.25	0.018	A	Vo=5V/13.5W, 12V/20mA
13SEP-1211ZNL	1:0.292:0.208	127	33~57V, 200KHZ	7.5	0.46	0.094	0.055	A	Vo=12V/13.5W, 8V/20mA
13SEP-7802ZNL	1:0.682:0.682	77.4	33~57V, 200KHZ	5.0	0.10	0.27	0.075	A	Vo=12V/13.5W, 12V/20mA
13SEP-2801ZNL	1:0.470:0.294	28.9	33~57V, 200KHZ	1.0	0.058	0.055	0.027	A	Vo=15V/27W, 8V/20mA

- ① Turns ratio is with the secondary windings connected in parallel.
- ② L(NOM)=Nominal Inductance is for pri winding, measured at 200KHz,0.2Vrms,0Adc.
- ③ Leakage inductance measured between Pri with other pins shorted.
- ④ DCR for the secondary windings connected in parallel.
- ⑤ Output is with the secondary windings connected in parallel.

Mechanical Diagrams

Schematic

Suggested Pad Layout

