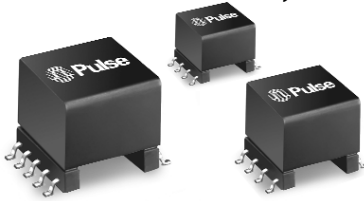


# HIGH FREQUENCY CONVENTIONAL TRANSFORMERS

## EP Platforms - EP7, EP10 and EP13



**Pulse**<sup>®</sup>  
A TECHNITROL COMPANY



- ☑ Ideal for PoE
- ☑ Power: 3W to 15W
- ☑ Three different SMT platforms
- ☑ Custom designs available

### Electrical Specifications @ 25°C — Operating Temperature -40°C to 125°C

Part Number	Application <sup>2</sup>	Turns Ratio			Primary Secondary Isolation	Primary Inductance (μH ±10%)	Leakage Inductance (μH MAX)	DCR (mΩ MAX)			
		Pri.	Sec.	Pri. Aux.				Pri.	Pri. Aux.	Sec. A	Sec. B
EP7 - 8 Pin SMT - (13.2mm x 10.7mm x 11.4mm MAX)											
PA1130	3W Flyback Transformer Vin=33-57v, Freq.=200kHz Vout=3.3v/3W, 8v/20mA	1	0.083	0.208	1500Vrms Operational	500	7.5	1750	215	15	N/A
PA1279	3W Flyback Transformer Vin=33-57v, Freq.=200kHz Vout=3.3v/3W, 12v/20mA	1	0.182	0.682		310	5	1600	2600	45	N/A
PA1131	3W Flyback Transformer Vin=33-57v, Freq.=200kHz Vout=5.0v/3W, 8v/20mA	1	0.125	0.208		500	7.5	1750	215	35	N/A
PA1280	3W Flyback Transformer Vin=33-57v, Freq.=200kHz Vout=5.0v/3W, 12v/20mA	1	0.273	0.682		310	5	1600	2650	87	N/A
PA1132	3W Flyback Transformer Vin=33-57v, Freq.=200kHz Vout=12v/3W, 8v/20mA	1	0.286	0.204		521	7.5	1750	220	100	N/A
PA1281	3W Flyback Transformer Vin=33-57v, Freq.=200kHz Vout=12v/3W, 12v/20mA	1	0.682	0.682		310	5	1600	2600	550	N/A
EP10 - 8 Pin SMT - (15.2mm x 12.7mm x 11.4mm MAX)											
PB2115	10W Flyback Transformer Vin=36-72v, Freq.=300kHz Vout=3.3v/10W, 5.0v/100mA	1	0.100	0.150	1500Vrms Operational	25.2	2	250	20	3.25	N/A
PA1133	7W Flyback Transformer Vin=33-57v, Freq.=200kHz Vout=3.3v/7W, 8v/20mA	1	0.083	0.208		253	7.5	420	115	7.5	N/A
PA1253	7W Flyback Transformer Vin=33-57v, Freq.=200kHz Vout=1.8v/1A, 3.3v/1.5A, 12v/20mA	1	.0420 (1.8v) .0625 (3.3v)	0.271		253	8.5	420	335	5.5 (1.8v) 6.8 (3.3v)	
PA1282	7W Flyback Transformer Vin=33-57v, Freq.=200kHz Vout=3.3v/7W, 12v/20mA	1	0.182	0.682		155	5	530	900	31	N/A
PA1277	10W Flyback Transformer Vin=9-50v, Freq.=200kHz Vout=3.3v/10W, 8v/20mA	1	0.222	0.555		20.4	1.5	80	150	7.5	N/A
PA1134	7W Flyback Transformer Vin=33-57v, Freq.=200kHz Vout=5.0v/7W, 8v/20mA	1	0.125	0.208		253	7.5	420	115	16	N/A
PA1283	7W Flyback Transformer Vin=33-57v, Freq.=200kHz Vout=5.0v/7W, 12v/20mA	1	0.273	0.682		155	5	570	1000	40	N/A
PA1135	7W Flyback Transformer Vin=33-57v, Freq.=200kHz Vout=12v/7W, 8v/20mA	1	0.286	0.204		264	7.5	800	115	45	N/A
PA1284	7W Flyback Transformer Vin=33-57v, Freq.=200kHz Vout=12v/7W, 12v/20mA	1	0.682	0.682		155	5	540	920	370	N/A

(Continued on next page)

# HIGH FREQUENCY CONVENTIONAL TRANSFORMERS

## EP Platforms - EP7, EP10 and EP13



### Electrical Specifications @ 25°C — Operating Temperature -40°C to 125°C — (continued from front page)

Part Number	Application <sup>2</sup>	Turns Ratio			Primary Secondary Isolation	Primary Inductance (μH ±10%)	Leakage Inductance (μH MAX)	DCR (mΩ MAX)			
		Pri.	Sec.	Pri. Aux.				Pri.	Pri. Aux.	Sec. A	Sec. B
EP13 - 10 PIN SMT - (17.8MM x 13.0MM x 12.7MM MAX)											
PA1136	13.5W Flyback Transformer Vin=33-57v, Freq.=200kHz Vout=3.3v/13.5W, 8v/20mA	1	0.083	0.208	1500Vrms Operational	127	7.5	440	88	6	N/A
PA1267	13.5W Flyback Transformer Vin=33-57v, Freq.=200kHz Vout=3.3v/11W, 12v/20mA	1	0.167	0.639		155.5	5	330	650	11	N/A
PA1269	13.5W Flyback Transformer Vin=33-57v, Freq.=200kHz Vout=3.3v/13.5W, 12v/20mA	1	0.182	0.682		77.4	5	100	270	8.5	N/A
PA1137	13.5W Flyback Transformer Vin=33-57v, Freq.=200kHz Vout=5.0v/13.5W, 8v/20mA	1	0.125	0.208		127	7.5	460	94	12	N/A
PA1260	13.5W Flyback Transformer Vin=33-57v, Freq.=200kHz Vout=5.0v/13.5W, 12v/20mA	1	0.273	0.682		77.4	0.8	220	250	18	N/A
PA1138	13.5W Flyback Transformer Vin=33-57v, Freq.=200kHz Vout=12v/13.5W, 8v/20mA	1	0.292	0.208		127	7.5	460	94	55	N/A
PA1276	13.5W Flyback Transformer Vin=33-57v, Freq.=200kHz Vout=12v/13.5W, 12v/20mA	1	0.682	0.682		77.4	5	100	270	75	N/A

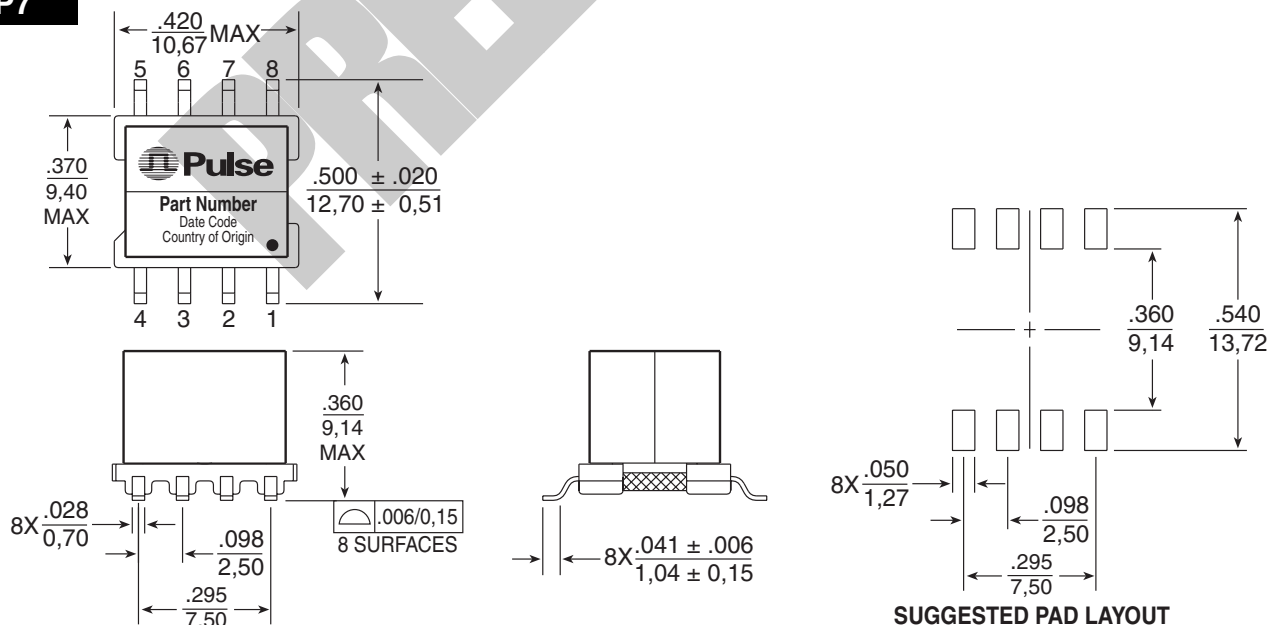
#### Notes:

1. The temperature of the component (ambient plus temperature rise) must be within the stated operating temperature range.
2. The above transformers have been tested and approved by Pulse's power IC partners and are sited in the appropriate datasheet or evaluation board documentation at these companies.
3. Add 'T' suffix to the part number for Tape & Reel version (ie: PA0699T).

To determine which IC and IC partners are matched with the above Pulse part numbers please consult the IC Cross Reference on the Pulse website.

## Mechanical

### EP7



SUGGESTED PAD LAYOUT

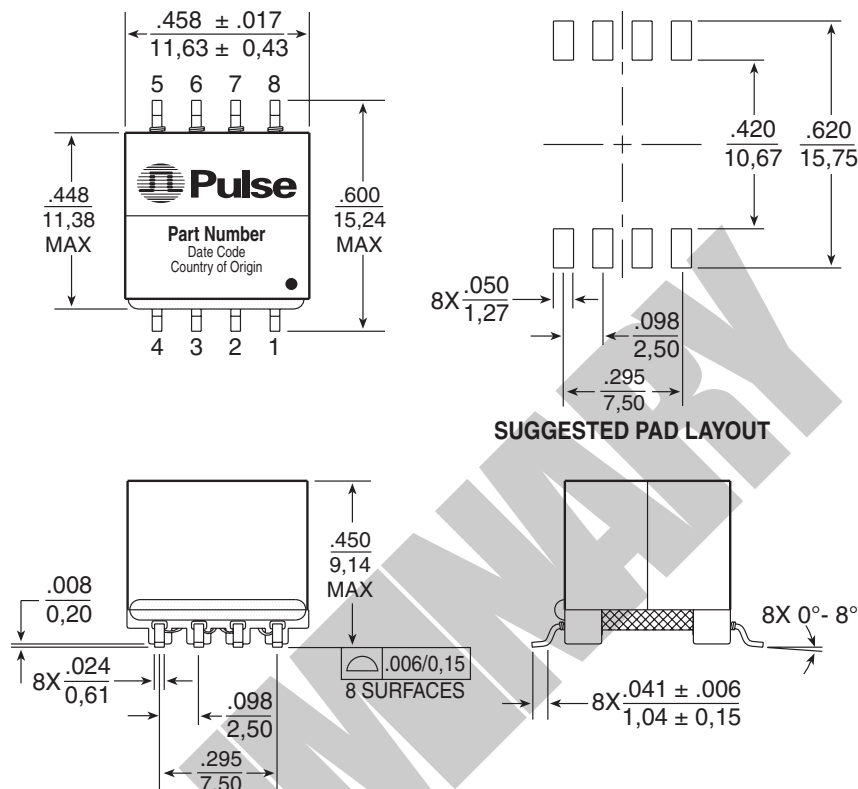
# HIGH FREQUENCY CONVENTIONAL TRANSFORMERS

## EP Platforms - EP7, EP10 and EP13

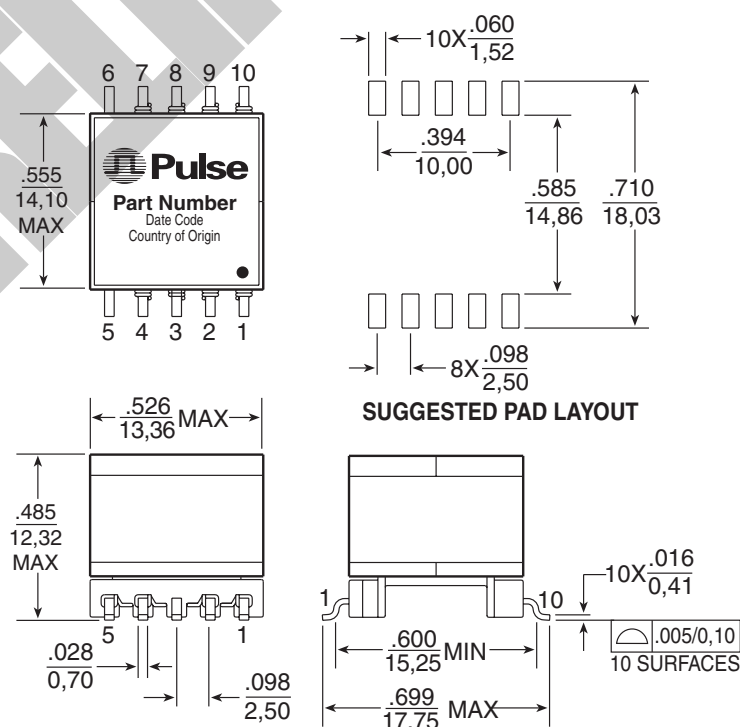


### Mechanicals

#### EP10



#### EP13



# HIGH FREQUENCY CONVENTIONAL TRANSFORMERS

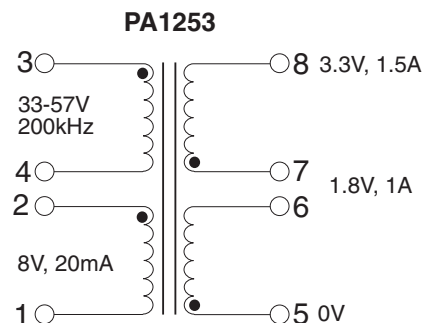
## EP Platforms - EP7, EP10 and EP13



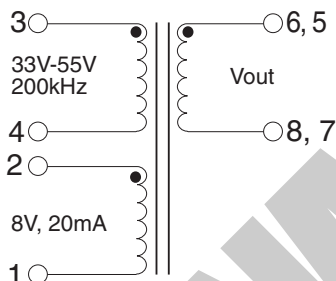
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### Schematics

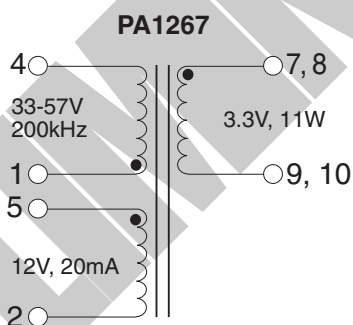
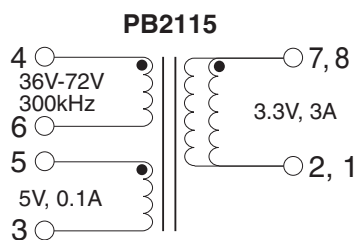
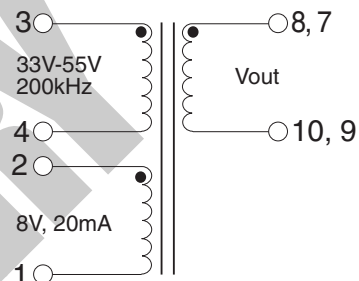
#### EP7/10/13



#### PA1130 / 31 / 32 / 33 / 34 / 35 PA1277 / 79 / 80 / 81 / 82 / 83 / 84



#### PA1136, PA1137, PA1138 PA1260, PA1269, PA1276



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