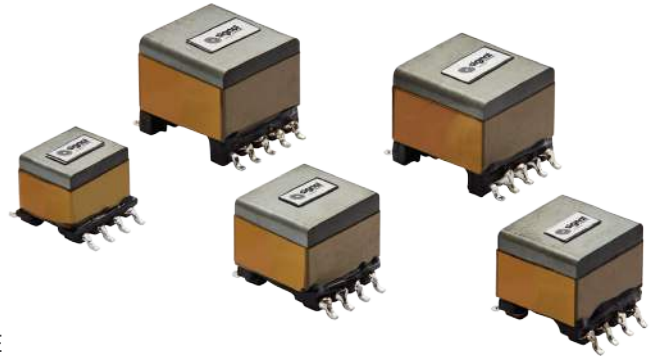


# SPoE Surface Mount Transformer Series (Power Over Ethernet)

Signal's latest product innovation for Power Over Ethernet (PoE) applications is the SPoE Surface Mount Transformer Series. SPoE is a new product targeting engineers, designers and manufacturers of equipment or devices which are connecting to an Ethernet network and rely on ethernet cables to receive power and digital data signals for operation and processing respectively.

The SPoE Series family of high-frequency SMD transformers are utilized for Power over Ethernet (PoE) Power Device equipment (PD) designs intended for IEEE802.3AF and IEEE802.3AT requirements. The SPoE Series steps down the voltage, provides isolation in the PD circuit and offers an auxiliary tap for controller feedback requirements. Applications for this series include VOIP phones, IP Cameras, wireless access points, IPTV decoders, network routers, and other low-power PoE devices that accept power from a PSE injector, midspan, or PoE switch.



## Features

- EP7, EP10 & EP13 SMT Platform
- 3 W to 27 W Power Range
- FLYBACK Circuit Topology

## Markets

- Commercial
- Industrial
- LED Lighting
- Smart Home & Office
- Healthcare Environment

## Applications

- VoIP Phones
- IP Cameras
- Wireless Access Points
- IPTV Decoders
- Network Routers
- Scanners
- Intercoms

## Notes

- (1) Electrical Specifications @ 25°C
- (2) Operating Temperature Range: -40°C to +125°C
- (3) Dielectric Strength: 1,500Vrms PRI to SEC operational

## Electro-Mechanical Characteristics

Part Number	L (uH) Pri ±10%	L (uH) Leakage Max.	DCR (mΩ) Pri Max.	DCR (mΩ) Aux Max.	DCR (mΩ) Sec Max.	Turns Ratio PRI:SEC	Turns Ratio PRI:AUX	Size & Pins	Power Capacity	Vout
SPOE3-3308	500	7.5	1750	215	15	1:0.083	1:0.208	EP7 8 PIN	3 W	3.3V
SPOE3-3312	310	5	1600	2600	45	1:0.182	1:0.682	EP7 8 PIN	3 W	3.3V
SPOE3-0508	500	7.5	1750	215	35	1:0.125	1:0.208	EP7 8 PIN	3 W	5.0V
SPOE3-1212	310	5	1600	2600	550	1:0.682	1:0.682	EP7 8 PIN	3 W	12V
SPOE7-3308	253	7.5	420	115	7.5	1:0.083	1:0.208	EP10 8 PIN	7 W	3.3V
SPOE10-3308	20.4	1.5	80	150	7.5	1:0.222	1:0.555	EP10 8 PIN	10 W	3.3V
SPOE7-0508	253	7.5	420	115	16	1:0.125	1:0.208	EP10 8 PIN	7 W	5.0V
SPOE7-0512	155	5	570	1000	40	1:0.273	1:0.682	EP10 8 PIN	7 W	5.0V
SPOE7-1212	155	5	540	920	370	1:0.682	1:0.682	EP10 8 PIN	7 W	12V
SPOE13-0508	127	7.5	460	94	12	1:0.125	1:0.208	EP13 10 PIN	13 W	5.0V
SPOE13-0512	77.4	0.8	220	250	18	1:0.273	1:0.682	EP13 10 PIN	13 W	5.0V
SPOE13-1208	127	7.5	460	94	55	1:0.292	1:0.208	EP13 10 PIN	13 W	12V
SPOE13-1212	77.4	5	100	270	75	1:0.682	1:0.682	EP13 10 PIN	13 W	12V
SPOE27-1512	28.9	1	58	55	27	1:0.470	1:0.294	EP13 10 PIN	27 W	15V

Custom versions available upon request.

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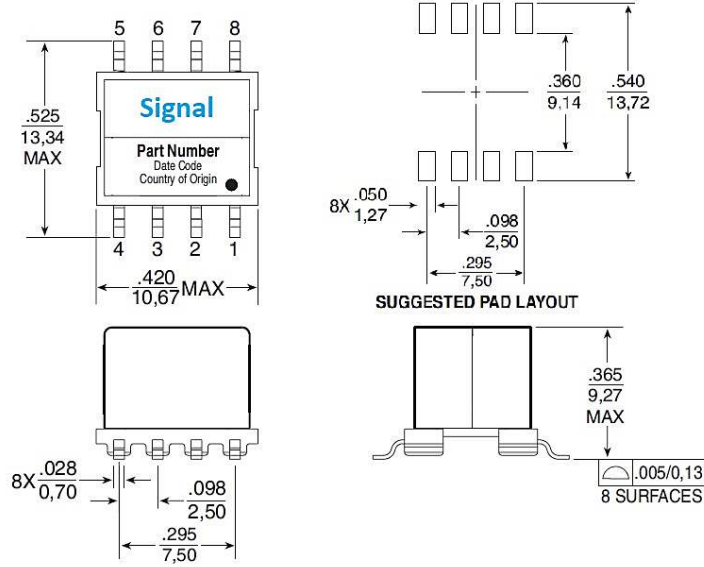


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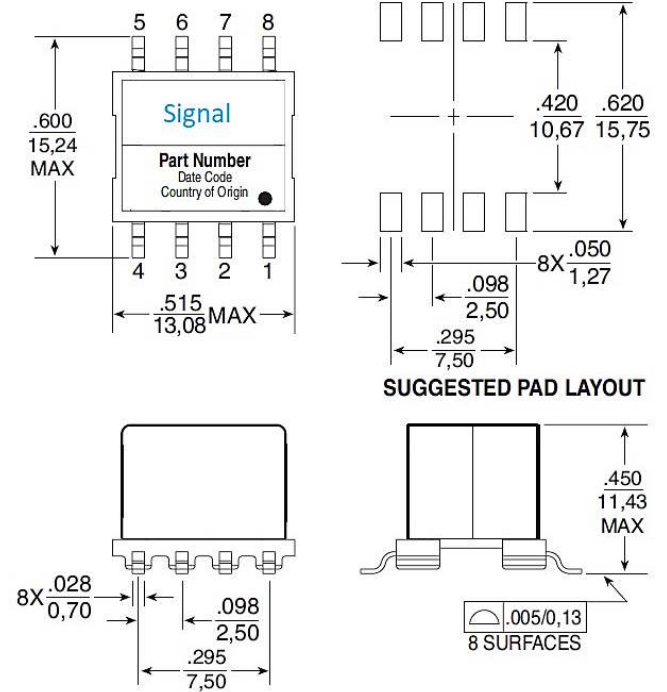
[belfuse.com/signal](http://belfuse.com/signal)

# SPoE Surface Mount Transformer Series (Power Over Ethernet)

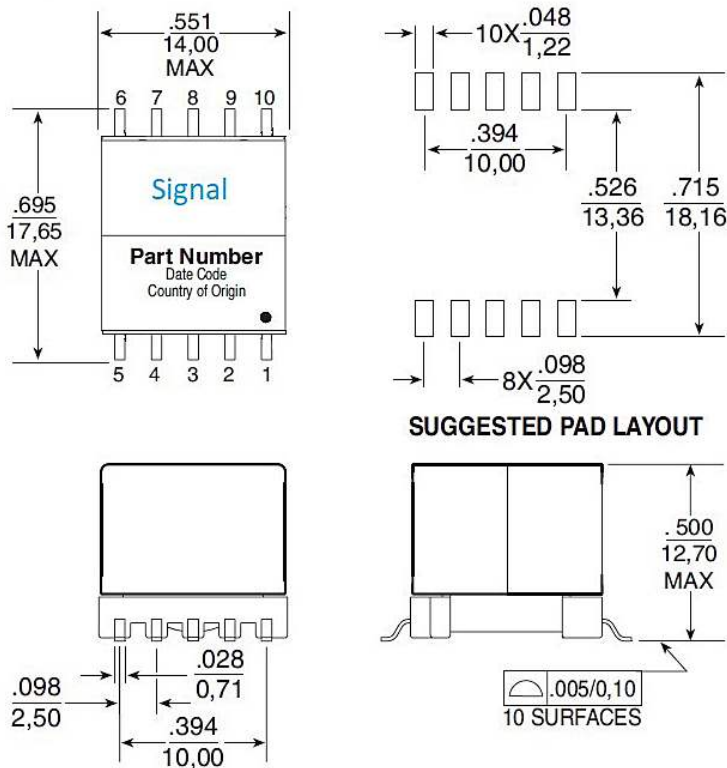
## EP7



## EP10



## EP13



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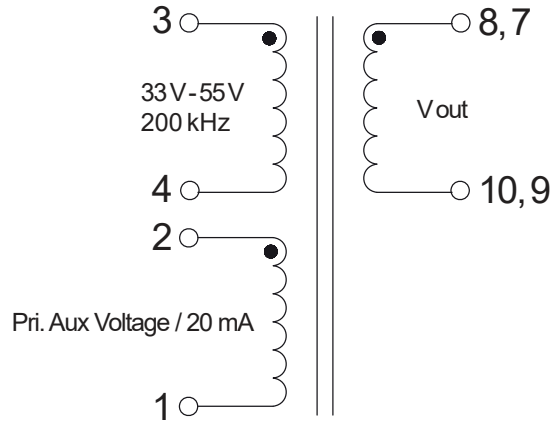
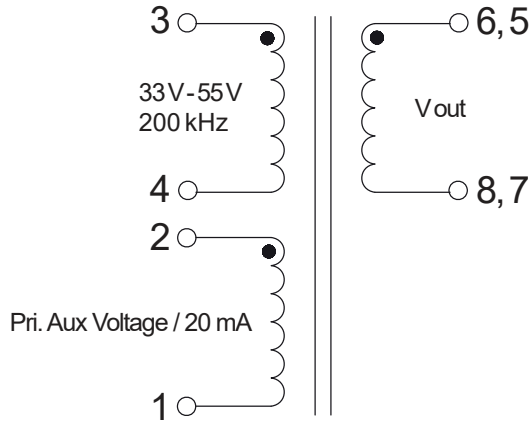
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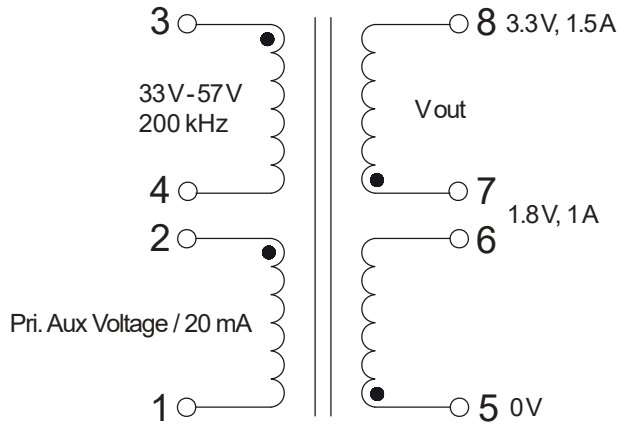
# SPOE Surface Mount Transformer Series (Power Over Ethernet)

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**SPOE7-3308 / 3312 / 0508 / 0512 / 1208 / 1212**

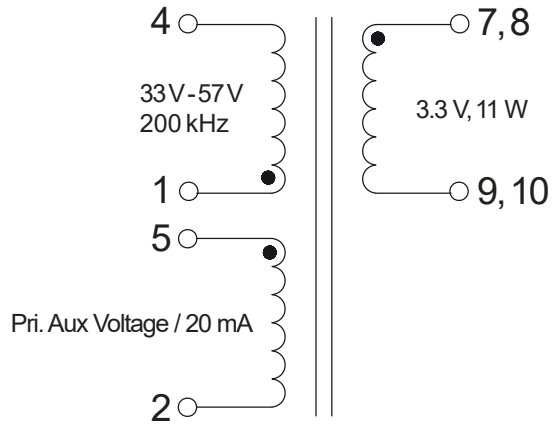
**SPOE13-3308 / 3312 / 0508 / 0512 / 1208 / 1212**  
**SPOE27-1512**



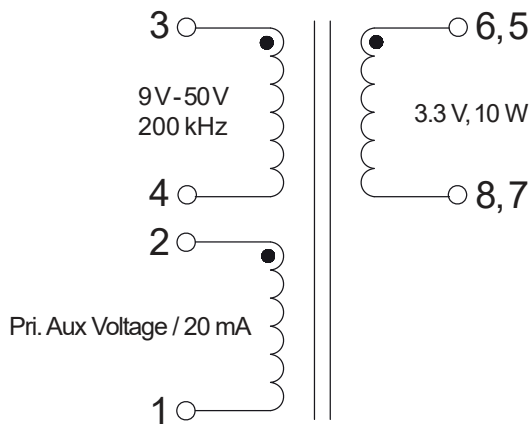
**SPOE7-1812**



**SPOE11-3308**



**SPOE10-3308/3305**



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