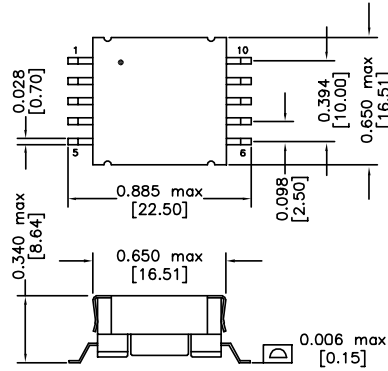


HALO Electronics offers a broad line of power transformers designed for fly-back DC/DC converters used in Power over Ethernet (PoE) applications. These industrial temperature range transformers are UL recognized and are fully compliant to IEEE802.3af requirements for isolation and power ratings. This standard series is LEAD-free and RoHS compliant. Please contact your nearest HALO representative for custom designs.



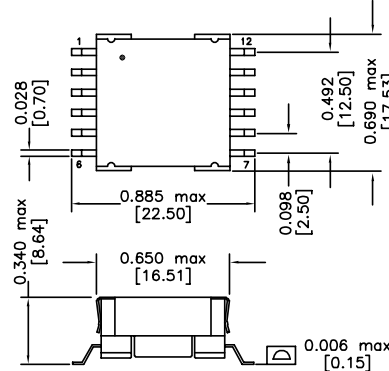
### MECHANICAL DIMENSIONS

#### PACKAGE A



RECOMMENDED SOLDER PAD DIMENSIONS

#### PACKAGE B



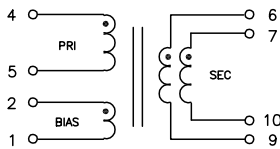
RECOMMENDED SOLDER PAD DIMENSIONS



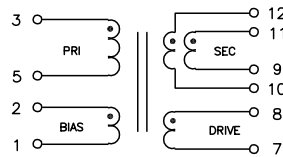
DIMENSIONS: Inch [mm]

TOLERANCES: 0.006 inch if not specified

#### SCHEMATIC A



#### SCHEMATIC B



Electrical Specifications @ 25 °C

Isolation Voltage (PRI – SEC): 1,500Vrms

Operating Temp: -40 to +85 °C



| Part Number       | Turns Ratio<br>PRI:BIAS:SEC:DRV | DCR (mΩ max)<br>PRI/BIAS/SEC/DRV | PRI OCL<br>(μH ±10%) | PRI LL<br>(μH Max) | PKG/<br>SCHE. | IC<br>P/N |
|-------------------|---------------------------------|----------------------------------|----------------------|--------------------|---------------|-----------|
| TGP13-S004EFD15LF | 1:0.208:0.083                   | 520/400/10                       | 145                  | 5                  | A             | LTC4267   |
| TGP13-S008EFD15LF | 1: 0.500:0.167                  | 150/400/10                       | 33                   | 1                  | A             | LM5072    |
| TGP13-S012EFD15LF | 1:0.500:0.150:0.275             | 520/760/20/400                   | 160                  | 2                  | B             | TPS23750  |

# HALO

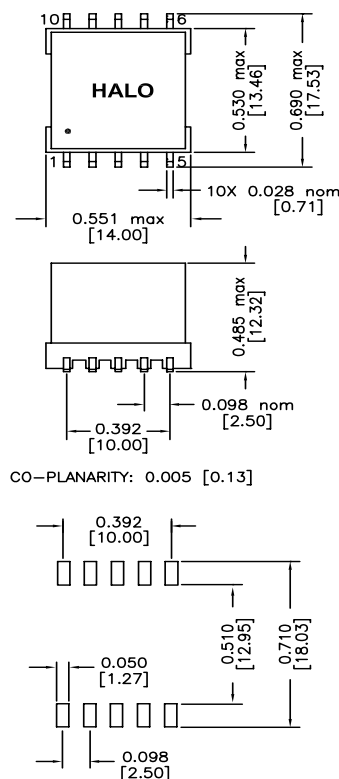
## 13W, 3.3Vout, Power Transformers (EP13) Power Over Ethernet, DC/DC Converter

ELECTRONICS, INC.

HALO Electronics offers a broad line of power transformers designed for fly-back DC/DC converters used in Power over Ethernet (PoE) applications. These industrial temperature range transformers are UL recognized and are fully compliant to IEEE802.3af requirements for isolation and power ratings. This standard series is LEAD-free and RoHS compliant. Please contact your nearest HALO representative for custom designs.



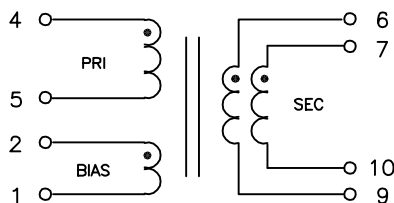
### MECHANICAL DIMENSIONS



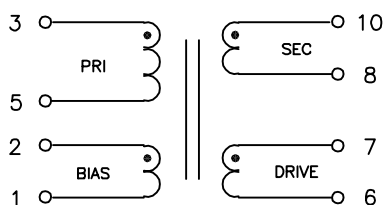
RECOMMENDED SOLDER PAD DIMENSIONS

DIMENSIONS: Inch [mm]  
TOLERANCES: 0.006 inch if not specified

### SCHEMATIC A



### SCHEMATIC B



13W, 3.3Vout, Power Transformers (EP13)  
Power Over Ethernet, DC/DC Converter

Electrical Specifications @ 25 °C  
Isolation Voltage (PRI – SEC): 1,500Vrms  
Operating Temp: -40 to +85 °C



| Part Number      | Turns Ratio<br>PRI:AUX:SEC:DRV | DCR (mΩ max)<br>PRI/AUX/SEC/DRV | PRI OCL<br>(μH ±10%) | PRI LL<br>(μH Max) | IC SCHE. | P/N      |
|------------------|--------------------------------|---------------------------------|----------------------|--------------------|----------|----------|
| TGP13-S003EP13LF | 1:0.208:0.083                  | 500/400/15                      | 145                  | 5                  | A        | LTC4267  |
| TGP13-S007EP13LF | 1: 0.500:0.167                 | 100/400/12                      | 33                   | 1                  | A        | LM5072   |
| TGP13-S011EP13LF | 1:0.500:0.150:0.275            | 450/700/30/400                  | 160                  | 3                  | B        | TPS23750 |

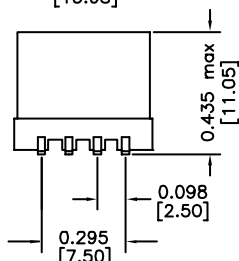
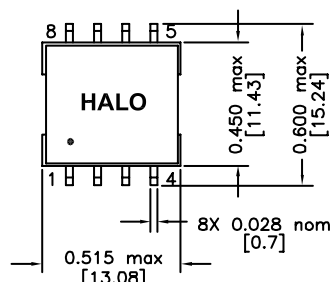
# HALO 7W, 3.3Vout, Power Transformers (EP10)

## Power Over Ethernet, DC/DC Converter

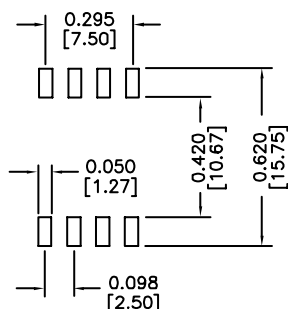
HALO Electronics offers a broad line of power transformers designed for fly-back DC/DC converters used in Power over Ethernet (PoE) applications. These industrial temperature range transformers are UL recognized and are fully compliant to IEEE802.3af requirements for isolation and power ratings. This standard series is LEAD-free and RoHS compliant. Please contact your nearest HALO representative for custom designs.



### MECHANICAL DIMENSIONS



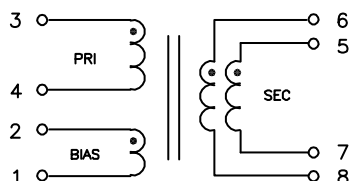
CO-PLANARITY: 0.005 [0.13]



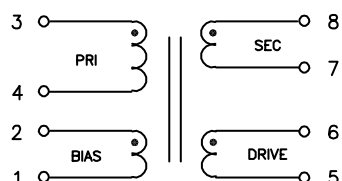
RECOMMENDED SOLDER PAD DIMENSIONS

DIMENSIONS: Inch [mm]  
TOLERANCES: 0.006 inch if not specified

### SCHEMATIC A



### SCHEMATIC B



7W, 3.3Vout, Power Transformers (EP10)  
Power Over Ethernet, DC/DC Converter

Electrical Specifications @ 25 °C

Isolation Voltage (PRI – SEC): 1,500Vrms  
Operating Temp: -40 to +85 °C

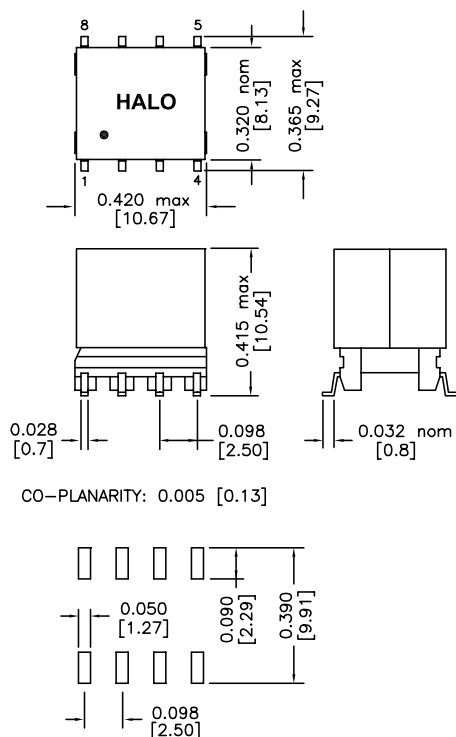


| Part Number     | Turns Ratio<br>PRI:AUX:SEC:DRV | DCR (mΩ max)<br>PRI/AUX/SEC/DRV | PRI OCL<br>(μH ±10%) | PRI LL<br>(μH Max) | IC<br>SCHE. P/N |
|-----------------|--------------------------------|---------------------------------|----------------------|--------------------|-----------------|
| TGP7-S002EP10LF | 1:0.208:0.083                  | 450/400/12                      | 145                  | 4                  | A LTC4267       |
| TGP7-S006EP10LF | 1: 0.500:0.167                 | 100/400/10                      | 33                   | 1                  | A LM5072        |
| TGP7-S010EP10LF | 1:0.500:0.150:0.275            | 450/700/30/400                  | 160                  | 3                  | B TPS23750      |

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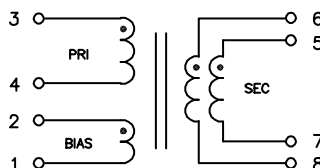
### MECHANICAL DIMENSIONS



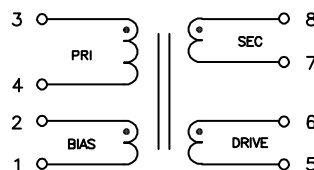
RECOMMENDED SOLDER PAD DIMENSIONS

DIMENSIONS: Inch [mm]  
TOLERANCES: 0.006 inch if not specified

### SCHEMATIC A



### SCHEMATIC B



Electrical Specifications @ 25 °C

Isolation Voltage (PRI – SEC): 1,500Vrms  
Operating Temp: -40 to +85 °C



| Part Number    | Turns Ratio<br>PRI:AUX:SEC:DRV | DCR (mΩ max)<br>PRI/AUX/SEC/DRV | PRI OCL<br>(μH ±10%) | PRI LL<br>(μH Max) SCHE. | IC<br>P/N |
|----------------|--------------------------------|---------------------------------|----------------------|--------------------------|-----------|
| TGP3-S001EP7LF | 1:0.208:0.083                  | 1200/300/20                     | 145                  | 4 A                      | LTC4267   |
| TGP3-S005EP7LF | 1: 0.500:0.167                 | 160/300/15                      | 33                   | 1 A                      | LM5072    |
| TGP3-S009EP7LF | 1:0.500:0.150:0.275            | 1000/550/50/300                 | 160                  | 3 B                      | TPS23750  |