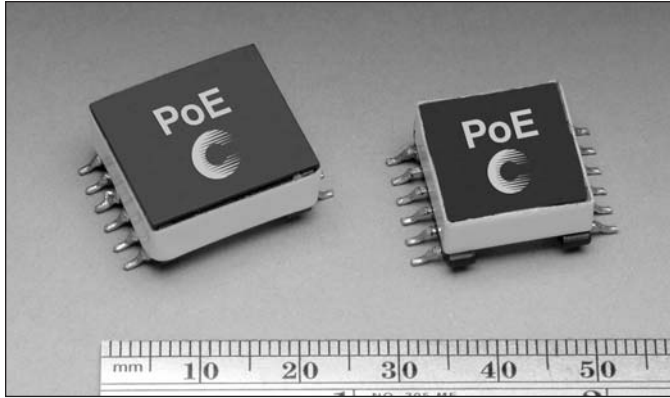


Power-over-Ethernet (PoE)/PD Configurable Transformer



Description

- Versatile design allows multiple output variations
- Flyback topology, 250kHz switching frequency
- Input range from 29.5-60V
- 1500Vac isolation between primary and secondary
- Three power levels: 4, 7 and 13watts
- Low leakage inductance
- 11.0 Volt @ 0.10 amp feedback winding
- Ferrite core material

Applications

- For IEEE 802.3af-compliant Power-over-Ethernet applications
- UPS, VoIP Phone, wireless LAN access point, Bluetooth access point, network camera, building access systems
- Retail point-of-information systems
- Vending/gaming machines

Environmental Data

- Storage temperature range: -40°C to +125°C
- Operating ambient temperature range: -40°C to +85°C (range is application specific)
- Solder reflow temperature: +260°C max. for 10 seconds max.

Packaging

- Packaging Information: 4 and 7 Watts - 200 parts per 13" reel, 13 Watts - 140 parts per 13" diameter reel

| Part Number | Watts | Inductance (µH) | Output | DCR/ PRI (Ω) | DCR/ SEC (Ω) | Leakage Inductance (µH) typ. | Pri Current Pk (A _{dc}) | Turn Ratio | | Schematic | Dimensions |
|---------------|-------|-----------------|--|--------------|-------------------------|------------------------------|-----------------------------------|---|---|-----------|------------|
| | | | | | | | | Schematic 1: Pins pri(1-3):fb(5-6):v1(12-7):v2(11-8):v3(10-9) | Schematic 2: Pins pri(1-3):fb(5-6):v1(12-10):v2(11-9) | | |
| PoE4W3x3.3-R | 4 | 200 | (3)x3.3V@0.45A | 0.500 | 0.07 | 2.75 | 0.65 | 1 : 0.52 : 0.16 : 0.16 : 0.16 ±1% | | 1 | Size 1 |
| PoE4W3x5.0-R | 4 | 200 | (3)x5.0V@0.30A | 0.500 | 0.27 | 2.50 | 0.65 | 1 : 0.52 : 0.26 : 0.26 : 0.26 ±1% | | 1 | Size 1 |
| PoE4W2x12-R | 4 | 200 | (2)x12.0V@0.20A | 0.500 | 0.740 | 1.40 | 0.65 | 1 : 0.52 : 0.60 : 0.60 ±1% | | 2 | Size 1 |
| PoE7W3x3.3-R | 7 | 100 | (3)x3.3V@0.75A | 0.275 | 0.03 | 1.00 | 1.00 | 1 : 0.529 : 0.176 : 0.176 : 0.176 ±1% | | 1 | Size 1 |
| PoE7W3x5.0-R | 7 | 100 | (3)x5.0V@0.50A | 0.275 | 0.095 | 1.00 | 1.00 | 1 : 0.529 : 0.265 : 0.265 : 0.265 ±1% | | 1 | Size 1 |
| PoE7W2x12-R | 7 | 100 | (2)x12.0V@0.30A | 0.275 | 0.250 | 1.00 | 1.00 | 1 : 0.529 : 0.588 : 0.588 ±1% | | 2 | Size 1 |
| PoE13W3x3.3-R | 13 | 100 | (3)x3.3V@1.35A | 0.250 | 0.032 | 1.50 | 1.60 | 1 : 0.529 : 0.176 : 0.176 : 0.176 ±3% | | 1 | Size 2 |
| PoE13W3x5.0-R | 13 | 100 | (3)x5.0V@0.90A | 0.250 | 0.075 | 1.20 | 1.60 | 1 : 0.529 : 0.265 : 0.265 : 0.265 ±3% | | 1 | Size 2 |
| PoE13W2x12-R | 13 | 100 | (2)x12.0V@0.60A | 0.250 | 0.280 | 1.00 | 1.70 | 1 : 0.529 : 0.647 : 0.647 ±3% | | 2 | Size 2 |
| Part Number | Watts | Inductance (µH) | Output | DCR/ PRI (Ω) | DCR/ SEC (Ω) | Leakage Inductance (µH) typ. | Pri Current Pk (A _{dc}) | Turn Ratio | | Schematic | Dimensions |
| | | | | | | | | Schematic 2: Pins pri(1-3):fb(5-6):v1(12-10):v2(11-9) | Schematic 3: Pins pri(1-3):fb(5-6):v1(12-11):v2(10-9):v3(8-7) | | |
| PoE13W3VERS-R | 13 | 100 | V1:7.0V@1.1A, V2:(1)x3.3V@1.1A, V3:1.8V@1.1A | 0.250 | 0.085 0.042 0.025 | 1.00 | 1.70 | 1 : 0.529 : 0.350 : 0.176 : 0.088 ±3% | | 3 | Size 2 |
| PoE13W2VERS-R | 13 | 100 | V1:5.0V@1.6A, V2:3.3V@1.6A | 0.250 | 0.038/ 0.027/na | 1.20 | 1.70 | 1 : 0.529 : 0.265 : 0.176 ±3% | | 2 | Size 2 |

1) Test Parameters: 100kHz, 0.100 V_{rms}, 0.0A_{dc}

2) DCR limits maximum @ 20°C

3) Leakage Inductance 200kHz, 0.01V_{rms}, 0.0A_{dc}

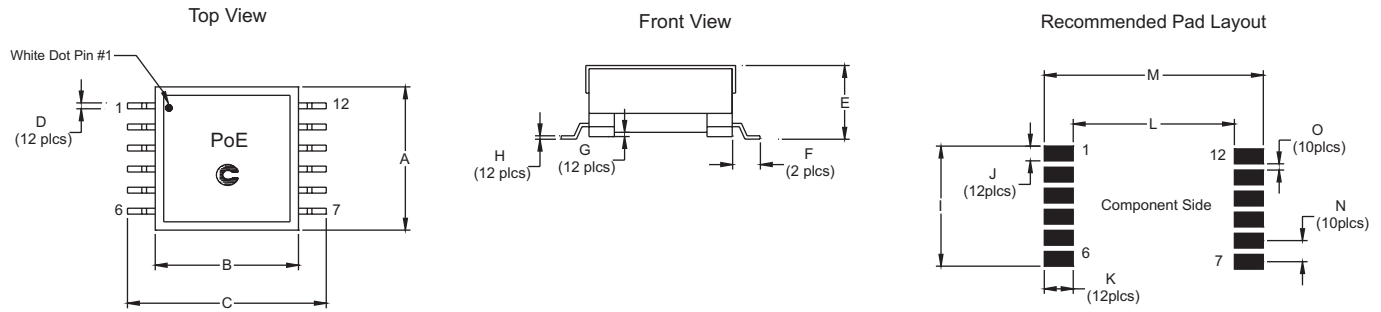
4) Feedback DCR 1.0Ω maximum @20°C

Dimensions (mm)

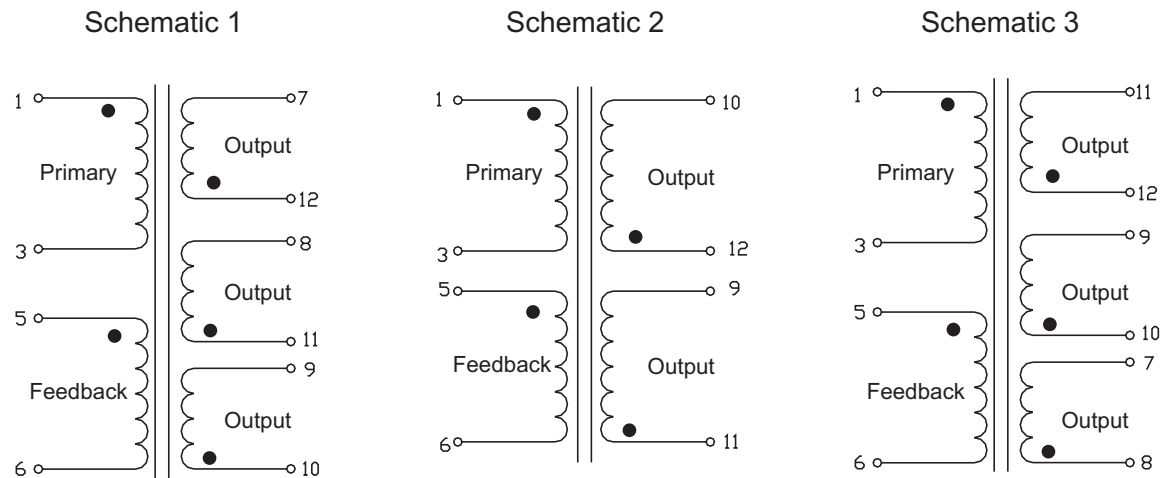
| | A max. | B ref. | C max. | D ref. | E max. | F ref. | G ref. | H ref. | I ref. | J mm | K mm | L ref. | M max. | N | O |
|---------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|------|------|--------|--------|------|------|
| Size 1 | 17.1 | 16.0 | 22.3 | 0.7 | 8.4 | 3.0 | 0.1 | 0.4 | 14.49 | 1.79 | 3.43 | 16.88 | 23.74 | 2.54 | 0.75 |
| Size 2 | 18.0 | 18.0 | 24.6 | 0.7 | 10.0 | 3.3 | 0.1 | 0.4 | 14.25 | 1.75 | 3.43 | 19.14 | 26.0 | 2.5 | 0.75 |

1) Tolerances A - H are $\pm 0.25\text{mm}$ unless specified otherwise.
 2) Tolerances I - O are $\pm 0.10\text{mm}$ unless specified otherwise.

3) All soldering surfaces are coplanar to within $\pm 0.102\text{mm}$.

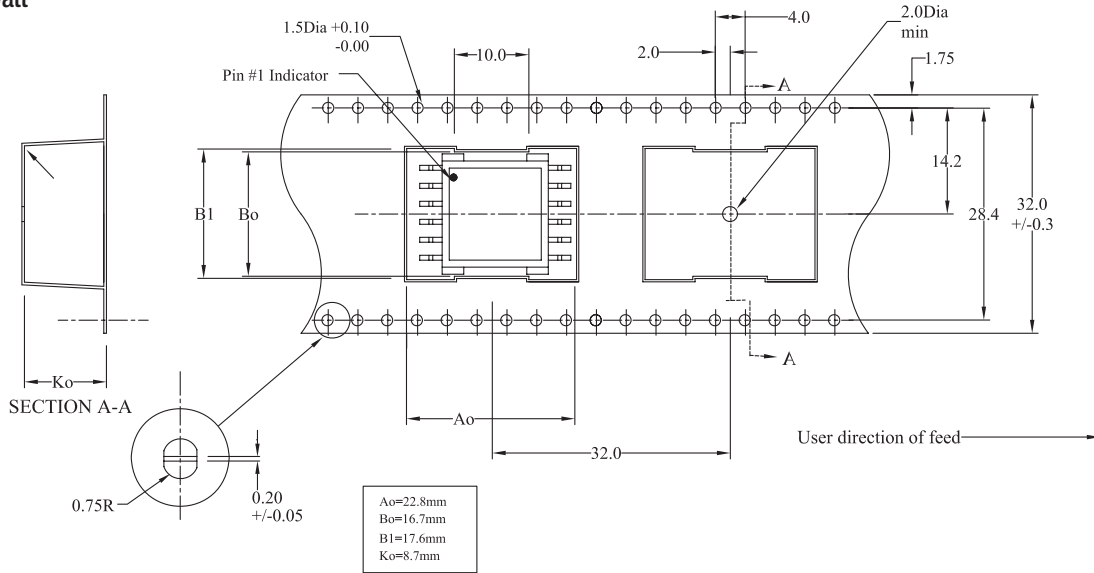


Schematics

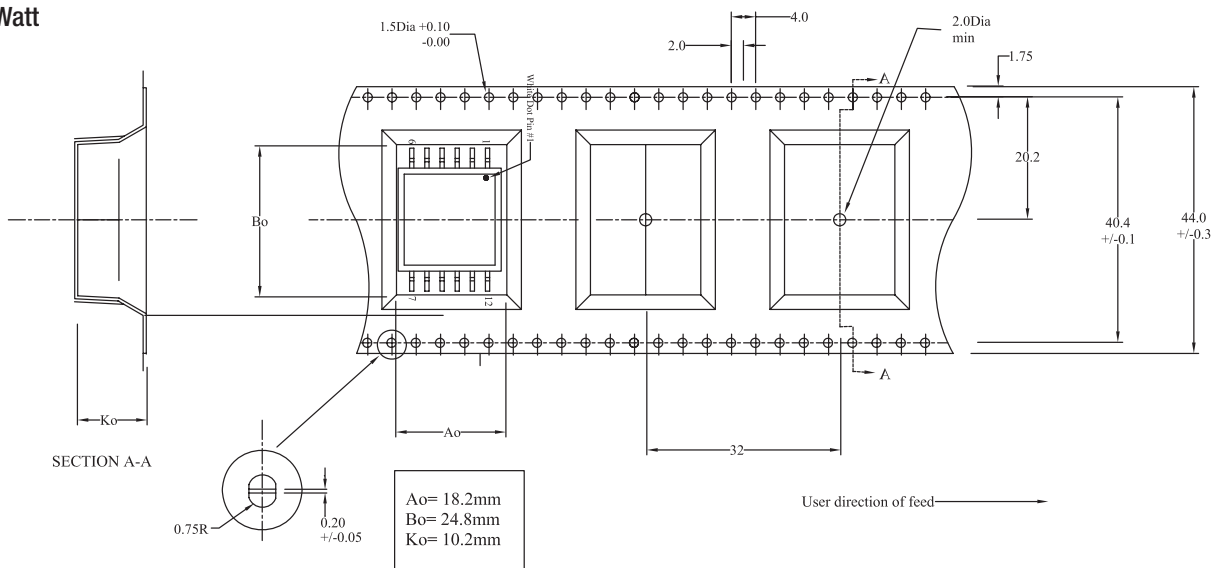


Packaging Information

PoE 4 and 7 Watt



PoE 13 Watt



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- Подбор аналогов;
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- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



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