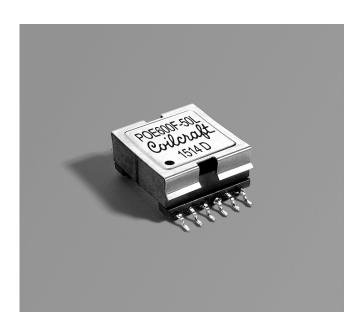


# 60 W PoE Transformers For Active Clamp Forward Topology



- Designed for active clamp forward topology
- Operates at 200 kHz, with 36 72 Volt input
- · Includes a 12-Volt auxiliary winding
- Isolation: 1500 Vrms, one minute primary and aux to secondary; 500 Vrms primary to auxiliary

#### Core material Ferrite

**Terminations** RoHS tin-silver over tin over nickel over phos bronze. Other terminations available at additional cost.

Weight 12.7 g

Ambient temperature -40°C to +125°C

Storage temperature Component: -40°C to +125°C.

Tape and reel packaging: -40°C to +80°C

Resistance to soldering heat Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles

Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity)

Failures in Time (FIT) / Mean Time Between Failures (MTBF)

38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332 Packaging 175 per 13" reel Plastic tape: 44 mm wide, 0.4 mm thick, 32 mm pocket spacing, 11.9 mm pocket depth

PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See Doc787\_PCB\_Washing.pdf.

Part number¹	Inductance <sup>2</sup> ±20% (μΗ)	DCR max <sup>3</sup> (mOhms) pri : sec : aux	Leakage inductance⁴ max (μΗ)	Turns ratio⁵ pri : sec : aux	Output <sup>6</sup>
POE600F-33L_	100	35:2.30:185	0.55	6:1:3.5	3.3 V, 18.18 A
POE600F-50L_	100	35:2.70:185	0.30	4:1:2.3	5.0 V, 12 A
POE600F-12L_	100	35:8.00:156	0.17	2:1:1	12 V, 5.0 A
POE600F-24L_	100	35:30:156	0.14	1:1:0.5	24 V, 2.5 A

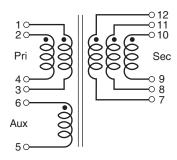
1. When ordering, please specify packaging code:

### POE600F-50LD

Packaging: D = 13" machine-ready reel. EIA-481 embossed plastic tape (175 parts per full reel).

- **B** = Less than full reel. In tape, but not machine ready. To have a leader and trailer added (\$25 charge), use code letter D instead.
- 2. Inductance is for the primary, measured at 200 kHz, 0.1 Vrms, 0 Adc.
- 3. DCR for the primary and the secondary is measured with the windings connected in parallel.
- 4. Leakage inductance is for the primary and is measured with all secondary windings shorted.
- 5. Turns ratio is with the primary windings and the secondary windings connected in parallel.
- 6. Output is with the secondary windings connected in parallel.
- 7. Electrical specifications at 25°C.

Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



Primary windings and secondary windings to be connected in parallel on the PC board.







## **60 W PoE Transformers — POE600F**

