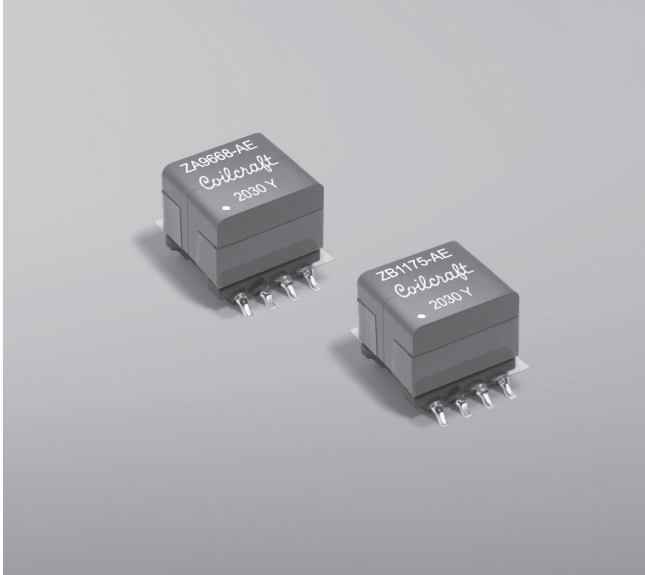


NEW!

Isolated Buck Transformers



- Optimized for STMicroelectronics 38V/5W automotive Iso-Buck converter A6986I and L6986I
- Suitable for automotive isolated IGBT/SiC gate driver, On-board charger for HEV/EV, Electric Traction Systems, and similar applications
- AEC-Q200 Grade 1 (-40°C to +125°C)
- 3300 Vrms, one minute isolation (hipot) from primary to secondary

Core material Ferrite

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

Weight 4.12 g

Ambient temperature -40°C to +125°C

Max Part Temperature +155°C (ambient + temperature rise)

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)

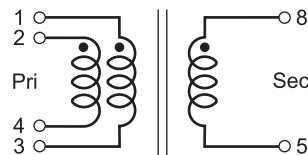
10.06 per billion hours / 9.940E+07 hours, calculated per Telcordia SR-332

PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787_PCB_Washing.pdf](#).

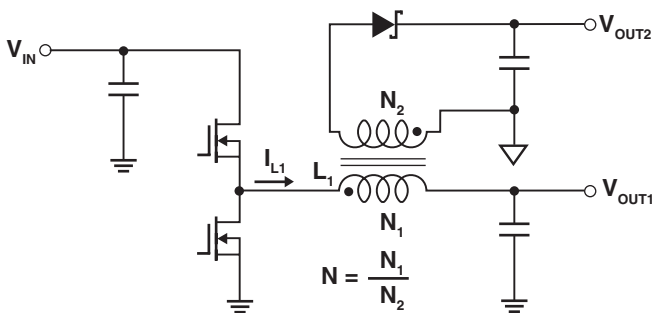
Part number ¹	L at 0 A ² ±10% (µH)	Isat ³ (A)	Leakage inductance max (µH) ⁴	DCR max (Ohms)		Turns ratio pri : sec	Isolation ⁵ (Vrms)	Power (W)	Output
				Pri	Sec				
ZA9668-AED	18	3.5	0.24	0.075	1.49	1 : 5.8	3300	5.8	29 V, 0.2 A
ZB1175-AED	18	2.6	0.18	0.050	0.13	1 : 1.6	3300	1.6	8 V, 0.2 A

- Packaging:** D = 13" machine-ready reel. EIA-481 embossed plastic tape (250 parts per reel). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer (\$25 charge).
 - Inductance is for the primary, measured at 500 kHz, 0.2 Vrms, 0 Adc.
 - DC current that causes the primary inductance drop 30% from its value without current. [Click for temperature derating information.](#)
 - Leakage Inductance is for the primary, measured with secondary windings shorted together.
 - 3300 Vrms, one minute isolation (hipot) from primary to secondary.
 - Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

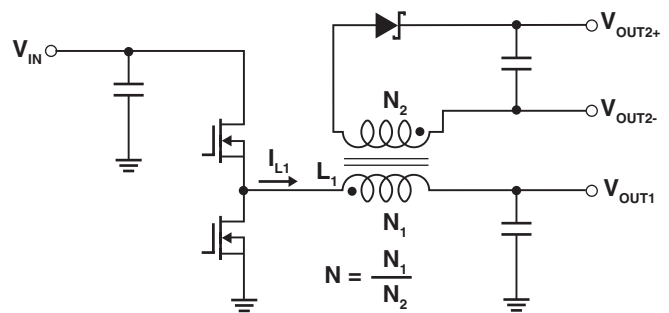
Schematic



Connect pin 1 to 2 and pin 3 to 4 on the PC board



Typical Iso-Buck Converter with single isolated output

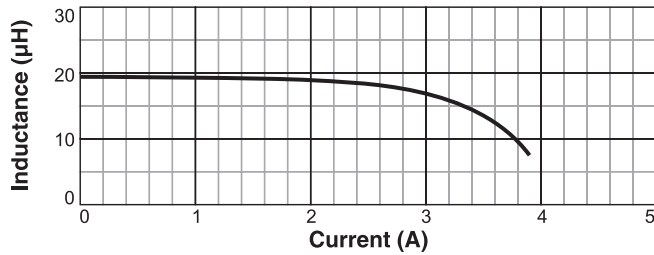


Typical Iso-Buck Converter with dual isolated output

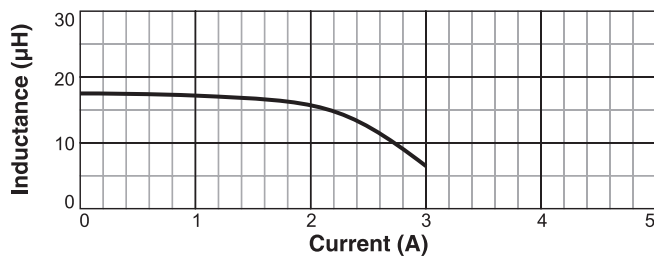


Isolated Buck Transformer – ZA9668-AE & ZB1175-AE

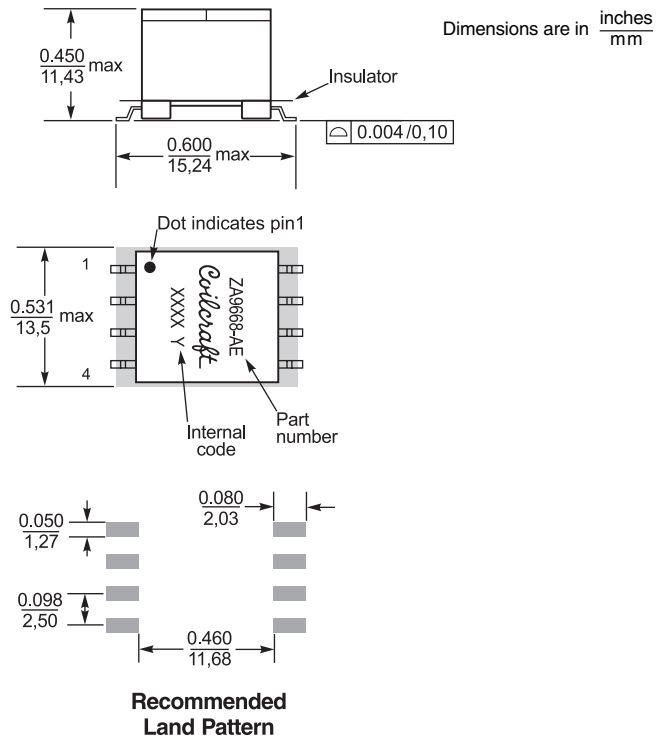
Typical L vs Current – ZA9668-AE



Typical L vs Current – ZB1175-AE



Dimensions



Packaging 250/13" reel Plastic tape: 32 mm wide, 0.5 mm thick, 20 mm pocket spacing, 11.2 mm pocket depth