

NEW!

LLC Half-Bridge Transformers – ZF3205-AE



- Optimized for AHV85312 eval board by Allegro MicroSystems
- Low interwinding capacitance to minimize EMI and achieve high CMTI
- Ideal for automotive OBC and traction Inverters in EV/HEV
- AEC-Q200 qualified

Core material Ferrite

Terminations RoHS compliant tin over nickel over silver glass frit.

Weight 0.53 – 0.54 g

Ambient temperature –40°C to +125°C

Max part temperature +140°C

Storage temperature Component: –40°C to +140°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)

Packaging 400/7" reel; 1200/13" reel Plastic tape: 24 mm wide, 0.4 mm thick, 8 mm pocket spacing, 5.5 mm pocket depth

PCB washing Tested with pure water or alcohol only. For other solvents, see [Doc787_PCB_Washing.pdf](#)

Part number ¹	Turns ratio Pri : Sec	Inductance ² ±25% (µH)		DCR max ³ (Ohms)		Leakage L ⁴ ±20% (µH)	Isolation ⁵ (VDC / Vrms)	Cap ⁶ max (pF)
		Pri	Sec	Pri	Sec			
ZF3205-AEC	1 : 1.7	20	55	0.18	0.30	2	5000 / 3535	0.60

1. When ordering, please specify **packaging** code:

ZF3205-AEC

Packaging: **C** = 7" machine-ready reel. EIA-481 embossed plastic tape (400 parts per full reel). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer (\$25 charge).

D = 13" machine-ready reel. EIA-481 embossed plastic tape. Factory order only, not stocked (1200 parts per full reel).

- Inductance measured at 1 MHz, 0.1 Vrms, 0 ADC on an Agilent 4263B (or equivalent).
 - DCR is measured on a Keithley 580 Micro-ohmmeter (or equivalent).
 - Leakage Inductance LL is measured at 1 MHz, 0.1 Vrms with pins 3 and 4 shorted.
 - 5000 VDC / 3535 Vrms, one minute isolation (hipot) measured between primary and secondary.
 - Interwinding capacitance is measured at 250 kHz, 0.1 Vrms across pins 1 – 4 with pins 2 and 3 open.
 - Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

Designed per IEC 61558-1 to meet the following requirements. Please contact Tech_support@coilcraft.com for questions about suitability for use in other application conditions.

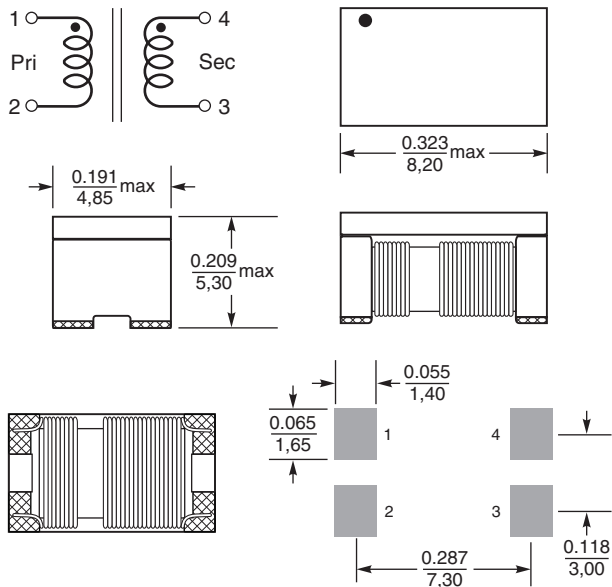
Reinforced insulation example	Basic insulation example
Working voltage 400 V	Working voltage 800 V
Altitude 2500 m	Altitude 2500 m
Overvoltage category II	Overvoltage category II
Pollution degree 2	Pollution degree 2

5.9 mm creepage and clearance between primary and secondary windings with Material Group IIIa.



LLC Half-Bridge Transformer ZF3205-AE

Dimensions



Dimensions are in $\frac{\text{inches}}{\text{mm}}$

Recommended Land Pattern