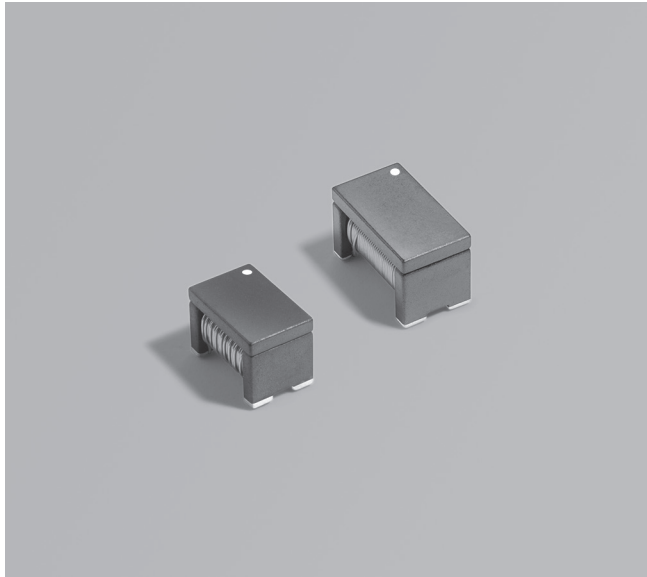


NEW!

SMT Gate Drive Transformers ZG365x



- Designed for lower DCR and higher volt-time capability compared to the original gate drive transformer DA23xx
- Up to 3500 VDC / 2474 Vrms, one minute isolation (hipot) between primary and secondary windings
- AEC-Q200 qualified

Core material Ferrite

Terminations RoHS compliant tin-silver over tin over nickel over phos bronze.

Weight 0.40 – 0.60 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)

PCB washing Tested with pure water or alcohol only. For other solvents, see Doc787_PCB_Washing.pdf

Part number ¹	Turns ratio	Pri L ² min (µH)		Leakage L ³ max (µH)	DCR max (Ohms)		Isolation ⁴ (VDC / Vrms)	Volt-time ⁵ product (V-µsec)	SRF typ (MHz)	Capacitance ⁶ Pri to Sec max (pF)
		Pri	Sec		Pri	Sec				
ZG3651-AE_	1 : 1	110	110	1.5	0.525	0.525	2800 / 1979	31.3	4.2	15.7
ZG3652-AE_	1 : 0.67	240	110	4.0	0.875	0.500	2800 / 1979	48.6	2.9	18.4
ZG3653-AE_	1 : 1	110	110	1.5	0.525	0.525	3500 / 2474	31.3	4.2	15.7
ZG3654-AE_	1 : 0.67	240	110	4.0	0.875	0.500	3500 / 2474	48.6	2.9	18.4

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

ZG3654-AEC

Packaging: **C** = 7" machine-ready reel. EIA-481 embossed plastic tape (350 (ZG3651, ZG3652) parts per full reel, 400 (ZG3653, ZG3654) 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. 1500 (ZG3651, ZG3652) parts per full reel, 1200 (ZG3653, ZG3654) parts per full reel). Factory order only, not stocked.

- Inductance is measured at 100 kHz, 0.1 Vrms, 0 ADC on an Agilent 4263B (or equivalent).
- Leakage Inductance is for the primary, measured at 100 kHz, 0.1 Vrms on Agilent 4263B (or equivalent) with secondary windings shorted together with pins 3,4 shorted.
- One minute isolation (hipot) between primary and secondary.
- Volt-time is for the primary, between pin 1 and pin 2.
- Interwinding capacitance is measured at 250 KHz, 0.1 Vrms on Voltech across pins 1 and 4.
- 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.

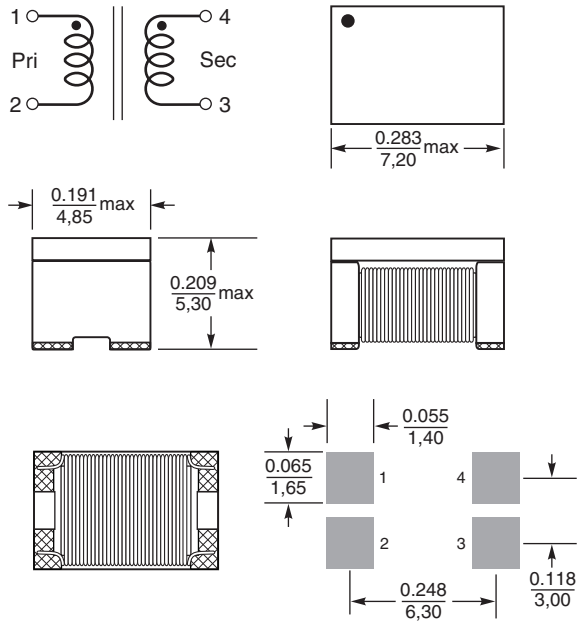
Reinforced insulation example	Basic insulation example
Working voltage 130 V (ZG3651-AE & ZG3652-AE)	Working voltage 450 V (ZG3651-AE & ZG3652-AE)
Working voltage 275 V (ZG3653-AE & ZG3654-AE)	Working voltage 550 V (ZG3653-AE & ZG3654-AE)
Altitude 2000 m	Altitude 2000 m
Overvoltage category II	Overvoltage category II
Pollution degree 2	Pollution degree 2

4.9 mm (ZG3651-AE & ZG3652-AE), 5.9 mm (ZG3653-AE & ZG3654-AE) creepage and clearance between primary and secondary windings.



SMT Gate Drive Transformers - ZG365x

ZG3651, ZG3652

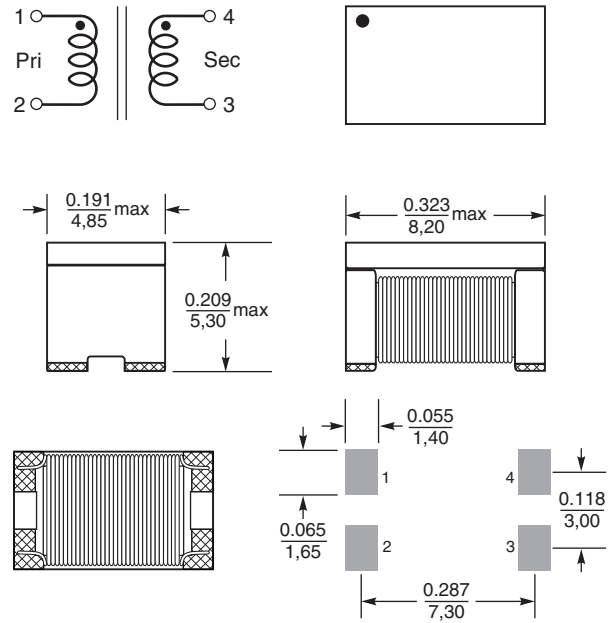


Dimensions are in $\frac{\text{inches}}{\text{mm}}$

Recommended Land Pattern

Packaging 350/7" reel; 1500/13" reel Plastic tape: 16 mm wide, 0.40 mm thick, 8 mm pocket spacing, 5.5 mm pocket depth

ZG3653, ZG3654



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

Recommended Land Pattern

Packaging 400/7" reel; 1200/13" reel Plastic tape: 24 mm wide, 0.40 mm thick, 8 mm pocket spacing, 5.5 mm pocket depth.