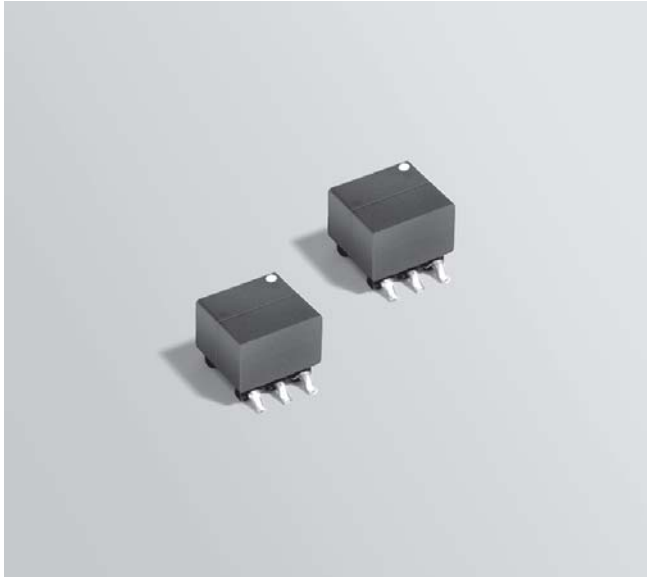




# SMT Gate Drive Transformers



- Designed for high switching speed, transformer coupled MOSFET and IGBT gate drive circuits.
- Operating frequency: 50 kHz – 2 MHz
- Primary to secondary isolation: 1500 Vdc. For DA2317-AL and DA2320-AL, isolation between secondaries is 500 Vdc.

**Core material** Ferrite

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

**Weight** 535 – 580 mg

**Ambient temperature** –40°C to +85°C

**Storage temperature** Component: –40°C to +85°C.

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** 250/7" reel; 1000/13" reel Plastic tape: 16 mm wide, 0.36 mm thick, 20 mm pocket spacing, 5.54 mm pocket depth

**PCB washing** Only pure water or alcohol recommended

| Part number <sup>1</sup> | Turns ratio pri : sec | Primary inductance <sup>2</sup> min (µH) | Leakage inductance <sup>3</sup> max (µH) | Primary DCR max (Ohms) | Secondary DCR max (Ohms) | Volt-time product (V-µsec) | SRF min <sup>4</sup> (MHz) | Capacitance pri to sec max (pF) |
|--------------------------|-----------------------|--|--|------------------------|--------------------------|----------------------------|----------------------------|---------------------------------|
| DA2319-AL_               | 1 : 1                 | 296.0                                    | 1.5                                      | 0.795                  | 0.655                    | 25.8                       | 2.23                       | 14.0                            |
| DA2318-AL_               | 1.5 : 1               | 680.0                                    | 4.0                                      | 1.65                   | 0.860                    | 40.8                       | 1.00                       | 14.0                            |
| DA2320-AL_               | 1 : 1 : 1             | 264.0                                    | 0.30                                     | 1.50                   | 1.50 (2-5; 3-4)          | 24.5                       | 3.60                       | 95.0                            |
| DA2317-AL_               | 2 : 1 : 1             | 330.0                                    | 0.60                                     | 1.40                   | 0.650 (2-5); 0.790 (3-4) | 24.5                       | 4.00                       | 18.0                            |

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

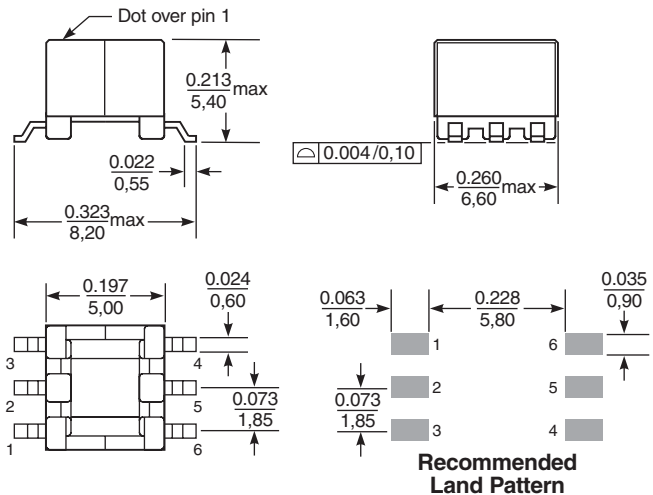
**DA2320-ALC**

**Packaging:** **C** = 7" machine-ready reel. EIA-481 embossed plastic tape (250 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 C instead.

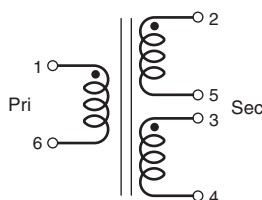
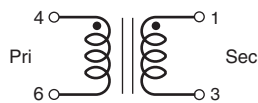
**D** = 13" machine-ready reel. EIA-481 embossed plastic tape. Factory order only, not stocked (1000 parts per full reel).

- Inductance measured at 100 kHz, 0.1 Vrms, 0 Adc
  - Leakage inductance measured at 100 kHz, 0.1 Vrms with secondary pins shorted.
  - SRF measured with coils connected in series using an Agilent/HP 4192 or equivalent.
  - Operating temperature range –40°C to +125°C.
  - Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



DA2318-AL, DA2319-AL

DA2317-AL, DA2320-AL



Dimensions are in inches / mm



Specifications subject to change without notice. Please check our website for latest information.

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