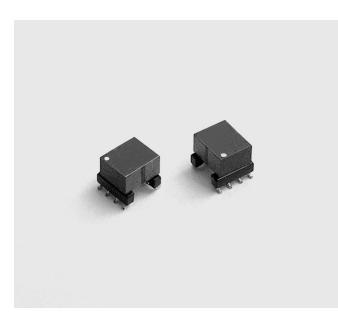


## **SMT Gate Drive Transformer**



- Designed for transformer coupled MOSFET and IGBT gate drive circuits; operating frequency: 50 kHz to 2 MHz.
- 2250 Vdc, one minute primary to secondary isolation
- Requires only 56 mm<sup>2</sup> of board space.
- Specified by National Semiconductor on AN-1521 for their POE+PHYTEREV-I/-E evaluation boards.
- Specified on the Microsemi PD70211EVB51F-12 evaluation board

## Core material Ferrite

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

Weight 700 mg

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 175/7"reel; 750/13" reel Plastic tape: 24 mm wide, 0.4 mm thick, 12 mm pocket spacing, 7.0 mm pocket depth PCB washing Tested with pure water or alcohol only. For other solvents, see Doc787\_PCB\_Washing.pdf

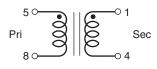
Part number <sup>1</sup>	Turns ratio	Primary inductance <sup>2</sup> min (μH)	Leakage inductance <sup>3</sup> max (µH)	Primary DCR max (Ohms)	Secondary DCR max (Ohms)	Volt-time product⁴ (V-µsec)	SRF min⁵ (MHz)	Capacitance pri to sec max (pF)
FA2659-AL	1:1	296.0	1.5	0.795	0.655	34.2	1.39	21.9

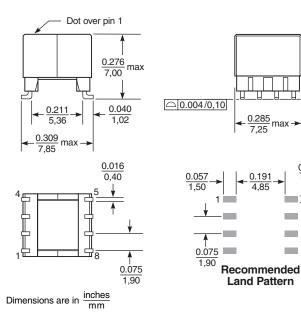
1. When ordering, please specify packaging code:

FA2659-ALC

- Packaging: C = 7" 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 C instead.
  - D = 13" machine-ready reel. EIA-481 embossed plastic tape. Factory order only, not stocked (750 parts per full reel).
- 2. Inductance measured at 100 kHz, 0.1 Vrms, 0 Adc
- Leakage inductance measured at 100 kHz, 0.1 Vrms with secondary pins shorted.
- 4. Based on Bsat of the core at 25°C and number of turns of the primary.
- SRF measured with coils connected in series using an Agilent/HP 4192 or equivalent.
- 6. Electrical specifications at 25°C.

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







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0.028

0.70

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