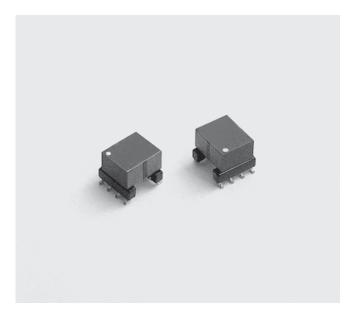


SMT Gate Drive Transformer



- · Designed for transformer coupled MOSFET and IGBT gate drive circuits; operating frequency: 50 kHz to 2 MHz.
- 2250 Vdc primary to secondary isolation
- Requires only 56 mm² of board space.
- Specified by National Semiconductor on AN-1521 for their POE+PHYTEREV-I/-E evaluation boards.

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.

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; 750/3" reel Plastic tape: 16 mm wide,

0.36 mm thick, 12 mm pocket spacing, 7.24 mm pocket depth PCB washing Only pure water or alcohol recommended

Part number¹	Turns ratio	Primary inductance ² min (µH)	Leakage inductance ³ max (µH)	Primary DCR max (Ohms)	Secondary DCR max (Ohms)	Volt-time product ⁴ (V-µsec)	SRF min ⁵ (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

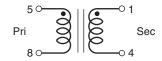
1. When ordering, please specify packaging code:

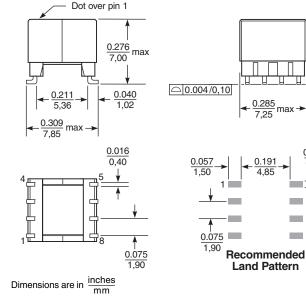
FA2659-AL C

Packaging: C = 7" machine-ready reel. EIA-481 embossed plastic tape (150 parts per full reel).

- $\mathbf{B} = \text{Less than full reel.}$ 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
- 3. Leakage inductance measured at 100 kHz, 0.1 Vrms with secondary
- 4. Based on Bsat of the core at 25°C and number of turns of the primary.
- 5. SRF measured with coils connected in series using an Agilent/HP 4192
- 6. Electrical specifications at 25°C.

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







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

Document 561 Revised 09/01/09