Triad Transformer Catalog

SWITCHMODE/HIGH FREQUENCY - GATE DRIVE TRANSFORMERS

Description:
TRIAD gate drive transformers from Triad Magnetics are used universally in all high frequency switching topologies to isolate the control circuitry from the line-connected switches. The windings are interleaved for the lowest possible practical leakage inductance. Turn ratios of 1:1 and 1:1.5 optimize coupling and enhance performance. Available with single or dual secondaries, these transformers constructed of UL rated 130°C materials are easily standardized at operating frequencies up to 200 kHz.

GATE DRIVE TRANSFORMERS

Type No.	Max. DCR 1-2	Max. DCR Gate	Min. ET Product	Max. Leakage	Min. Inductance	Turns Ratio	Dimensions								Wt. Oz.
							H	W	L	A	B	C	D	E	
GDE25-1	.350 Ohms	.350 Ohms	540 VµSec	2.5 µH	.680 mH	1:1	1.20	1.04	1.10	.150	.700	.600	.450	.850	.045
GDE25-2	.350 Ohms	.650 Ohms	540 VµSec	2.5 µH	.680 mH	1:1:1	1.20	1.04	1.10	.150	.700	.600	.450	.850	.045
GDE25-3	.875 Ohms	.350 Ohms	840 VµSec	3.5 µH	1.50 mH	1.5:1	1.20	1.04	1.10	.150	.700	.600	.450	.850	.045
GDE25-4	.875 Ohms	.650 Ohms	840 VµSec	3.5 µH	1.50 mH	1.5:1:1	1.20	1.04	1.10	.150	.700	.600	.450	.850	.045
GDE25-5	.350 Ohms	.875 Ohms	540 VµSec	3.5 µH	.680 mH	1:1	1.20	1.04	1.10	.150	.700	.600	.450	.850	.045
GDE25-6	.350 Ohms	1.75 Ohms	540 VµSec	3.5 µH	.680 mH	1:1.5:1.5	1.20	1.04	1.10	.150	.700	.600	.450	.850	.045

Technical Notes:

1. Drive to gate winding hi-pot tested at 3,750 VRMS
2. Derate ET product by 32% for 50 kHz, 50% for 100 kHz and 50% for unidirectional operation.
3. Operation at rated current per winding renders approximately 40°C temperature rise.

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