

## SWITCHMODE/HIGH FREQUENCY GATE DRIVE TRANSFORMERS

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

## Gate Drive Transformers

| TYPE    | MAX.      | MAX.      | MAX.       | MAX.    | MIN.       | TURNS     | DIMENSIONS |      |     |      |     |     |      |      | WТ    |
|---------|-----------|-----------|------------|---------|------------|-----------|------------|------|-----|------|-----|-----|------|------|-------|
| NO.     | DCR 1-2   | DCR GATE  | ET PRODUCT | LEAKAGE | INDUCTANCE | RATIO     | Н          | W    | D   | А    | В   | С   | D    | Е    | Lbs.  |
| GDE25-1 | .350 Ohms | .350 Ohms | 540 VuSec  | 2.5 uH  | .680 mH    | 1:1       |            |      |     |      |     |     |      |      |       |
| GDE25-2 | .350 Ohms | .650 Ohms | 540 VuSec  | 2.5 uH  | .680 mH    | 1:1:1     |            |      |     |      |     |     |      |      |       |
| GDE25-3 | .875 Ohms | .350 Ohms | 840 VuSec  | 3.5 uH  | 1.5 mH     | 1.5:1     | 1.2        | 1.04 | 1.1 | 0.15 | 0.7 | 0.6 | 0.45 | 0.85 | 0.045 |
| GDE25-4 | .875 Ohms | .650 Ohms | 840 VuSec  | 3.5 uH  | 1.5 mH     | 1.5:1:1   |            |      |     |      |     |     |      |      |       |
| GDE25-5 | .350 Ohms | .875 Ohms | 540 VuSec  | 3.5 uH  | .680 mH    | 1:1.5     |            |      |     |      |     |     |      |      |       |
| GDE25-6 | .350 Ohms | 1.75 Ohms | 540 VuSec  | 3.5 uH  | .680 mH    | 1:1.5:1.5 |            |      |     |      |     |     |      |      |       |

A GDE25-KIT is available which includes one of each of the above listed components.

999-8000-048

Page 1.



## TECHNICAL NOTES:

- 1. Drive to gate winding hi-pot tested @ 3,750 VRMS
- Derate ET product by 32% for 50 kHz, 50% for 100 kHz & 50% for unidirectional operation.
- 3. Operation at rated current per winding renders approximately40 degrees celsius temperture rise.
- 4. "." Refers to polarity

В L MAX Π П 2 Г 1 W MAX С H MAX 6 3 5 4 ۷ Т I Π U D լու Е ŧ . \_ 3 GATE 1 -- 3 1 - 4 DRIVE DRIVE GATE . 5 2 6 2 -GATE - 6

Page 2.

80048 Rev. D