

Switchmode/High Frequency Gate Drive Transformers

GDE25-1

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 Windings are interleaved for the lowest possible leakage inductance. Turn ratios optimize coupling and enhance performance. Available with single or dual secondaries, these transformers are constructed of UL rated 130° materials and are easily standardized at operating frequencies of 200 kHz and beyond.

Electrical Specifications (@25C):

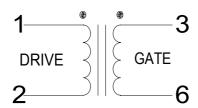
Ma	ax	Max	Min.	Max.	Min.	Turns		
DCR	1-2	DCR Gate	ET Product	Leakage	Inductance	Ratio		
.350	0 Ω	.350 Ω	540 VµSec	2.5 µH	.680 mH	1:1		

Weight: .045 oz.

Technical Notes:

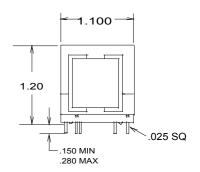
- 1. Drive to gate winding hi-pot tested at 3,750 VRMS.
- 2. Derate ET product by 32% for 50 kHz, 50% for 100 kHz and for unidirectional operation.
- 3. Operation at rated current per winding renders approximately 40° temperature rise.

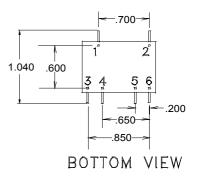
Schematic:

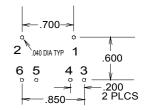


RoHS Compliance: As of manufacturing date February 2005, all standard products meet the requirements of 2002/95/EC, known as the RoHS initiative.





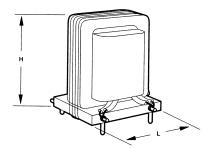




MOUNTING HOLE PATTERN TOP VIEW

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 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 200 kHz and beyond.

:: Gate Drive Transformers

	Туре	Max.	Max.	Min.	Max.	Min.		Dimensions							Wt.	
Section	No.	DCR 1-2	DCR Gate	ET Product	Leakage	Inductance	Turns Ratio	H	W	L	A	В	C	D	E	Oz.
	GDE25-1	.350 Ohms	.350 Ohms	540 VμSec	2.5 μΗ	.680 mH	1:1					.700	.600	.450	.850	.045
	GDE25-2	.350 Ohms	.650 Ohms	540 VμSec	2.5 μΗ	.680 mH	1:1:1									
	GDE25-3	.875 Ohms	.350 Ohms	840 VμSec	3.5 µH	1.50 mH	1:5:1	1.00	10/	1.10	.150					
A	GDE25-4	.875 Ohms	.650 Ohms	840 VμSec	3.5 µH	1.50 mH	1.5:1:1	1.20	1.04							
	GDE25-5	.350 Ohms	.875 Ohms	540 VμSec	3.5 µH	.680 mH	1:1.5									
	GDE25-6	.350 Ohms	1.75 Ohms	540 VμSec	3.5 µH	.680 mH	1:1.5:1.5									

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

:: Outline Dimensions

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.
- Operation at rated current per winding renders approximately 40°C temperature rise.

