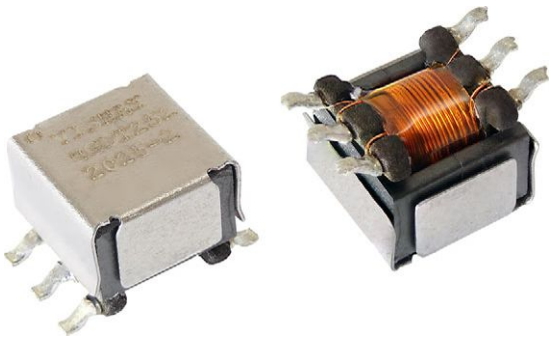
Micro Gate Drive Transformers



FEATURES

RoHS* Available

- Deliver MOSFET / IGBT gate power and timing signals simultaneously
- Directly drive high side MOSFETs / IGBTs on busses up to 200 V
- Excellent rise time, overshoot, and peak current characteristics
- For lead (Pb)-free parts, please add "-LF" to the end of the part number
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

Note

* This datasheet provides information about parts that are RoHS-compliant and / or parts that are non RoHS-compliant. For example, parts with lead (Pb) terminations are not RoHS-compliant. Please see the information / tables in this datasheet for details

ABSOLUTE MAXIMUM RATINGS

PARAMETER	CONDITIONS	LIMITS	UNITS
Dielectric withstand voltage	Drive to gate, 1 min	1500	V_{DC}
	Gate to gate, 1 min	500	V_{DC}
Winding current	Any winding	100	mA_{RMS}
Total power dissipation (1)		400	mW
Operating temperature	Continuous	-55 to +130	°C
Storage temperature	Continuous	-55 to +155	°C
Frequency		125 to 750	kHz
Size (L x W x H)		8.9 x 6.6 x 5.6	mm
Terminals	Surface-mount		

Note

(1) Derate at 5 mW/°C above 25 °C

STANDARD ELECTRICAL SPECIFICATIONS

PART NUMBER (1)	USEFUL FREQ. RANGE (kHz)	TRANSFER RATIO (± 1 %) (2)	DRIVE EXCITATION MAX. (V x µs)	MAGNETIZING INDUCTANCE MIN. (µH) (3)(4)	LEAKAGE INDUCTANCE MAX. (nH) (5)	DC RESISTANCE (3)		INTERWINDING CAPACITANCE		SCHEMATIC
						DRIVE MAX. (Ω)	GATES MAX. (Ω)	DRIVE TO GATE MAX. (pF)	GATE TO GATE MAX. (pF)	
MTBAUGDT125050	125 to 500	1 : 0.5 : 0.5	63	330	500	2.0	0.7	60	30	A
MTBAUGDT125075	125 to 500	1 : 0.75 : 0.75	66	360	500	2.0	2.0	60	30	A
MTBAUGDT125100	125 to 500	1 : 1 : 1	63	330	500	2.0	2.0	160	160	A
MTBAUGDT250101	250 to 750	1 : 1	25.8	350	1000	1.0	0.65	75	n/a	B
MTBAUGDT250102	250 to 750	1 : 1 : 1	22.4	264	300	1.5	1.5	95	95	A
MTBAUGDT250251	250 to 750	2.5 : 1	30.6	473	1500	1.5	0.3	25	n/a	B
MTBAUGDT250252	250 to 750	2.5 : 1 : 1	23.8	300	900	1.8	0.3	27	27	A

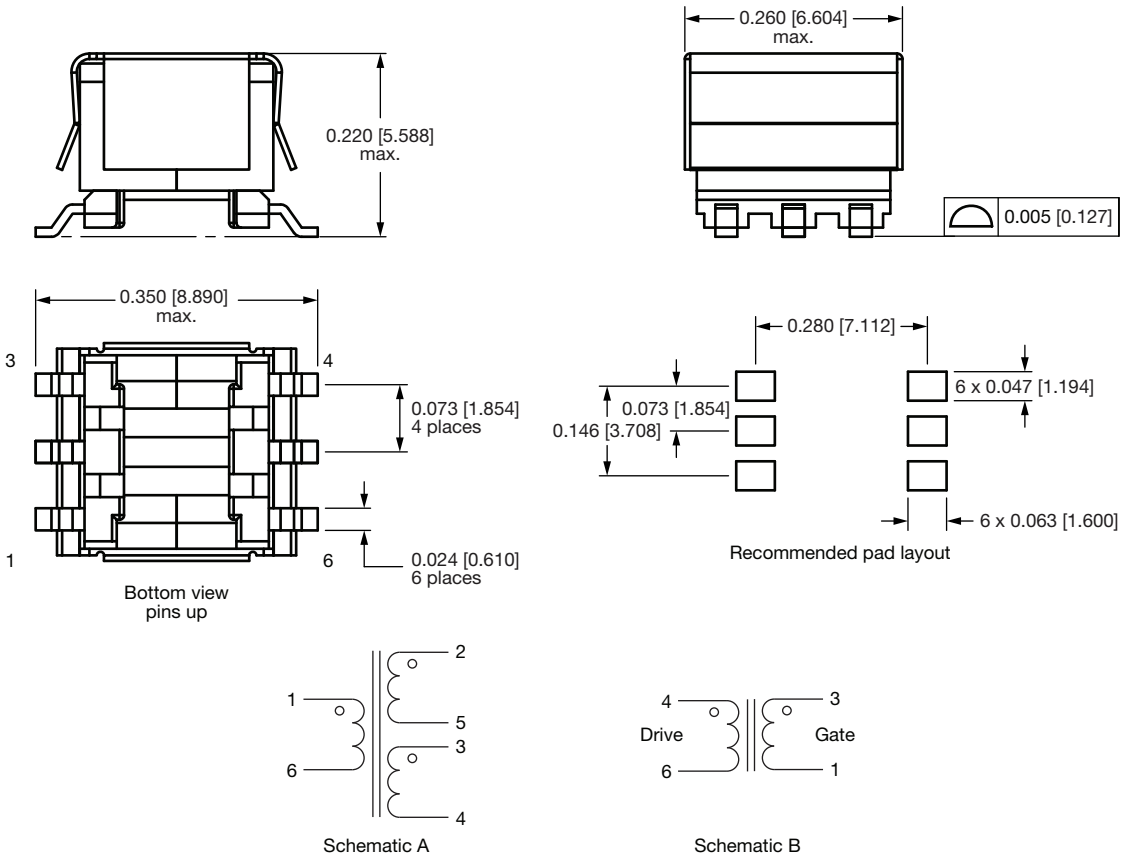
Notes

(1) For lead (Pb)-free parts, please add "-LF" to the end of the part number
(2) Drive: gate or drive : gate : gate
(3) T_A = 25 °C
(4) Small signal measurement across the drive winding with both gates open
(5) Small signal measurement a across the drive winding with both gates shorted
(6) Derate at 5 mW/°C above 25 °C

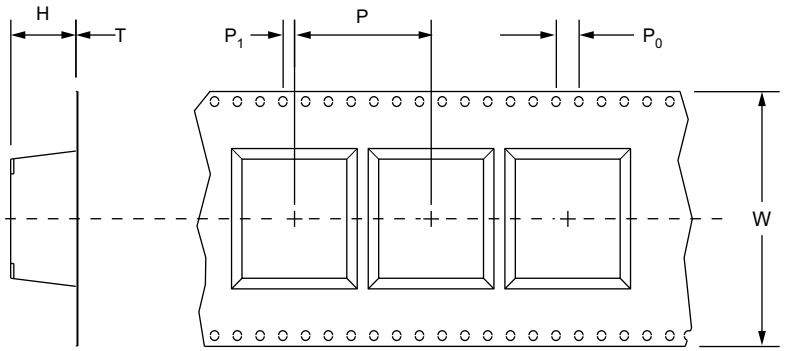
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DIMENSIONS in inches [millimeters]



TAPE AND REEL SPECIFICATIONS



PARAMETER	SYMBOL	DIMENSIONS inches [mm]
Tape width	W	0.630 [16.0]
Component pitch	P	0.315 [8.0]
Indexing pitch	P_0	0.157 [4.0]
Index-to-component offset	P_1	0.079 [2.0]
Pocket height	H	0.213 [5.4]
Tape thickness	T	0.012 [0.3]
Reel overall diameter	OD	13.0 [330]
Reel axle diameter	AD	0.5 [13]
Reel capacity	Qty	1000/reel

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