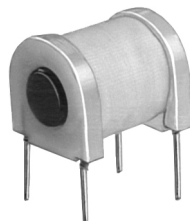


## Through Hole Transformers Trigger, SCR Isolation



### ELECTRICAL SPECIFICATIONS

**Primary Inductance Values:** From 200  $\mu\text{H}$  to 5000  $\mu\text{H}$

**Turns Ratio:** 1:1, 2:1 and 5:1

**Temperature Range:** - 55 °C to + 105 °C

**Dielectric Test at 60 Hz:** 1600  $V_{\text{RMS}}$  (Windings to core)

**AC Line Voltage at 60 Hz:** 240  $V_{\text{RMS}}$  maximum in test circuits shown

### FEATURES

- Designed for low-cost trigger source isolation in SCR power control circuits
- Small physical size and low profile provide packaging advantages
- Designed to transfer high amplitude or long duration pulses without saturation
- Industrial and commercial applications include motor speed controls, lighting controls and heater controls
- Interchangeable. Designed for circuit board mounting using same mounting dimensions as 11Z and PT-20 models
- Compliant to RoHS directive 2002/95/EC



**RoHS**  
COMPLIANT

### MATERIAL SPECIFICATIONS

**Bobbin:** Glass-filled nylon

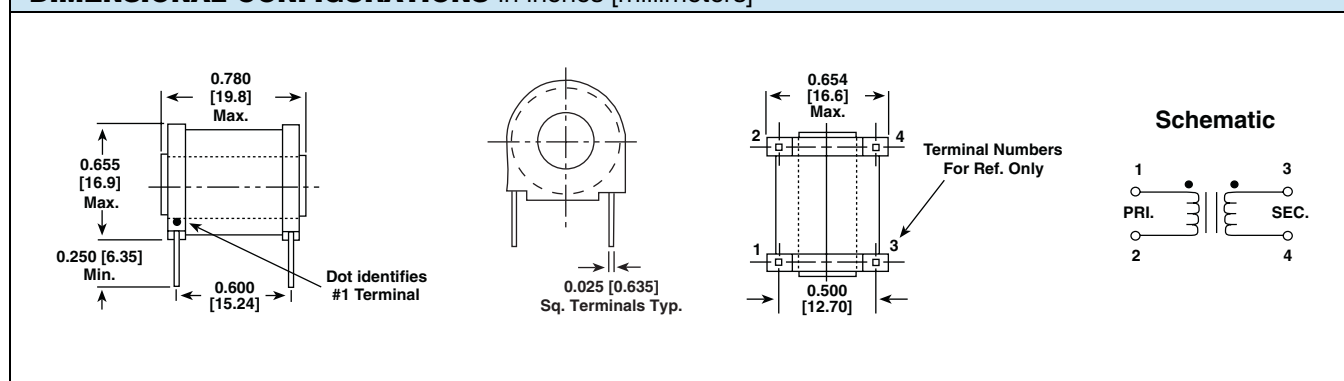
**Terminals:** 0.025" [0.635] square tinned copper

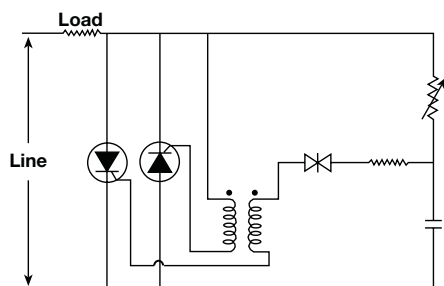
**Material Rating:** + 105 °C class A

### STANDARD ELECTRICAL SPECIFICATIONS

| MODEL     | TURNS RATIO    | PRIMARY IND. MIN. ( $\mu\text{H}$ ) | LEAKAGE IND. MAX. ( $\mu\text{H}$ ) | INTERWINDING CAPACITY MAX. (pF) | PRIMARY DCR MAX. ( $\Omega$ ) | SECONDARY DCR MAX. ( $\Omega$ ) | UNIPOLAR ET ( $V\text{-}\mu\text{s}$ ) |
|-----------|----------------|-------------------------------------|-------------------------------------|---------------------------------|-------------------------------|---------------------------------|--|
| PT-50-101 | 1:1 $\pm$ 10 % | 200                                 | 3                                   | 3                               | 1.5                           | 1.5                             | 570                                    |
| PT-50-102 | 1:1 $\pm$ 10 % | 500                                 | 6                                   | 6                               | 4.5                           | 4.5                             | 912                                    |
| PT-50-103 | 1:1 $\pm$ 10 % | 1000                                | 12                                  | 12                              | 8.0                           | 8.0                             | 1283                                   |
| PT-50-104 | 1:1 $\pm$ 10 % | 2000                                | 13                                  | 13                              | 12.0                          | 12.0                            | 1853                                   |
| PT-50-105 | 1:1 $\pm$ 10 % | 5000                                | 15                                  | 15                              | 18.4                          | 18.4                            | 2850                                   |
| PT-50-106 | 2:1 $\pm$ 10 % | 500                                 | 6                                   | 6                               | 4.0                           | 2.0                             | 912                                    |
| PT-50-107 | 2:1 $\pm$ 10 % | 1000                                | 10                                  | 10                              | 10.0                          | 2.0                             | 1288                                   |
| PT-50-108 | 2:1 $\pm$ 10 % | 2000                                | 12                                  | 12                              | 10.0                          | 5.0                             | 1881                                   |
| PT-50-109 | 2:1 $\pm$ 10 % | 5000                                | 15                                  | 15                              | 18.0                          | 10.0                            | 2565                                   |
| PT-50-110 | 5:1 $\pm$ 10 % | 5000                                | 1500                                | 1500                            | 19.0                          | 3.0                             | 2850                                   |

### DIMENSIONAL CONFIGURATIONS in inches [millimeters]



**CIRCUIT DIAGRAM**

Transformer Coupled Breakdown Diode Triggering Circuit

**PART MARKING**

- Vishay Dale
- Model
- Dash number

**ORDERING INFORMATION**

PT-50

MODEL

101

DASH NUMBER

EB

PACKAGE CODE

e2

JEDEC LEAD (Pb)-FREE  
STANDARD**GLOBAL PART NUMBER**

|   |   |   |   |   |
|---|---|---|---|---|
| P | T | 0 | 5 | 0 |
|---|---|---|---|---|

MODEL

|   |   |
|---|---|
| E | B |
|---|---|

PACKAGE CODE

|   |   |   |
|---|---|---|
| 1 | 0 | 1 |
|---|---|---|

DASH NUMBER



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