

Pulse transformers for THT mounting



**Description**

- High insulation rating (>3.2 kVAC) between the primary and the secondary windings
- High insulation rating up to 500V between the secondary windings
- Small coupling capacitances between primary and secondary windings limit transient feedback from the power supply side to the control electronics
- The defined partial discharge voltage guarantees an effectively unlimited serviceable life

**Standards**

- VDE 110b

**Applications**

- Galvanic separation of drive- and power-circuit
- Mainly used in ignition circuits with Thyristors, Triacs, power transistors and IGBT's
- DC/DC converters
- Line coupling transformers in high speed data transmission

**Weblinks**

[pdf-datasheet](#), [html-datasheet](#), [General Product Information](#), [Approvals](#), [CE declaration of conformity](#), [RoHS](#), [CHINA-RoHS](#), [e-Shop](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#), [Detailed request for product](#)

**Technical Data**

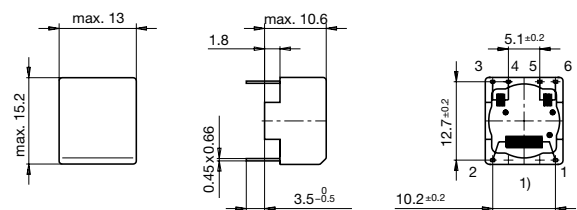
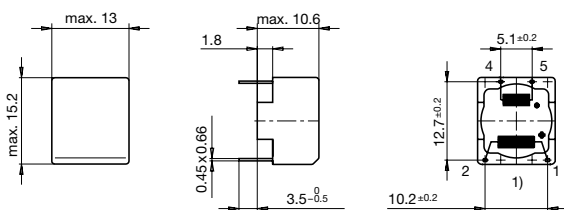
Rated voltage	up to 600 VAC
Voltage Time Integral	150 - 400 Vμs
Pulse Rise Time	0.05 - 1.5 μs
Turns Ratio	1:1, 2:1, 1:1:1
Terminal technic	THT
Weight	6 - 11 g
Material: Housing	UL 94V-0
Sealing Compound	UL 94V-0

Climatic Category	25/100/21 acc. to IEC 60068-1
Allowable Operation Temp.	-25 °C to 100 °C

**Dimension**

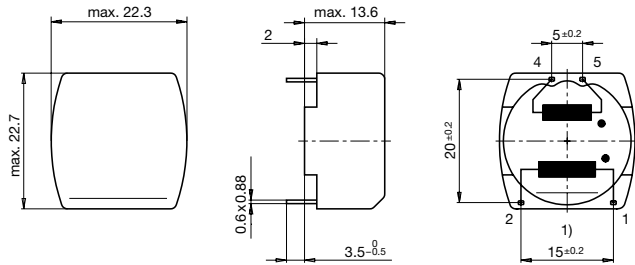
Case 35-3

Case 35-4

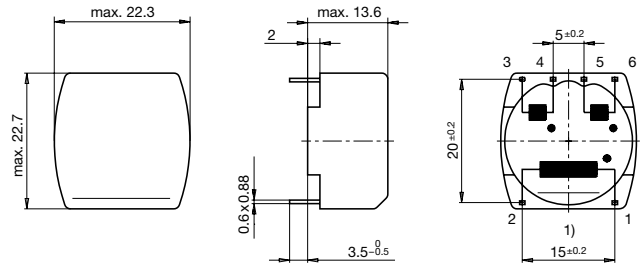


1) Prim.

Case 39-3

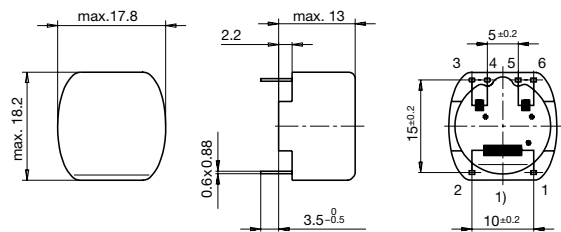
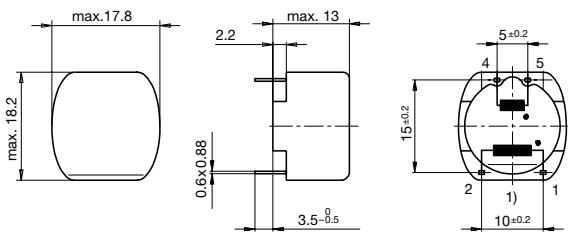


Case 39-4



1) Prim.  
Case 49-4

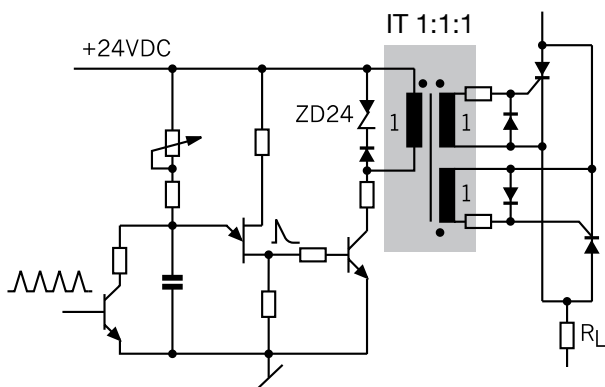
Case 49-3



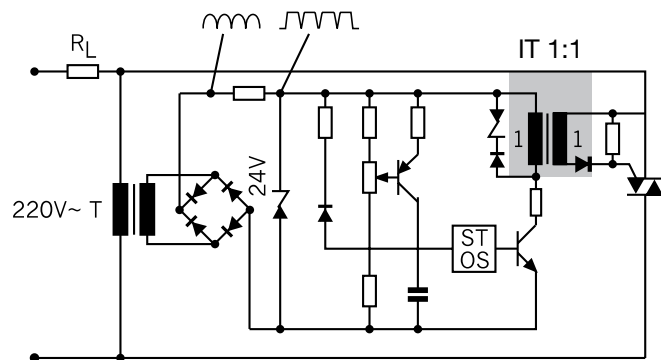
1) Prim.

1) Prim.

Diagrams



Firing of antiparallel Thyristors (SCR's) by means of unijunction and transistor amplifiers



Triac phase angle control

Variants

Turns Ratio	$T_r$ [ $\mu$ s]	$I_{ign}$ [A]	$U_{isol}$ [kV]	$U_s \times T_w$ [ $\mu$ s]	$L_s$ [mH]	$R_p$ [ $\Omega$ ]	$R_s$ [ $\Omega$ ]	$C_c$ [pF]	Weight [g]	Packing unit [pcs.]	Housing	Order Number
1:1	0.05	0.1	3.2	200	2.8	1.5	1	43/80	8 g	480	35-3	ITRA-0235-D103
1:1	0.9	0.1	3.5	200	2.8	1	1	20	8 g	480	35-3	ITNA-0235-D103
1:1	0.1	0.5	3.2	400	2.2	0.4	0.4	100	11 g	140	39-3	ITRA-0239-D502
1:1	1	0.17	3.5	400	2.2	0.4	0.4	20	11 g	140	39-3	ITNA-0239-D202
1:1	0.05	0.1	3.2	300	3.5	0.7	0.7	90	9 g	45	49-3	ITRA-0249-D104
1:1	1	0.1	3.5	300	3.5	0.7	0.7	20	9 g	45	49-3	ITNA-0249-D104
1:1:1	0.05	0.1	3.2	150	1.1	1	0.5	40	8 g	480	35-4	ITRF-0235-D101
1:1:1	0.5	0.5	3.2	350	1.6	0.4	0.4	90	10 g	140	39-4	ITRF-0239-D502
1:1:1	1.5	0.17	3.5	350	1.6	0.4	0.4	20	10 g	140	39-4	ITNF-0239-D202
1:1:1	1	0.1	3.5	250	1.4	0.5	0.5	20	9 g	45	49-4	ITNF-0249-D101
2:1	0.5	0.5	3.2	350	1.8	0.8	0.4	90	9 g	140	39-3	ITRB-0239-D502
2:1	0.05	0.1	3.2	250	1.4	1	0.5	70	9 g	45	49-3	ITRB-0249-D101
2:1	1	0.1	3.5	250	1.6	1	0.5	20	6 g	45	49-3	ITNB-0249-D101

Availability for all products can be searched real-time: <http://www.schurter.com/en/Stock-Check/Stock-Check-SCHURTER>