

Pulse transformers for THT mounting



Approvals and Compliances

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

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](#), [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 Type	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

Approvals and Compliances

Detailed information on product approvals, code requirements, usage instructions and detailed test conditions can be looked up in [Details about Approvals](#)




Application standards

Application standards where the product can be used

Organization	Design	Standard	Description
	Designed for applications acc.	IEC/UL 60950	IEC 60950-1 includes the basic requirements for the safety of information technology equipment.

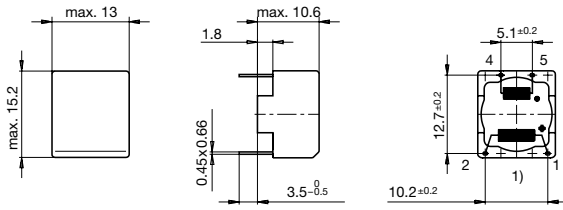
Compliances

The product complies with following Guide Lines

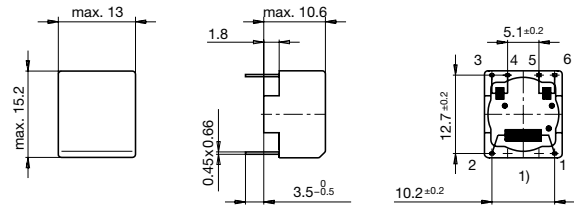
Identification	Details	Initiator	Description
	RoHS	SCHURTER AG	EU Directive RoHS 2011/65/EU
	China RoHS	SCHURTER AG	The law SJ / T 11363-2006 (China RoHS) has been in force since 1 March 2007. It is similar to the EU directive RoHS.
	REACH	SCHURTER AG	On 1 June 2007, Regulation (EC) No 1907/2006 on the Registration, Evaluation, Authorization and Restriction of Chemicals 1 (abbreviated as "REACH") entered into force.

Dimension [mm]

Case 35-3

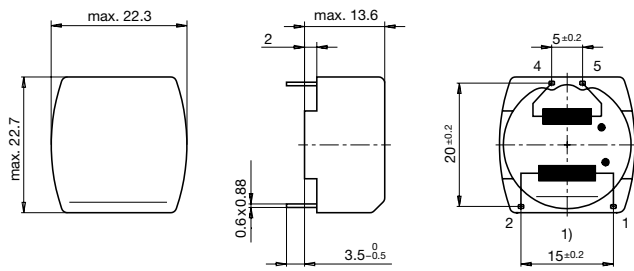


Case 35-4

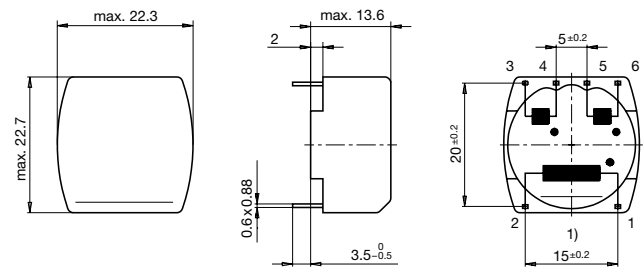


1) Prim.
 Case 39-4

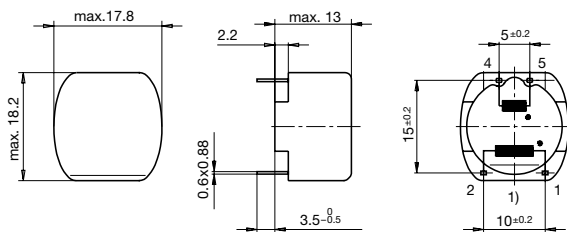
Case 39-3



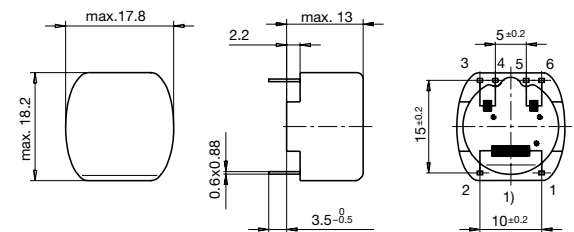
1) Prim.
 Case 49-4



Case 49-3

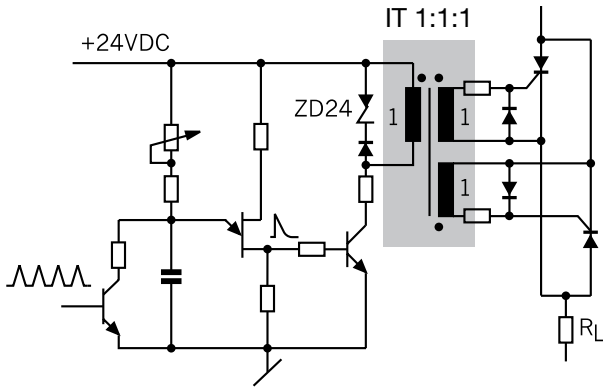


1) Prim.

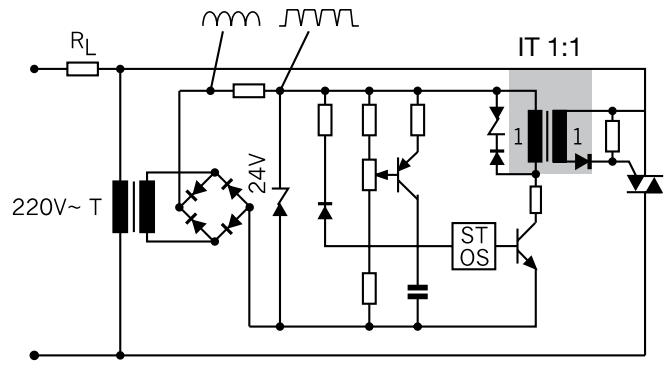


1) Prim.

Diagrams



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



Triac phase angle control

All Variants

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

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