Pulse transformers for THT mounting



ITNB



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 effecively unlimited serviceable live

Technical Data

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

See below: Approvals and Compliances

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 data sheet, html datasheet, General Product Information, Approvals, Distributor-Stock-Check, Detailed request for product

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

SCHURTER products are designed for use in industrial environments. They have approvals from independent testing bodies according to national and international standards. Products with specific characteristics and requirements such as required in the automotive sector according to IATF 16949, medical technology according to ISO 13485 or in the aerospace industry can be offered exclusively with customer-specific, individual agreements by SCHURTER.

Application standards

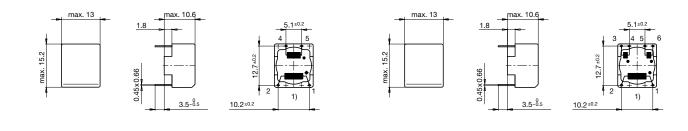
Application standards where the product can be used

Organization	Design	Standard	Description				
I <u>EC</u>	Designed for applications acc.	IEC/UL 62368-1	Audio/video, information and communication technology equipment - Part 1: Safety requirements				
Compliances							
The product comp	plies with following Guide Lines						
Identification Details		Initiator	Description				
RoHS	RoHS	SCHURTER AG	Directive RoHS 2011/65/EU, Amendment (EU) 2015/863				
©	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	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.				



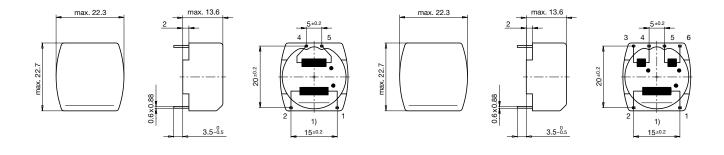
Dimension [mm] Case 35-3

Case 35-4



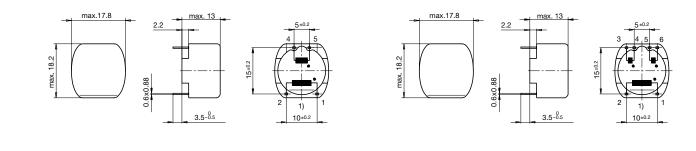
1) Prim. Case 39-4

Case 39-3



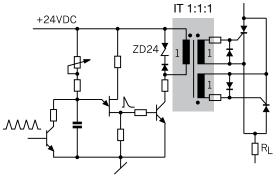
Case 49-3

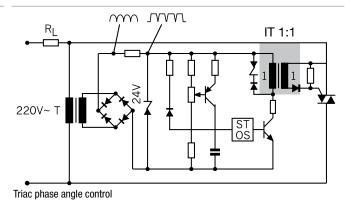
1) Prim. Case 49-4



1) Prim.

Diagrams





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

All Variants

Turns Ratio	T _r [µs]	I _{ign} [A]	U _{isol} [kV]	U _s x T _w [Vµs]	L _s [mH]	R_P [Ω]	R_S [Ω]	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:https://www.schurter.com/en/Stock-Check/Stock-Check-SCHURTER

The specifications, descriptions and illustrations indicated in this document are based on current information. All content is subject to modifications and amendments. Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability and test each product selected for their own applications.