

Data sheet: Safety isolating transformers type PTLG

Description: safety isolating transformer according to VDE 0551/EN 60 742

Test voltage PRI - SEC 5000 V, 50 Hz
SEC - SEC 250 V, 50 Hz

Short-circuit protection: PTLG 1,5 to 3,3 Inherently short-circuit proof
PTLG 4,5 to 22 non-inherently short-circuit proof

Construction: open design, potted in insulation housing

Protection class: prepared for protection class II

Protection index: connections IP 00
housing IP 65

Max ambient temperature: + 40 °C

Insulation class of the
insulation system.....: E

Input voltage.....: 230 V

Frequency: 50 - 60 Hz

Output voltage.....: according to chart

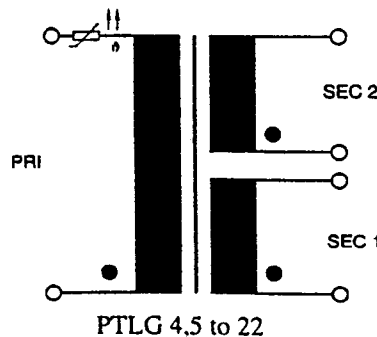
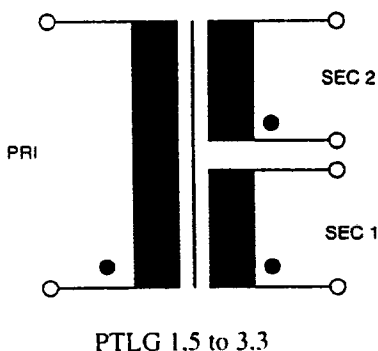
Connections.....: soldering pins 0,8 mm Ø, for printed circuit board mounting

Mounting: additional method of mounting with self tapping screws(except PTLG 1,5 to 3,3)

Extras: Phillips self tapping screws (type LS), 2,9 x 9,5mm DIN 7981
LS10 package 10 pieces
LS100 package 100 pieces
LS1000 package 1000 pieces

Packing.....: separately packed in cartons

Schematic plan :



Description :

The PT type resin moulded safety isolating transformer was developed for printed circuit board use, with the following special features :

Short-circuit protection

The transformer has a built in protection device, which in the case of a short circuit or overload, allows the transformer to function normally, after disconnection from the mains, removal of the overload or short circuit and cooling down has occurred.

Small voltage drop (regulation)

The method chosen to achieve short-circuit protection enables the regulation to be kept to a minimum and makes the transformer ideal for rectification and electronic circuits.

Room-saving dimensions

The transformer can be secured with self tapping screws 2,9 x 9,5 mm DIN 7981 (as extras available). This can be an advantage when the transformer is soldered, via soldering bath, to a printed circuit board, because no extra space, which is precious, is needed to secure the transformer to the PCB and pollution of the soldering bath is averted.

The dual output can be operated in series or parallel.

(PTLG 1,5 ; 2,3 and 3,3 with output voltages exceeding 2 x 12V are not designed for series connection)

(PTLG 4,5 to 22 with output voltages exceeding 2 x 18V are not designed for series connection)

Note :

* vacuum epoxy resin moulded

* selfextinguishing epoxy resin UL 94 V-0 listed

Output power 1,5 VA Core-type EI 30/10,5

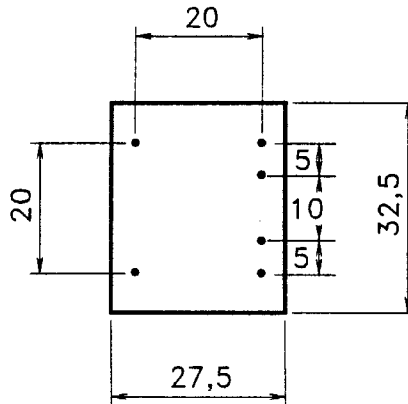
Height 22,6 mm

Weight 75 g

Ground area 32,5 mm x 27,5 mm

Type	SEC rated output-voltage V	current A
PTLG1,5-2x6	2x6	2x0,125
PTLG1,5-2x8	2x8	2x0,093
PTLG1,5-2x9	2x9	2x0,083
PTLG1,5-2x12	2x12	2x0,062
PTLG1,5-2x15	2x15	2x0,050
PTLG1,5-2x18	2x18	2x0,041
PTLG1,5-2x24	2x24	2x0,031

No load output voltage x Faktor = typ. 1,6
 Regulation typ. 38 %
 No load (active) power typ. 1,0 W
 Efficiency typ. 50 %



Output power 2,3 VA Core-type EI 38/7,6

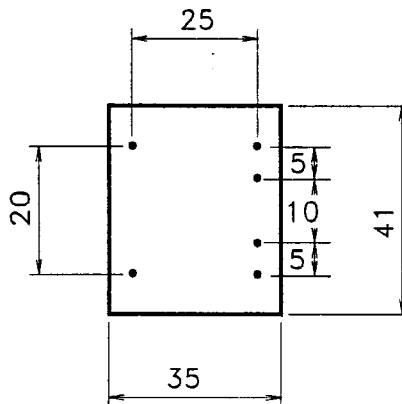
Height 22,1 mm

Weight 99,5 g

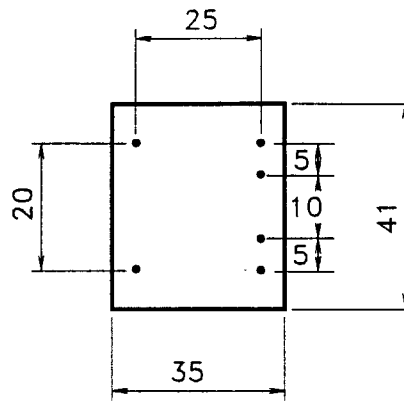
Ground area 41 mm x 35 mm

Type	SEC rated output-voltage V	current A
PTLG2,3-2x6	2x6	2x0,19
PTLG2,3-2x8	2x8	2x0,14
PTLG2,3-2x9	2x9	2x0,127
PTLG2,3-2x12	2x12	2x0,096
PTLG2,3-2x15	2x15	2x0,076
PTLG2,3-2x18	2x18	2x0,063
PTLG2,3-2x24	2x24	2x0,048

No load output voltage x Faktor = typ. 1,7
 Regulation typ. 42 %
 No load (active) power typ. 1,2 W
 Efficiency typ. 50 %



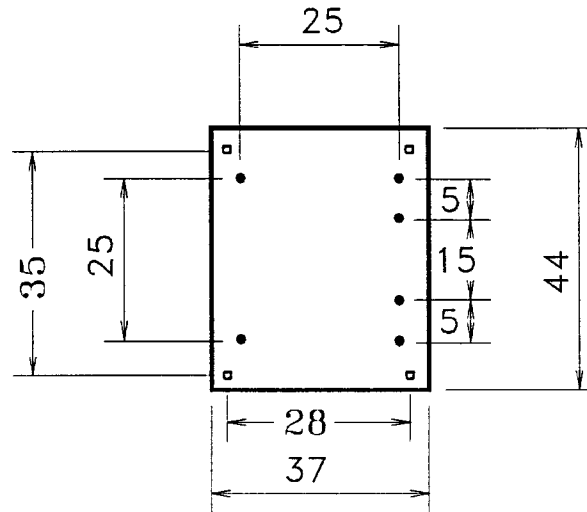
Output power 3,3 VA Core-type EI 38/13,5
 Height 28,5 mm Weight 150 g
 Ground area 41 mm x 35 mm



Type	SEC rated output-	
	voltage	current
	V	A
PTLG2.3-2x6	2x6	2x0,275
PTLG2.3-2x8	2x8	2x0,206
PTLG2.3-2x9	2x9	2x0,183
PTLG2.3-2x12	2x12	2x0,137
PTLG2.3-2x15	2x15	2x0,110
PTLG2.3-2x18	2x18	2x0,091
PTLG2.3-2x24	2x24	2x0,0687

No load output voltage x Faktor = typ. 1,6
 Regulation typ. 38 %
 No load (active) power typ. 0,9 W
 Efficiency typ. 55 %

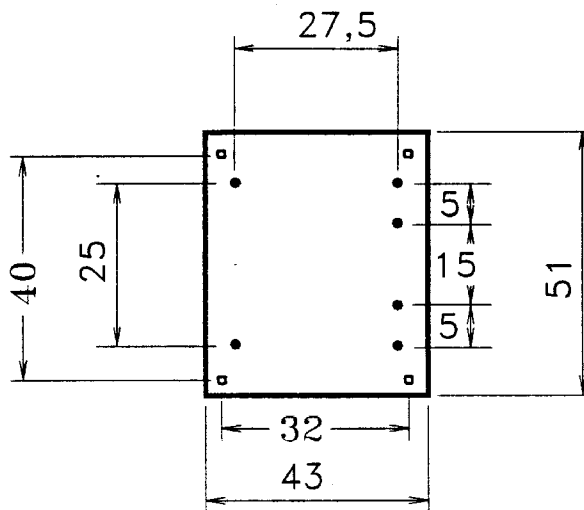
Output power 4,5 VA Core-type EI 42/14,8
 Height 33 mm Weight 190 g
 Ground area 44 mm x 37 mm



Type	SEC rated output-	
	voltage	current
	V	A
PTLG4.5-2x6	2x6	2x0,375
PTLG4.5-2x8	2x8	2x0,281
PTLG4.5-2x9	2x9	2x0,250
PTLG4.5-2x12	2x12	2x0,187
PTLG4.5-2x15	2x15	2x0,150
PTLG4.5-2x18	2x18	2x0,125
PTLG4.5-2x24	2x24	2x0,093

No load output voltage x Faktor = typ. 1,32
 Regulation typ. 24 %
 No load (active) power typ. 1,2 W
 Efficiency typ. 65 %

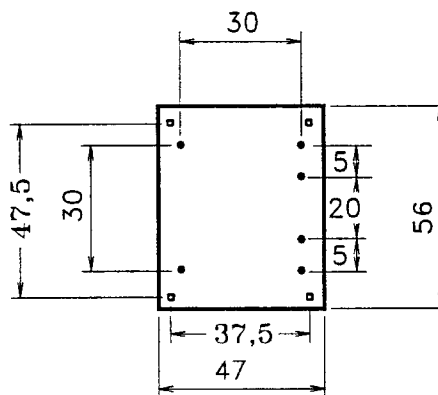
Output power 7,5 VA Core-type EI 48/16,8
 Height 36 mm Weight 280 g
 Ground area 51 mm x 43 mm



Type	SEC rated output-voltage V	current A
PTLG7,5-2x6	2x6	2x0,625
PTLG7,5-2x8	2x8	2x0,468
PTLG7,5-2x9	2x9	2x0,416
PTLG7,5-2x12	2x12	2x0,312
PTLG7,5-2x15	2x15	2x0,25
PTLG7,5-2x18	2x18	2x0,208
PTLG7,5-2x24	2x24	2x0,156

No load output voltage x Faktor = typ. 1,21
 Regulation typ. 17 %
 No load (active) power typ. 1,5 W
 Efficiency typ. 65 %

Output power 13 VA Core-type EI 54/18,8
 Height 40 mm Weight 420 g
 Ground area 56 mm x 47 mm



Type	SEC rated output-voltage V	current A
PTLG13-2x6	2x6	2x1,083
PTLG13-2x8	2x8	2x0,812
PTLG13-2x9	2x9	2x0,722
PTLG13-2x12	2x12	2x0,541
PTLG13-2x15	2x15	2x0,433
PTLG13-2x18	2x18	2x0,361
PTLG13-2x24	2x24	2x0,271

No load output voltage x Faktor = typ. 1,23
 Regulation typ. 18,7 %
 No load (active) power typ. 1,3 W
 Efficiency typ. 73 %

Output power 22 VA Core-type EI 60/21
 Height 46 mm Weight 565 g
 Ground area 64 mm x 54 mm

Type	SEC rated output-voltage V	current A
PTLG22-2x6	2x6	2x1,83
PTLG22-2x8	2x8	2x1,375
PTLG22-2x9	2x9	2x1,222
PTLG22-2x12	2x12	2x0,916
PTLG22-2x15	2x15	2x0,733
PTLG22-2x18	2x18	2x0,611
PTLG13-2x24	2x24	2x0,458

No load output voltage x Faktor = typ. 1,19
 Regulation typ. 16 %
 No load (active) power typ. 2,5 W
 Efficiency typ. 77 %

