

PT SERIES

Pulse transformers designed for Semikron

Features

- Voltage-time area ($\int Vdt$): from 250 μ Vs to 2000 μ Vs.
- Pulse rise time (t_r): from 0,8 μ s to 4 μ s.
- Working voltage (V_w): From 500Vac to 3200Vac.
- Isolation voltage according to IEC60664-1.
- Ambient temperature: -40°C to +85°C.
- Storage temperature: from -40°C to +120°C.
- Plastic case: UL 94V-0.
- Potting resin: UL94V-0.



Electrical specifications

| Types | Np : Ns | $\int Vdt$ (μ Vs) | R _p Typ (Ω) | R _s Typ (Ω) | L _p (mH) at 10kHz \pm 30% | L _{leak} (μ H) MAX | C _c (pF) MAX | I _m (mA) | t _r (μ s) | R _L (Ω) | V _w (V) | Visol P/S (kVac) | Visol S/S (kVac) | Config |
|-----------|---------|---------------------------|---------------------------------------|---------------------------------------|--|--|-------------------------------|------------------------|------------------------------|--------------------------------|-----------------------|------------------------|------------------------|--------|
| PT 14b2,5 | 1:1:1 | 250 | 0,9 | 0,9 | 1,7 | 5 | 45 | 200 | 1 | 50 | 500 | 4 | 3 | B |
| PT 14k2,5 | 1:1:1 | 250 | 0,9 | 0,9 | 1,7 | 5 | 45 | 200 | 1 | 50 | 500 | 4 | 3 | C |
| PT 14c2,5 | 2:1 | 250 | 1,8 | 0,9 | 6,7 | 15 | 45 | 200 | 1 | 50 | 500 | 4 | - | D |
| PT 14a3 | 1:1 | 350 | 1,2 | 1,2 | 2,9 | 20 | 40 | 300 | 1 | 50 | 500 | 4 | - | A |
| PT 14i3 | 1:1 | 350 | 1,2 | 1,2 | 2,9 | 20 | 40 | 300 | 1 | 50 | 500 | 4 | - | D |
| PT 14g3 | 2:1:1 | 300 | 4,0 | 2,5 | 11,4 | 20 | 50 | 300 | 1 | 50 | 500 | 4 | 3 | B |
| PT 14c3,5 | 2:1 | 350 | 3,5 | 2,4 | 14 | 30 | 50 | 300 | 1 | 50 | 500 | 4 | - | D |
| PT 14i5 | 1:1 | 500 | 2,5 | 2,5 | 5,6 | 15 | 45 | 350 | 1 | 50 | 500 | 4 | - | D |
| PT 14k6 | 1:1:1 | 600 | 3,6 | 3,6 | 9,7 | 10 | 45 | 400 | 1,2 | 50 | 500 | 4 | 3 | C |
| PT 22a3 | 1:1 | 300 | 0,6 | 0,6 | 3 | 4,5 | 40 | 800 | 0,8 | 15 | 690 | 4 | - | A |
| PT 22b3 | 1:1:1 | 300 | 0,6 | 0,6 | 3 | 4,5 | 40 | 800 | 0,8 | 15 | 690 | 4 | 4 | B |
| PT 22c3 | 2:1 | 300 | 1 | 0,6 | 6 | 6,5 | 55 | 800 | 0,8 | 15 | 690 | 4 | - | A |
| PT 22d3 | 3:1 | 300 | 1,5 | 0,6 | 26 | 20 | 65 | 800 | 0,8 | 15 | 690 | 4 | - | A |
| PT 22e3 | 3:1:1 | 300 | 1,2 | 0,5 | 26 | 20 | 45 | 800 | 0,8 | 50 | 690 | 4 | 4 | B |
| PT 22b4 | 1:1:1 | 400 | 0,8 | 0,8 | 5,5 | 10 | 55 | 800 | 1 | 15 | 690 | 4 | 4 | B |
| PT 22a5 | 1:1 | 500 | 1 | 1 | 7,5 | 10 | 30 | 800 | 1 | 15 | 690 | 4 | - | A |
| PT 22b5 | 1:1:1 | 500 | 1 | 1 | 7,7 | 10 | 45 | 800 | 1 | 15 | 690 | 4 | 4 | B |

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Electrical specifications

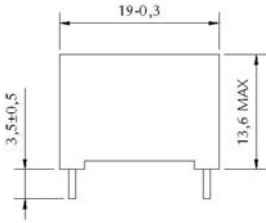
| Types | Np : Ns | $\int Vdt$ (μVs) | Rp Typ (Ω) | Rs Typ (Ω) | Lp (mH) at 10kHz $\pm 30\%$ | Lleak (μH) MAX | Cc (pF) MAX | Im (mA) | tr (μs) | Rl (Ω) | Vw (V) | Visol P/S (kVac) | Visol S/S (kVac) | Config |
|--------------|---------|----------------------------|---------------------------|---------------------------|-----------------------------------|-----------------------------|-------------------|------------|-------------------|--------------------|-----------|------------------------|------------------------|--------|
| PT 25j2 | 2:2 | 200 | 0,8 | 1,5 | 1,27 | 20 | 7,5 | 450 | 4 | 50 | 500 | 5 | 3,5 | 1-G |
| PT 25a3 | 1:1 | 300 | 0,5 | 0,5 | 2 | 3 | 50 | 250 | 1 | 50 | 500 | 4 | - | 1-A |
| PT 25b3 | 1:1:1 | 300 | 0,5 | 0,5 | 2 | 3 | 60 | 250 | 1 | 50 | 500 | 4 | 4 | 1-B |
| PT 25e3 | 3:1:1 | 300 | 1,7 | 0,55 | 15,8 | 20 | 55 | 250 | 1 | 50 | 500 | 4 | 4 | 1-B |
| PT 25h3 | 1:1:1:1 | 300 | 0,55 | 0,55 | 2 | 5 | 65 | 250 | 1 | 50 | 500 | 4 | 4 | 1-C |
| PT 25k3 | 1:1:1 | 300 | 0,5 | 0,5 | 2 | 3 | 60 | 250 | 1 | 50 | 650 | 4 | 4 | 1-E |
| PT 25m3 | 1:1 | 300 | 0,5 | 0,5 | 1,8 | 50 | 10 | 200 | 2 | 50 | 1000 | 6 | - | 1-F |
| PT 25n3 | 3:1 | 300 | 1,7 | 0,55 | 15,8 | 400 | 10 | 200 | 2 | 50 | 1000 | 6 | - | 1-F |
| PT 25p3 | 3:1:1 | 300 | 1,7 | 0,55 | 15,8 | 20 | 45 | 250 | 1 | 50 | 650 | 4 | 4 | 1-E |
| PT 25a4 | 1:1 | 400 | 0,6 | 0,6 | 4,2 | 5 | 70 | 300 | 1 | 50 | 500 | 4 | - | 1-A |
| PT 25b4 | 1:1:1 | 400 | 0,6 | 0,6 | 4,2 | 5 | 60 | 300 | 1 | 50 | 500 | 4 | 4 | 1-B |
| PT 25b4/hs | 1:1:1 | 400 | 0,9 | 0,9 | 2,2 | 5 | 70 | 300 | 1 | 50 | 700 | 4 | 4 | 1-D |
| PT 25g4 | 2:1:1 | 400 | 1,7 | 1 | 12,3 | 250 | 8,5 | 200 | 4 | 50 | 500 | 5 | 3,5 | 1-G |
| PT 25a5 | 1:1 | 500 | 1 | 1 | 5,5 | 15 | 40 | 400 | 1 | 50 | 500 | 4 | - | 1-A |
| PT 25b5 | 1:1:1 | 500 | 1 | 1 | 5,5 | 10 | 50 | 400 | 1 | 50 | 500 | 4 | 4 | 1-B |
| PT 25m5 | 1:1 | 500 | 1 | 1 | 5,5 | 125 | 8 | 250 | 5 | 50 | 1000 | 6 | - | 1-F |
| PT 25o5 | 2:1 | 500 | 2 | 1 | 31,7 | 500 | 8,5 | 250 | 5 | 50 | 1000 | 6 | - | 1-F |
| PT 25b6/N | 1:1:1 | 650 | 1 | 1 | 5,7 | 15 | 70 | 500 | 1 | 50 | 600 | 4 | 4 | 1-B |
| PT 25b8 | 1:1:1 | 800 | 1,7 | 1,7 | 13,5 | 15 | 70 | 600 | 1,5 | 50 | 500 | 4 | 4 | 1-B |
| PT 25b10 | 1:1:1 | 1000 | 1,8 | 1,8 | 18,3 | 25 | 55 | 700 | 1,5 | 50 | 500 | 4 | 4 | 1-B |
| PT 25b20 | 1:1:1 | 2000 | 6,8 | 6,8 | 56 | 65 | 70 | 800 | 2 | 50 | 500 | 4 | 4 | 1-B |
| PT 909 | 1:1 | 400 | 0,9 | 0,9 | 4,2 | 5 | 50 | 300 | 1 | 50 | 900 | 3 | - | 2-A |
| PT 26a3 | 1:1 | 300 | 0,55 | 0,55 | 2 | 5 | 50 | 250 | 1 | 50 | 500 | 4 | - | A |
| PT 26b3 | 1:1:1 | 300 | 0,55 | 0,55 | 2 | 5 | 60 | 250 | 1 | 50 | 500 | 4 | 4 | B |
| PT 26e3 | 3:1:1 | 300 | 1,8 | 0,5 | 14,7 | 25 | 50 | 250 | 1 | 50 | 500 | 4 | 4 | B |
| PT 26b10 | 1:1:1 | 1000 | 2,3 | 2,3 | 18,3 | 25 | 50 | 700 | 2,5 | 50 | 500 | 4 | 4 | B |
| PT26n3 | 3:1 | 300 | 1,7 | 0,70 | 15,8 | 400 | 30 | 200 | 2 | 50 | 1000 | 6 | - | C |
| PT 27a3 | 1:1 | 300 | 0,3 | 0,3 | 2 | 2 | 70 | 1200 | 1 | 10 | 690 | 4 | - | A |
| PT 27b3 | 1:1:1 | 300 | 0,3 | 0,3 | 2 | 2 | 70 | 1200 | 1 | 10 | 690 | 4 | 4 | B |
| PT 27d3,5 | 3:1 | 350 | 0,6 | 0,3 | 19,7 | 10 | 120 | 2000 | 1 | 5 | 690 | 4 | - | A |
| PT 27e3,5 | 3:1:1 | 350 | 0,6 | 0,3 | 19,7 | 7 | 100 | 2000 | 1 | 5 | 690 | 4 | 4 | B |
| PT 27b4/1300 | 1:1:1 | 450 | 0,15 | 0,15 | 0,55 | 4 | 40 | 2000 | 1 | 10 | 1300 | 6 | 5 | B |
| PT 27a5 | 1:1 | 500 | 0,4 | 0,4 | 5 | 8 | 105 | 2000 | 1 | 10 | 690 | 4 | 4 | A |
| PT 27b5 | 1:1:1 | 500 | 0,4 | 0,4 | 5 | 8 | 120 | 2000 | 1 | 10 | 690 | 4 | 4 | B |
| PT 27a10 | 1:1 | 1000 | 0,4 | 0,4 | 2,2 | 8 | 160 | 2000 | 1,5 | 10 | 690 | 4 | 4 | A |
| PT 27b10 | 1:1:1 | 1000 | 0,5 | 0,5 | 2,2 | 8 | 100 | 2000 | 1,5 | 10 | 690 | 4 | 4 | B |
| PT 27b10ES | 1:1:1 | 1000 | 0,5 | 0,5 | 2,2 | 20 | 60 | 2000 | 1,5 | 10 | 690 | 4 | 4 | C |
| PT 27c10 | 2:1 | 1000 | 0,7 | 0,35 | 10 | 23 | 180 | 2000 | 1 | 10 | 690 | 4 | 4 | A |
| PT HVb3 | 1:1:1 | 300 | 0,3 | 0,3 | 2,8 | 75 | 15 | 1000 | 1 | 50 | 3200 | 12 | 12 | A |

PT SERIES

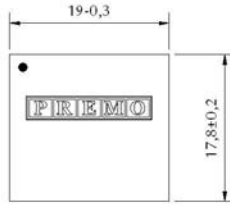
Pulse transformers designed for Semikron

Winding configurations and dimensions

PT-14 SERIES

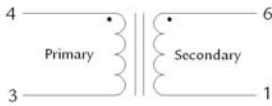
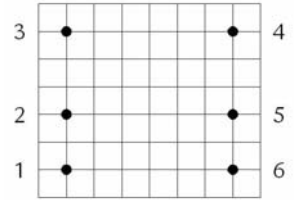


Configuration A

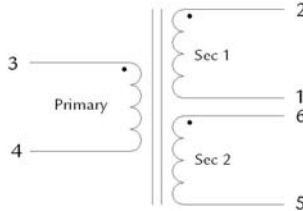


Configuration C

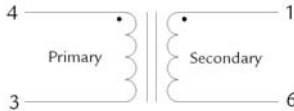
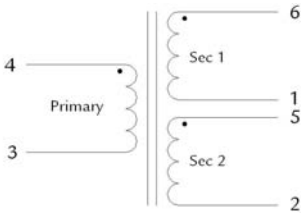
View by the side of the pins



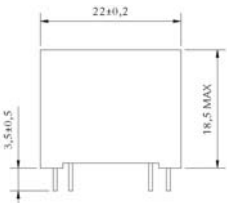
Configuration B



Configuration D



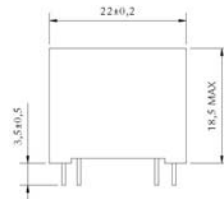
PT-22 SERIES



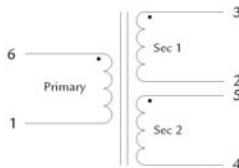
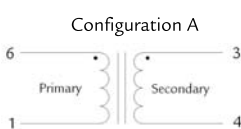
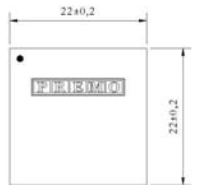
Configuration A



View by the side of the pins



Configuration B



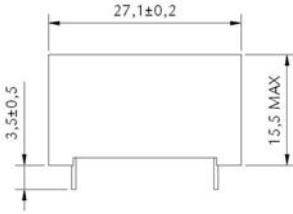
All dimensions in mm; Pin diameter = 0,6mm typ; Pins with no connection are removed; Grid = 2,5mm unless otherwise indicated; Pin grid tolerance = ±0,2mm; Dot on the top indicating pin number 1.

PT SERIES

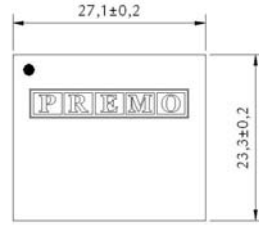
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Winding configurations and dimensions

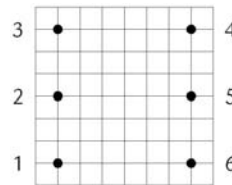
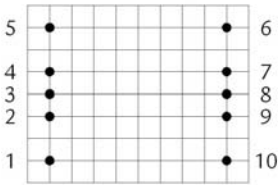
PT-25 SERIES



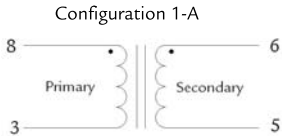
1 - Configuration



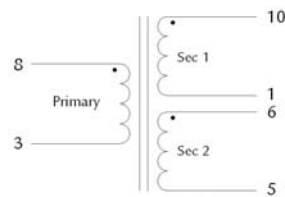
2 - Configuration
Special raster 2,54 mm



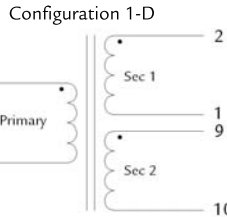
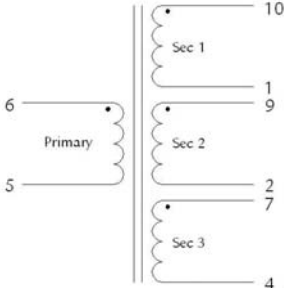
View by the side of the pins



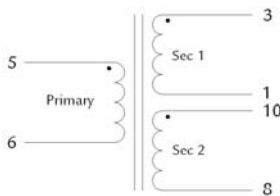
Configuration 1-B



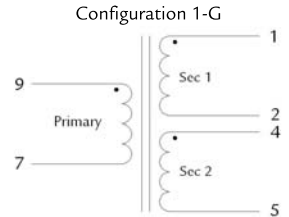
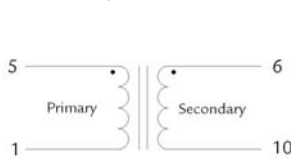
Configuration 1-C



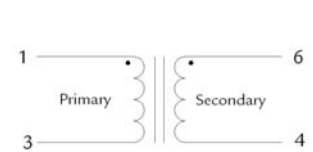
Configuration 1-E



Configuration 1-F



Configuration 2-A



All dimensions in mm; Pin diameter = 0,6mm typ; Pins with no connection are removed; Grid = 2,5mm unless otherwise indicated; Pin grid tolerance = ±0,2mm; Dot on the top indicating pin number 1.

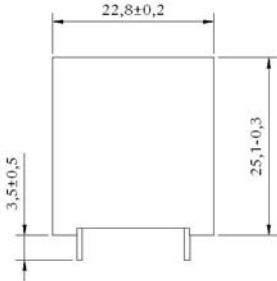
PT SERIES

Pulse transformers designed for Semikron

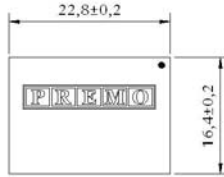
Pulse Transformers

Winding configurations and dimensions

PT-26 SERIES

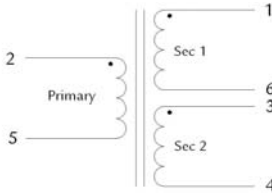
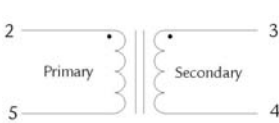
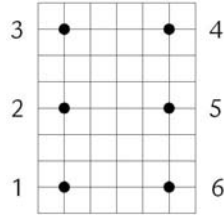


Configuration A

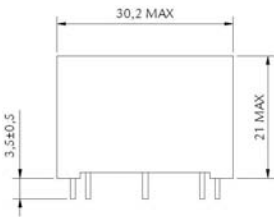


Configuration B

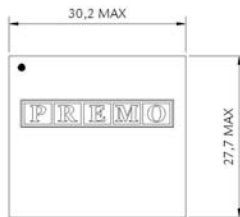
View by the side of the pins



PT-27 SERIES

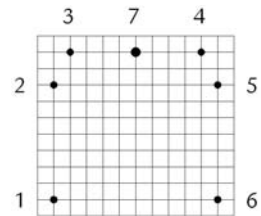


Configuration A

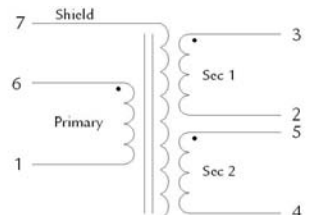
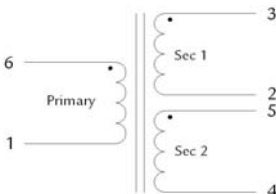
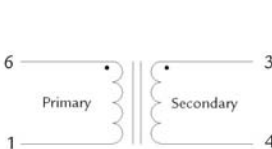


Configuration B

Shield pin number 7 \varnothing 0,8mm
View by the side of the pins



Configuration C



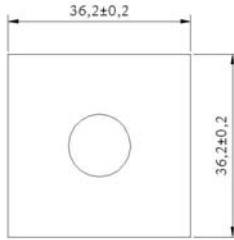
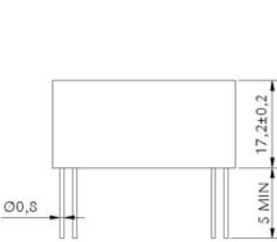
All dimensions in mm; Pin diameter = 0,6mm typ; Pins with no connection are removed; Grid = 2,5mm unless otherwise indicated; Pin grid tolerance = \pm 0,2mm; Dot on the top indicating pin number 1.

PT SERIES

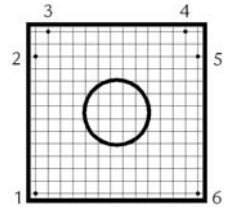
Pulse transformers designed for Semikron

Winding configurations and dimensions

PT-HV



View by the side of the pins



Configuration A

