MINIATURE VOLTAGE TRANSFORMERS

Toroidal Core Voltage Transformers

The YUANXING TV series of miniature voltage transformers are designed for applications where AC voltage signals must be transformed accurately into a lower AC voltage signal appropriate for micro-processor based circuits.

The TVxx0x series of toroidal core, PCB voltage transformers are designed specifically for integration into products which require exceptionally accurate primary signal transformation while exposed to harsh environmental operating conditions.

A TV model can be designed and manufactured to meet the specific design challenges of the client’s specific application. The following models are only a small sampling of the many different products which have been and are currently being manufactured.

FEATURES
- Low cost
- More than 20 standard sizes
- Non-symmetrical mounting pattern

APPLICATIONS
- For applications that require exceptional accuracy with minimal phase angle error
- Applications would include voltage, power, and energy monitoring devices

SPECIFICATIONS
- Exterior Material: PBT Resin UL flame retardant rating 94-V0
- Interior Insulation: Epoxy Encapsulated
- Isolation Voltage: 2500 Vrms for 1 minute
- Dielectric Resistance: 1000M Ohms @500 Vdc
- Surge Withstand: 5000V (1.2/50μs standard shock wave) optional
- Rated Load Resistance: 100K Ohms
- Accuracy Class: as defined in IEC 60044-2 Part 2 Voltage Transformers Class 0.1
- Operating Temperature: -25 to +55°C, -40 to +85°C optional
- Frequency: 50 to 400 Hz
- RoHS compliant

PERFORMANCES

<table>
<thead>
<tr>
<th>Model</th>
<th>Rated Input/Output</th>
<th>Frequency (Hz)</th>
<th>Excitation Current (mA)</th>
<th>Accuracy Class</th>
<th>Outline Dimensions (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TV5202</td>
<td>57.7V, 100V, 120V,150V,</td>
<td>50 to 400</td>
<td>≤0.5</td>
<td>0.1</td>
<td>OD-H 32.0-26.0</td>
</tr>
<tr>
<td></td>
<td>0.1V,0.333V...3.53V...7.07V</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>TV52D02</td>
<td>Input: 57.7V, 100V, 120V,</td>
<td>50 to 400</td>
<td>≤0.5</td>
<td>0.1</td>
<td>OD-H 31.0-30.0</td>
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<tr>
<td>(stall casing)</td>
<td>150V, Output: 0.1V,0.333V...3.53V...7.07V</td>
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<tr>
<td>TV5402</td>
<td>Input: 150V, 200, 220V, 300V,</td>
<td>50 to 400</td>
<td>≤0.5</td>
<td>0.1</td>
<td>OD-H 37.4-28.0</td>
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<td>0.1V,0.333V...3.53V...7.07V</td>
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<tr>
<td>TV3501</td>
<td>Input: 57.7V, 100V, 120V, 150V,</td>
<td>50 to 400</td>
<td>≤0.5</td>
<td>0.1</td>
<td>L-W-H 32.0-25.0-34.0</td>
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<td>0.1V,0.333V...3.53V...7.07V</td>
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<td>TV39B01</td>
<td>Input: 57.7V, 100V, 120V, 200V,</td>
<td>50 to 400</td>
<td>≤0.5</td>
<td>0.1</td>
<td>L-W-H 35.0-32.0-30.0</td>
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<tr>
<td>TV3901</td>
<td>Input: 150V,220V,300V,</td>
<td>50 to 400</td>
<td>≤0.5</td>
<td>0.1</td>
<td>L-W-H 36.5-31.0-35.0</td>
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<td>0.1V,0.333V...3.53V...7.07V</td>
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<tr>
<td>TV6301</td>
<td>Input: 300V,380V,500V,600V,</td>
<td>50 to 400</td>
<td>≤0.5</td>
<td>0.1</td>
<td>L-W-H 47.0-44.0-31.0</td>
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<tr>
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<td>0.1V,0.333V...3.53V...7.07V</td>
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SHANDONG YUANXING Electronics Co., Ltd.

Phone: +86-533-381-8450
Fax: +86-533-381-8724

NO.39, QIXIN AVENUE, ZHANGDIAN,
ZIBO, SHANDONG, CHINA 255095

www.yuanxing.net
sales@yuanxing.net
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<tr>
<td>TV25D01</td>
<td>150V, 220V, 300V</td>
<td>50 to 400</td>
<td>≤0.5</td>
<td>0.1</td>
<td>L-W-H 50.0-26.0-46.0</td>
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<td>≤0.5</td>
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<td>TV25Y01</td>
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<td>50 to 400</td>
<td>≤0.5</td>
<td>0.1</td>
<td>L-W-H 49.0-32.0-46.0</td>
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#### OUTLINE DRAWINGS

- **TV25D01**
- **TV25K01**
- **TV25Y01**

### 外形尺寸

<table>
<thead>
<tr>
<th>型号</th>
<th>L</th>
<th>W</th>
<th>H</th>
<th>A1</th>
<th>A2</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>TV5202</td>
<td>32.0(1.259)</td>
<td>—</td>
<td>26.0(1.024)</td>
<td>7.62x2(0.3x2)</td>
<td>15.24(0.600)</td>
<td>20.0(0.787)</td>
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<tr>
<td>TV52D02</td>
<td>31.0(1.220)</td>
<td>—</td>
<td>30.0(1.181)</td>
<td>7.62x2(0.3x2)</td>
<td>15.24(0.600)</td>
<td>20.0(0.787)</td>
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<tr>
<td>TV5402</td>
<td>37.4(1.472)</td>
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<td>28.0(1.102)</td>
<td>7.62x2(0.3x2)</td>
<td>15.24(0.600)</td>
<td>20.0(0.787)</td>
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<td>25.0(0.984)</td>
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<td>15.24(0.600)</td>
<td>7.62x2(0.3x2)</td>
<td>25.4(1.000)</td>
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<td>TV4501</td>
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<td>7.5x2(0.295x2)</td>
<td>22.5(0.886)</td>
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<tr>
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<td>5.08x4(0.2X4)</td>
<td>25.4(1.000)</td>
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<td>TV39B01</td>
<td>47.0(1.850)</td>
<td>44.0(1.732)</td>
<td>31.0(1.220)</td>
<td>8.0x3(0.315x3)</td>
<td>8.0x3(0.315X3)</td>
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<td>TV25D01</td>
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<td>46.0(1.811)</td>
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<td>TV25K01</td>
<td>44.0(1.732)</td>
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<td>46.0(1.811)</td>
<td>36.0(1.417)</td>
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<td>TV25Y01</td>
<td>49.0(1.929)</td>
<td>32.0(1.260)</td>
<td>46.0(1.811)</td>
<td>40.0(1.575)</td>
<td>22.0(0.866)</td>
<td>4.0(0.157)</td>
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*单位: mm (inch)*