



## Introducing 4900 Series Power Transformers for PC Board Mounting

# 4900 Series PC Board Transformers

## KEY FEATURES

1.1 through 36VA models

Split bobbin design provides  
1,500Vrms isolation and  
permits low profile

Low capacitive coupling of  
primary to secondary  
requires no electrostatic  
shielding

Single or dual primaries

Series or parallel secondaries

Designed to operate on  
50/60 Hz.

UL Class B (130°C)  
insulation

UL Recognized for the U.S.  
and Canada

Packaging design protects  
terminals during shipment  
for true pin positioning



## DESCRIPTION

Low frequency (50/60 Hz), laminated, split bobbin transformers for printed circuit board mounting.  
Six different sizes (1.1 - 36VA) are available with single (115VAC, 6-pin) or dual (115/230VAC, 8-pin) primaries, and all models permit a choice of series or parallel secondary connections.

## APPLICATIONS

Provide low voltage for power supply circuits and switching devices in various industries including appliance, HVAC, controls and consumer electronics.  
Specific applications include oven controls, control valves, garage door openers, small power supplies, small fan controls, power distribution, solenoid valves, contactor and relay coils, thermostat controls.

## STANDARDS AND SPECS

UL 5085-1, -2 Recognition, General Purpose Transformers (formerly UL 506)  
UL Recognized for the US and Canada, File E102980

## ELECTRICAL

Power - 1.1 to 36VA  
Dielectric Strength - 1500Vrms  
Primaries - Single or dual primaries (115 or 115/230V, 50/60Hz.)  
Secondaries - Series or parallel secondaries  
Electrostatic Shield - None is required due to split bobbin construction.  
Insulation - UL Class B (130°C)

## MECHANICAL

Dimensions below are expressed as inches over millimeters and apply to the illustration on the next page.

| VA  | L               | W               | H              | HC               | HD               | PL             | X              | Y             | Z             |
|-----|-----------------|-----------------|----------------|------------------|------------------|----------------|----------------|---------------|---------------|
| 1.1 | 1.4<br>(35.6)   | 1.18<br>(30.1)  | .93<br>(23.6)  | †                | †                | .135<br>(3.4)  | 1.22<br>(31)   | .25<br>(6.35) | .25<br>(6.35) |
| 2.4 | 1.4<br>(35.6)   | 1.18<br>(30.1)  | 1.2<br>(30.5)  | †                | †                | .135<br>(3.4)  | 1.22<br>(31)   | .25<br>(6.35) | .25<br>(6.35) |
| 6   | 1.625<br>(41.3) | 1.32<br>(33.5)  | 1.35<br>(34.3) | 1.140<br>(28.96) | .125 §<br>(3.17) | .135<br>(3.4)  | 1.28<br>(32.6) | .25<br>(6.35) | .35<br>(8.9)  |
| 12  | 1.89<br>(48.0)  | 1.58<br>(40.0)  | 1.41<br>(35.8) | 1.270<br>(32.76) | .150 §<br>(3.81) | .135<br>(3.4)  | 1.40<br>(35.6) | .3<br>(7.55)  | .4<br>(10.2)  |
| 20  | 2.25<br>(57.0)  | 1.88<br>(47.6)  | 1.41<br>(35.8) | 1.500<br>(38.1)  | .177 §<br>(4.5)  | .135<br>(3.4)  | 1.59<br>(40.4) | .3<br>(7.55)  | .4<br>(10.2)  |
| 36  | 2.60<br>(66.0)  | 2.165<br>(55.0) | 1.62<br>(41.1) | ††               | .157 §§<br>(4.0) | .200<br>(5.08) | 1.84<br>(46.8) | .4<br>(10.2)  | .4<br>(10.2)  |

† There are no mounting holes on 1.1 and 2.4VA models.

†† There are four mounting holes on 2.165 x 1.630 (55.0 x 41.4) centers on 36VA models.

§ Recommend use of #4 Nylon screws (not included) for mounting.

§§ Recommend use of #6 screws (not included) for mounting.

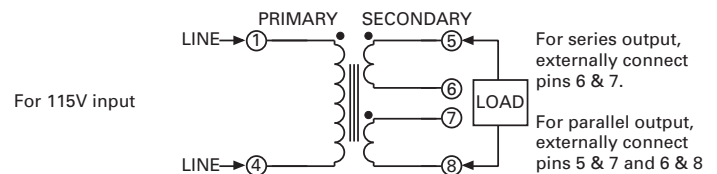
# 4900 Series PC Board Transformers

## PRODUCT OFFERING

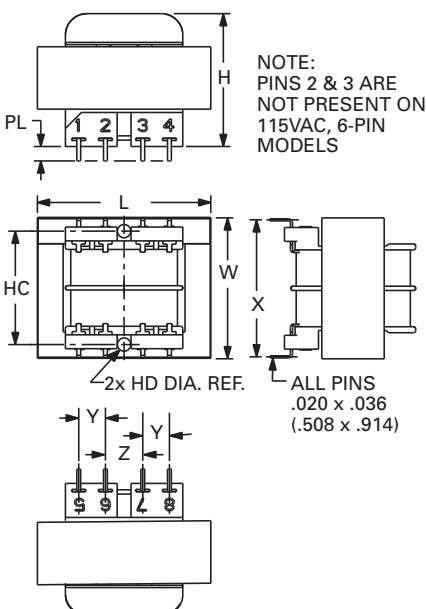
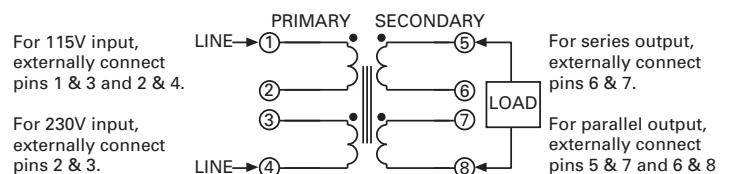
| Rated Power (VA) | Part Number                  |                                | Rated Output     |                 |
|------------------|------------------------------|--------------------------------|------------------|-----------------|
|                  | Single Input (115VAC, 6-pin) | Dual Input (115/230VAC, 8-pin) | Series           | Parallel        |
| 1.1              | 4900-8012RA60                | 4900-9012RA60                  | 12VCT @ 0.092A   | 6VAC @ 0.183A   |
| 1.1              | 4900-8013RA60                | 4900-9013RA60                  | 12.6VCT @ 0.087A | 6.3VAC @ 0.175A |
| 1.1              | 4900-8020RA60                | 4900-9020RA60                  | 20VCT @ 0.055A   | 10VAC @ 0.11A   |
| 1.1              | 4900-8024RA60                | 4900-9024RA60                  | 24VCT @ 0.046A   | 12VAC @ 0.1A    |
| 1.1              | 4900-8028RA60                | 4900-9028RA60                  | 28VCT @ 0.039A   | 14VAC @ 0.092A  |
| 1.1              | 4900-8048RA60                | 4900-9048RA60                  | 48VCT @ 0.023A   | 24VAC @ 0.046A  |
| 2.4              | 4900-8010RB61                | 4900-9010RB61                  | 10VCT @ 0.25A    | 5VAC @ 0.5A     |
| 2.4              | 4900-8013RB61                | 4900-9013RB61                  | 12.6VCT @ 0.2A   | 6.3VAC @ 0.4A   |
| 2.4              | 4900-8016RB61                | 4900-9016RB61                  | 16VCT @ 0.15A    | 8VAC @ 0.3A     |
| 2.4              | 4900-8020RB61                | 4900-9020RB61                  | 20VCT @ 0.12A    | 10VAC @ 0.24A   |
| 2.4              | 4900-8024RB61                | 4900-9024RB61                  | 24VCT @ 0.1A     | 12VAC @ 0.2A    |
| 2.4              | 4900-8120RB61                | 4900-9120RB61                  | 120VCT @ 0.02A   | 60VAC @ 0.04A   |
| 6                | 4900-8010RC62                | 4900-9010RC62                  | 10VCT @ 0.6A     | 5VAC @ 1.2A     |
| 6                | 4900-8016RC62                | 4900-9016RC62                  | 16VCT @ 0.4A     | 8VAC @ 0.8A     |
| 6                | 4900-8020RC62                | 4900-9020RC62                  | 20VCT @ 0.3A     | 10VAC @ 0.6A    |
| 6                | 4900-8024RC62                | 4900-9024RC62                  | 24VCT @ 0.25A    | 12VAC @ 0.5A    |
| 6                | 4900-8028RC62                | 4900-9028RC62                  | 28VCT @ 0.2A     | 14VAC @ 0.4A    |
| 6                | 4900-8036RC62                | 4900-9036RC62                  | 36VCT @ 0.17A    | 18VAC @ 0.34A   |
| 6                | 4900-8120RC62                | 4900-9120RC62                  | 120VCT @ 0.05A   | 60VAC @ 0.1A    |
| 12               | 4900-8012RD63                | 4900-9012RD63                  | 12VCT @ 1A       | 6VAC @ 2A       |
| 12               | 4900-8013RD63                | 4900-9013RD63                  | 12.6VCT @ 1A     | 6.3VAC @ 2A     |
| 12               | 4900-8024RD63                | 4900-9024RD63                  | 24VCT @ 0.5A     | 12VAC @ 1A      |
| 12               | 4900-8028RD63                | 4900-9028RD63                  | 28VCT @ 0.42A    | 14VAC @ 0.84A   |
| 12               | 4900-8048RD63                | 4900-9048RD63                  | 48VCT @ 0.25A    | 24VAC @ 0.5A    |
| 20               | 4900-8012RE64                | 4900-9012RE64                  | 12VCT @ 1.6A     | 6VAC @ 3.2A     |
| 20               | 4900-8013RE64                | 4900-9013RE64                  | 12.6VCT @ 1.6A   | 6.3VAC @ 3.2A   |
| 20               | 4900-8024RE64                | 4900-9024RE64                  | 24VCT @ 0.8A     | 12VAC @ 1.6A    |
| 20               | 4900-8028RE64                | 4900-9028RE64                  | 28VCT @ 0.7A     | 14VAC @ 1.4A    |
| 20               | 4900-8048RE64                | 4900-9048RE64                  | 48VCT @ 0.4A     | 24VAC @ 0.8A    |
| 36               | 4900-8012RF65                | 4900-9012RF65                  | 12VCT @ 2.85A    | 6VAC @ 5.7A     |
| 36               | 4900-8013RF65                | 4900-9013RF65                  | 12.6VCT @ 2.85A  | 6.3VAC @ 5.7A   |
| 36               | 4900-8024RF65                | 4900-9024RF65                  | 24VCT @ 1.5A     | 12VAC @ 3A      |
| 36               | 4900-8028RF65                | 4900-9028RF65                  | 28VCT @ 1.3A     | 14VAC @ 2.6A    |
| 36               | 4900-8048RF65                | 4900-9048RF65                  | 48VCT @ 0.75A    | 24VAC @ 1.5A    |

Note: Output voltages other than those listed above are available on a special order basis.

### Wiring Diagram for Models with Single Primaries (115VAC, 6-Pin)



### Wiring Diagram for Models with Dual Primaries (115/230VAC, 8-Pin)



Note: Specifications and availability are subject to change without notice. All part numbers shown are RoHS compliant.

## FOR MORE INFORMATION

### Technical Support

|                |                                                                                      |
|----------------|--------------------------------------------------------------------------------------|
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| E-mail:        | <a href="mailto:newproducts@tycoelectronics.com">newproducts@tycoelectronics.com</a> |
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| Canada:        | 1-905-470-4425                                                                       |
| Mexico:        | 52-55-1106-0800                                                                      |
| C. America:    | 57-1-254-4444                                                                        |
| South America: | 55-11-2103-6000                                                                      |
| Hong Kong:     | 852-2735-1628                                                                        |
| Japan:         | 81-44-844-8013                                                                       |
| UK:            | 44-208-420-8341                                                                      |

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