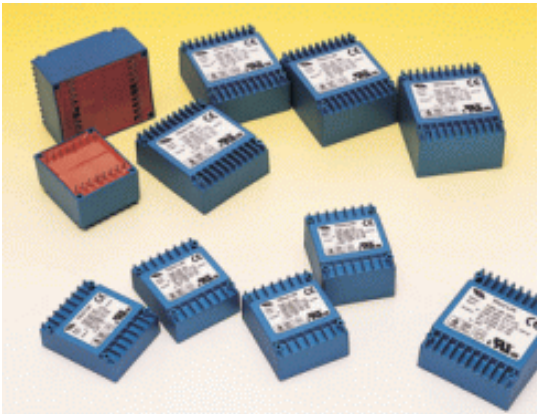


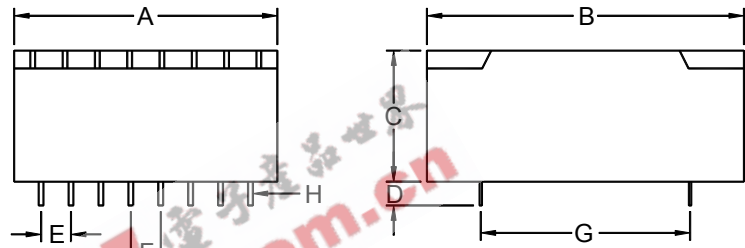
LOW PROFILE  
ENCAPSULATED  
TRANSFORMER



- Power – 2VA to 70VA
- Dielectric Strength – 3750Vrms
- Primary – Dual primary (115V/230V 50/60Hz)
- Secondary – Series or parallel
- Insulation Class – Class F (155°C)
- Safety Approvals – UL506, CSA C22.2 #6 TUV/EN61558 / EN60950, CE

**TL29E & TL29U Series**

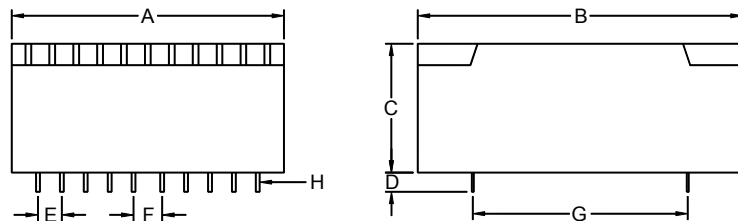
Empty pin shall be omitted if necessary.



Series	Dimension (mm)							
	A	B	C	D	E	F	G	H
2 (VA)	44.0	53.0	17.0	4.0	5.0	5.0	35.0	0.64 x 0.64
3 (VA)	44.0	53.0	17.0	4.0	5.0	5.0	35.0	0.64 x 0.64
4 (VA)	44.0	53.0	19.0	4.0	5.0	5.0	35.0	0.64 x 0.64
6 (VA)	44.0	53.0	22.0	4.0	5.0	5.0	35.0	0.64 x 0.64
8 (VA)	44.0	53.0	28.0	4.0	5.0	5.0	35.0	0.64 x 0.64
10 (VA)	44.0	53.0	28.0	4.0	5.0	5.0	35.0	0.64 x 0.64
Tolerance (mm)	±0.5	±0.5	±0.5	±1.0	±0.2	±0.2	±0.5	±0.1

**TL39E & TL39U Series**

Empty pin shall be omitted if necessary.

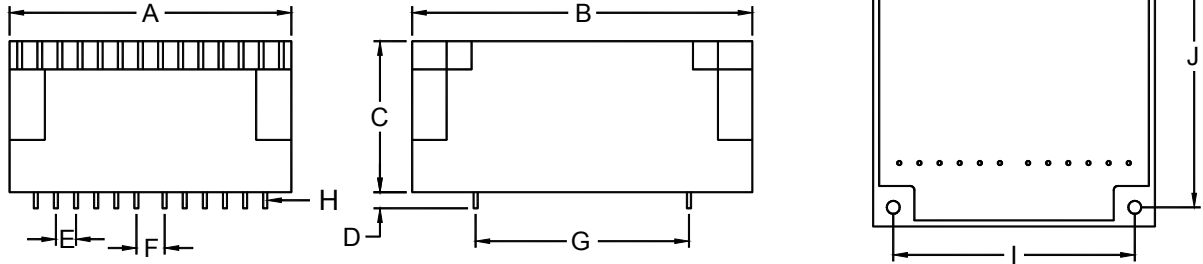


Series	Dimension (mm)							
	A	B	C	D	E	F	G	H
10 (VA)	57.0	68.0	22.0	4.0	5.0	6.0	45.0	0.64 x 0.64
14 (VA)	57.0	68.0	24.0	4.0	5.0	6.0	45.0	0.64 x 0.64
18 (VA)	57.0	68.0	27.0	4.0	5.0	6.0	45.0	0.64 x 0.64
24 (VA)	57.0	68.0	31.0	4.0	5.0	6.0	45.0	0.64 x 0.64
30 (VA)	57.0	68.0	35.0	4.0	5.0	6.0	45.0	0.64 x 0.64
Tolerance (mm)	±0.5	±0.5	±0.5	±1.0	±0.2	±0.2	±0.5	±0.1

LOW PROFILE  
ENCAPSULATED  
TRANSFORMER

**TL48E & TL48U Series**

Empty pin shall be omitted if necessary.



Series	Dimension (mm)										
	A	B	C	D	E	F	G	H	I	J	K
35 (VA)	70	84.5	37.5	4.0	5.0	7.0	53.0	Ø1.0	60	75	Ø3.2
40 (VA)	70	84.5	37.5	4.0	5.0	7.0	53.0	Ø1.0	60	75	Ø3.2
42 (VA)	70	84.5	37.5	4.0	5.0	7.0	53.0	Ø1.0	60	75	Ø3.2
48 (VA)	70	84.5	37.5	4.0	5.0	7.0	53.0	Ø1.0	60	75	Ø3.2
52 (VA)	70	84.5	47.5	4.0	5.0	7.0	53.0	Ø1.0	60	75	Ø3.2
56 (VA)	70	84.5	47.5	4.0	5.0	7.0	53.0	Ø1.0	60	75	Ø3.2
60 (VA)	70	84.5	47.5	4.0	5.0	7.0	53.0	Ø1.0	60	75	Ø3.2
70 (VA)	70	84.5	47.5	4.0	5.0	7.0	53.0	Ø1.0	60	75	Ø3.2
<b>Tolerance (mm)</b>	±1.0	±1.0	±1.0	±1.0	±0.2	±0.2	±0.5	±0.1	±0.5	±0.5	±0.2

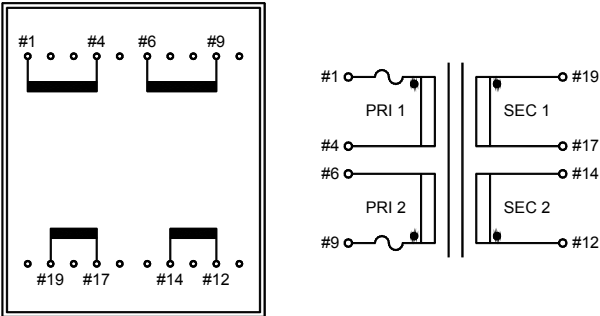
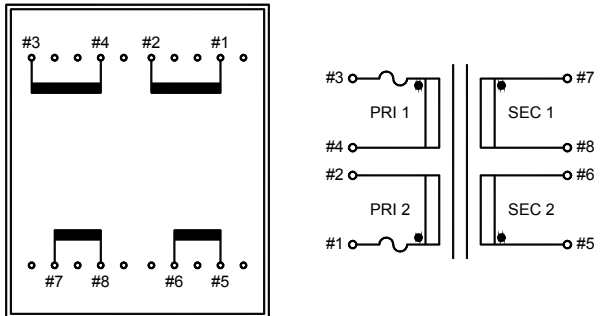
**TL29E & TL29U Series**

E TYPE	U TYPE
<p>FIG. A: Primary connections (PRI 1, PRI 2) and secondary connections (SEC 1, SEC 2) for E Type.</p> <p>FIG. B: Alternative primary and secondary connections for E Type.</p> <p>Bottom View: Physical layout of pins #1, #3, #5, #7, #16, #14, #12, #10.</p>	<p>FIG. C: Primary connections (PRI 1, PRI 2) and secondary connections (SEC 1, SEC 2) for U Type.</p> <p>FIG. D: Alternative primary and secondary connections for U Type.</p> <p>Bottom View: Physical layout of pins #3, #4, #2, #1, #7, #8, #6, #5.</p>
<p>Input Voltage : 115V/60Hz (at Pin 1 – Pin 3) (Pin 1 &amp; Pin 7 short, Pin 3 &amp; Pin 5 short)</p> <p>230V/50Hz (at Pin 1 – Pin 5) (Pin 3 &amp; Pin 7 short)</p> <p>Output Voltage : (Pin 10 – 12 &amp; Pin 14 – 16)</p>	<p>Input Voltage : 115V/60Hz (at Pin 1 – Pin 2) (Pin 1 &amp; Pin 3 short, Pin 2 &amp; Pin 4 short)</p> <p>230V/50Hz (at Pin 1 – Pin 4) (Pin 2 &amp; Pin 3 short)</p> <p>Output Voltage : (Pin 5 – 6 &amp; Pin 7 – 8)</p>

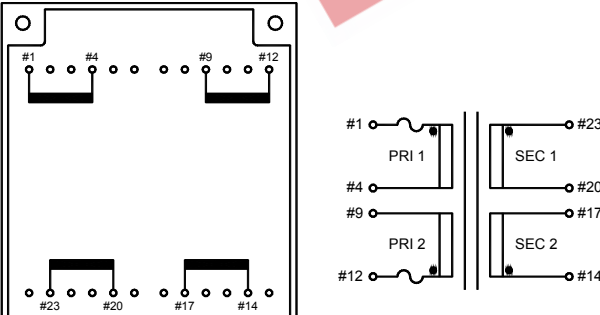
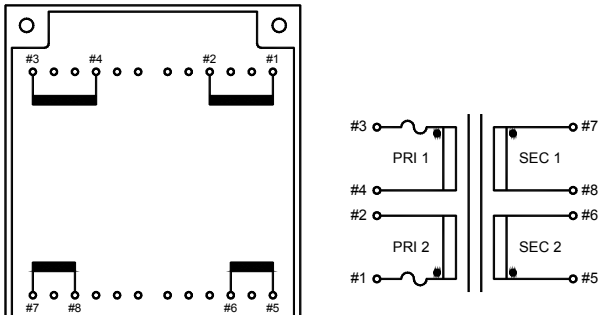
\*\*2VA, 3VA & 4VA without fuse (Fig A or C)

LOW PROFILE  
ENCAPSULATED  
TRANSFORMER

TL39E & TL39U Series

E TYPE	U TYPE
 <p>Bottom View</p>	 <p>Bottom View</p>
<p>Input Voltage : 115V/60Hz (at Pin 1 – Pin 4) (Pin 1 &amp; Pin 9 short, Pin 4 &amp; Pin 6 short)</p> <p>230V/50Hz (at Pin 1 – Pin 6) (Pin 4 &amp; Pin 9 short)</p> <p>Output Voltage : (Pin 12 – 14 &amp; Pin 17 – 19)</p>	<p>Input Voltage : 115V/60Hz (at Pin 1 – Pin 2) (Pin 1 &amp; Pin 3 short, Pin 2 &amp; Pin 4 short)</p> <p>230V/50Hz (at Pin 1 – Pin 4) (Pin 2 &amp; Pin 3 short)</p> <p>Output Voltage : (Pin 5 – 6 &amp; Pin 7 – 8)</p>

TL48E & TL48U Series

E TYPE	U TYPE
 <p>Bottom View</p>	 <p>Bottom View</p>
<p>Input Voltage : 115V/60Hz (at Pin 1 – Pin 4) (Pin 1 &amp; Pin 12 short, Pin 4 &amp; Pin 9 short)</p> <p>230V/50Hz (at Pin 1 – Pin 9) (Pin 4 &amp; Pin 12 short)</p> <p>Output Voltage : (Pin 14 – 17 &amp; Pin 20 – 23)</p>	<p>Input Voltage : 115V/60Hz (at Pin 1 – Pin 2) (Pin 1 &amp; Pin 3 short, Pin 2 &amp; Pin 4 short)</p> <p>230V/50Hz (at Pin 1 – Pin 4) (Pin 2 &amp; Pin 3 short)</p> <p>Output Voltage : (Pin 5 – 6 &amp; Pin 7 – 8)</p>

LOW PROFILE  
ENCAPSULATED  
TRANSFORMER

Series	Part Number	Input Voltage (V)	Secondary RMS Rating	
			Series	Parallel
2VA	TL29X-005-0200	2 x 115	10V @200mA	5V @400mA
	TL29X-006-0166	2 x 115	12V @166mA	6V @332mA
	TL29X-008-0125	2 x 115	16V @125mA	8V @250mA
	TL29X-009-0111	2 x 115	18V @111mA	9V @222mA
	TL29X-010-0100	2 x 115	20V @100mA	10V @200mA
	TL29X-012-0083	2 x 115	24V @83mA	12V @166mA
	TL29X-015-0066	2 x 115	30V @66mA	15V @132mA
	TL29X-017-0059	2 x 115	34V @59mA	17V @118mA
	TL29X-018-0055	2 x 115	36V @55mA	18V @110mA
	TL29X-020-0050	2 x 115	40V @50mA	20V @100mA
	TL29X-021-0047	2 x 115	42V @47mA	21V @94mA
	TL29X-024-0041	2 x 115	48V @41mA	24V @82mA
	TL29X-028-0036	2 x 115	56V @36mA	28V @72mA
	TL29X-115-0009	2 x 115	230V @9mA	115V @18mA
3VA	TL29X-005-0300	2 x 115	10V @300mA	5V @600mA
	TL29X-006-0250	2 x 115	12V @250mA	6V @500mA
	TL29X-008-0187	2 x 115	16V @187mA	8V @374mA
	TL29X-009-0166	2 x 115	18V @166mA	9V @332mA
	TL29X-010-0150	2 x 115	20V @150mA	10V @300mA
	TL29X-012-0125	2 x 115	24V @125mA	12V @250mA
	TL29X-015-0100	2 x 115	30V @100mA	15V @200mA
	TL29X-017-0088	2 x 115	34V @88mA	17V @176mA
	TL29X-018-0083	2 x 115	36V @83mA	18V @166mA
	TL29X-020-0075	2 x 115	40V @75mA	20V @150mA
	TL29X-021-0071	2 x 115	42V @71mA	21V @142mA
	TL29X-024-0063	2 x 115	48V @63mA	24V @126mA
	TL29X-028-0053	2 x 115	56V @53mA	28V @106mA
	TL29X-115-0013	2 x 115	230V @13mA	115V @26mA
4VA	TL29X-005-0400	2 x 115	10V @400mA	5V @800mA
	TL29X-006-0333	2 x 115	12V @333mA	6V @666mA
	TL29X-008-0250	2 x 115	16V @250mA	8V @500mA
	TL29X-009-0222	2 x 115	18V @222mA	9V @444mA
	TL29X-010-0200	2 x 115	20V @200mA	10V @400mA
	TL29X-012-0166	2 x 115	24V @166mA	12V @332mA
	TL29X-015-0133	2 x 115	30V @133mA	15V @266mA
	TL29X-017-0118	2 x 115	34V @118mA	17V @236mA
	TL29X-018-0111	2 x 115	36V @111mA	18V @222mA
	TL29X-020-0100	2 x 115	40V @100mA	20V @200mA
	TL29X-021-0095	2 x 115	42V @95mA	21V @190mA
	TL29X-024-0083	2 x 115	48V @83mA	24V @166mA
	TL29X-028-0071	2 x 115	56V @71mA	28V @142mA
	TL29X-115-0017	2 x 115	230V @17mA	115V @34mA
6VA	TL29X-005-0600	2 x 115	10V @600mA	5V @1200mA
	TL29X-006-0500	2 x 115	12V @500mA	6V @1000mA
	TL29X-008-0375	2 x 115	16V @375mA	8V @750mA
	TL29X-009-0333	2 x 115	18V @333mA	9V @666mA
	TL29X-010-0300	2 x 115	20V @300mA	10V @600mA
	TL29X-012-0250	2 x 115	24V @250mA	12V @500mA
	TL29X-015-0200	2 x 115	30V @200mA	15V @400mA
	TL29X-017-0176	2 x 115	34V @176mA	17V @352mA
	TL29X-018-0166	2 x 115	36V @166mA	18V @332mA
	TL29X-020-0150	2 x 115	40V @150mA	20V @300mA
	TL29X-021-0142	2 x 115	42V @142mA	21V @284mA
	TL29X-024-0125	2 x 115	48V @125mA	24V @250mA
	TL29X-028-0107	2 x 115	56V @107mA	28V @214mA
	TL29X-115-0026	2 x 115	230V @26mA	115V @52mA

LOW PROFILE  
ENCAPSULATED  
TRANSFORMER

Series	Part Number	Input Voltage (V)	Secondary RMS Rating	
			Series	Parallel
8VA	TL29X-005-0800	2 x 115	10V @800mA	5V @1600mA
	TL29X-006-0666	2 x 115	12V @666mA	6V @1332mA
	TL29X-008-0500	2 x 115	16V @500mA	8V @1000mA
	TL29X-009-0444	2 x 115	18V @444mA	9V @888mA
	TL29X-010-0400	2 x 115	20V @400mA	10V @800mA
	TL29X-012-0333	2 x 115	24V @333mA	12V @666mA
	TL29X-015-0266	2 x 115	30V @266mA	15V @532mA
	TL29X-017-0235	2 x 115	34V @235mA	17V @470mA
	TL29X-018-0222	2 x 115	36V @222mA	18V @444mA
	TL29X-020-0200	2 x 115	40V @200mA	20V @400mA
	TL29X-021-0190	2 x 115	42V @190mA	21V @380mA
	TL29X-024-0166	2 x 115	48V @166mA	24V @332mA
	TL29X-028-0143	2 x 115	56V @143mA	28V @286mA
	TL29X-115-0035	2 x 115	230V @35mA	115V @70mA
10VA	TL29X-005-1000	2 x 115	10V @1000mA	5V @2000mA
	TL29X-006-0833	2 x 115	12V @833mA	6V @1666mA
	TL29X-008-0625	2 x 115	16V @625mA	8V @1250mA
	TL29X-009-0555	2 x 115	18V @555mA	9V @1110mA
	TL29X-010-0500	2 x 115	20V @500mA	10V @1000mA
	TL29X-012-0416	2 x 115	24V @416mA	12V @832mA
	TL29X-015-0333	2 x 115	30V @333mA	15V @666mA
	TL29X-017-0294	2 x 115	34V @294mA	17V @588mA
	TL29X-018-0277	2 x 115	36V @277mA	18V @554mA
	TL29X-020-0250	2 x 115	40V @250mA	20V @500mA
	TL29X-021-0238	2 x 115	42V @238mA	21V @476mA
	TL29X-024-0208	2 x 115	48V @208mA	24V @416mA
	TL29X-028-0179	2 x 115	56V @179mA	28V @358mA
	TL29X-115-0043	2 x 115	230V @43mA	115V @86mA
10VA	TL39X-005-1000	2 x 115	10V @1000mA	5V @2000mA
	TL39X-006-0833	2 x 115	12V @833mA	6V @1666mA
	TL39X-008-0625	2 x 115	16V @625mA	8V @1250mA
	TL39X-009-0555	2 x 115	18V @555mA	9V @1110mA
	TL39X-010-0500	2 x 115	20V @500mA	10V @1000mA
	TL39X-012-0416	2 x 115	24V @416mA	12V @832mA
	TL39X-015-0333	2 x 115	30V @333mA	15V @666mA
	TL39X-017-0294	2 x 115	34V @294mA	17V @588mA
	TL39X-018-0277	2 x 115	36V @277mA	18V @554mA
	TL39X-020-0250	2 x 115	40V @250mA	20V @500mA
	TL39X-021-0238	2 x 115	42V @238mA	21V @476mA
	TL39X-024-0208	2 x 115	48V @208mA	24V @416mA
	TL39X-028-0179	2 x 115	56V @179mA	28V @358mA
	TL39X-115-0043	2 x 115	230V @43mA	115V @86mA
14VA	TL39X-005-1400	2 x 115	10V @1400mA	5V @2800mA
	TL39X-006-1167	2 x 115	12V @1167mA	6V @2334mA
	TL39X-008-0875	2 x 115	16V @875mA	8V @1750mA
	TL39X-009-0777	2 x 115	18V @777mA	9V @1554mA
	TL39X-010-0700	2 x 115	20V @700mA	10V @1400mA
	TL39X-012-0583	2 x 115	24V @583mA	12V @1166mA
	TL39X-015-0466	2 x 115	30V @466mA	15V @932mA
	TL39X-017-0412	2 x 115	34V @412mA	17V @824mA
	TL39X-018-0388	2 x 115	36V @388mA	18V @776mA
	TL39X-020-0350	2 x 115	40V @350mA	20V @700mA
	TL39X-021-0333	2 x 115	42V @333mA	21V @666mA
	TL39X-024-0291	2 x 115	48V @291mA	24V @582mA
	TL39X-028-0250	2 x 115	56V @250mA	28V @500mA
	TL39X-115-0060	2 x 115	230V @60mA	115V @120mA

LOW PROFILE  
ENCAPSULATED  
TRANSFORMER

Series	Part Number	Input Voltage (V)	Secondary RMS Rating	
			Series	Parallel
18VA	TL39X-005-1800	2 x 115	10V @1800mA	5V @3600mA
	TL39X-006-1500	2 x 115	12V @1500mA	6V @3000mA
	TL39X-008-1125	2 x 115	16V @1125mA	8V @2250mA
	TL39X-009-1000	2 x 115	18V @1000mA	9V @2000mA
	TL39X-010-0900	2 x 115	20V @900mA	10V @1800mA
	TL39X-012-0750	2 x 115	24V @750mA	12V @1500mA
	TL39X-015-0600	2 x 115	30V @600mA	15V @1200mA
	TL39X-017-0529	2 x 115	34V @529mA	17V @1058mA
	TL39X-018-0500	2 x 115	36V @500mA	18V @1000mA
	TL39X-020-0450	2 x 115	40V @450mA	20V @900mA
	TL39X-021-0428	2 x 115	42V @428mA	21V @856mA
	TL39X-024-0375	2 x 115	48V @375mA	24V @750mA
	TL39X-028-0321	2 x 115	56V @321mA	28V @342mA
	TL39X-115-0078	2 x 115	230V @78mA	115V @156mA
24VA	TL39X-005-2400	2 x 115	10V @2400mA	5V @4800mA
	TL39X-006-2000	2 x 115	12V @2000mA	6V @4000mA
	TL39X-008-1500	2 x 115	16V @1500mA	8V @3000mA
	TL39X-009-1333	2 x 115	18V @1333mA	9V @2666mA
	TL39X-010-1200	2 x 115	20V @1200mA	10V @2400mA
	TL39X-012-1000	2 x 115	24V @1000mA	12V @2000mA
	TL39X-015-0800	2 x 115	30V @800mA	15V @1600mA
	TL39X-017-0706	2 x 115	34V @706mA	17V @1412mA
	TL39X-018-0666	2 x 115	36V @666mA	18V @1332mA
	TL39X-020-0600	2 x 115	40V @600mA	20V @1200mA
	TL39X-021-0571	2 x 115	42V @571mA	21V @1142mA
	TL39X-024-0500	2 x 115	48V @500mA	24V @1000mA
	TL39X-028-0429	2 x 115	56V @429mA	28V @858mA
	TL39X-115-0104	2 x 115	230V @104mA	115V @208mA
30VA	TL39X-005-3000	2 x 115	10V @3000mA	5V @6000mA
	TL39X-006-2500	2 x 115	12V @2500mA	6V @5000mA
	TL39X-008-1875	2 x 115	16V @1875mA	8V @3750mA
	TL39X-009-1666	2 x 115	18V @1666mA	9V @3332mA
	TL39X-010-1500	2 x 115	20V @1500mA	10V @3000mA
	TL39X-012-1250	2 x 115	24V @1250mA	12V @2500mA
	TL39X-015-1000	2 x 115	30V @1000mA	15V @2000mA
	TL39X-017-0882	2 x 115	34V @882mA	17V @1764mA
	TL39X-018-0833	2 x 115	36V @833mA	18V @1666mA
	TL39X-020-0750	2 x 115	40V @750mA	20V @1500mA
	TL39X-021-0714	2 x 115	42V @714mA	21V @1428mA
	TL39X-024-0625	2 x 115	48V @625mA	24V @1250mA
	TL39X-028-0550	2 x 115	56V @550mA	28V @1100mA
	TL39X-115-0130	2 x 115	230V @130mA	115V @260mA