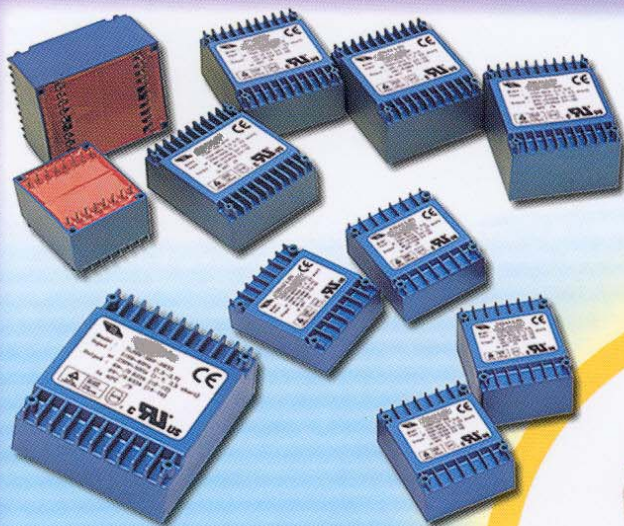




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TECHNOLOGIES

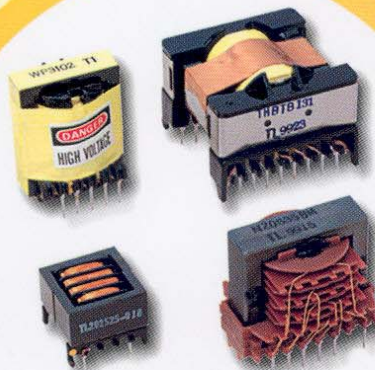
Герметичный трансформатор



EMI фильтр



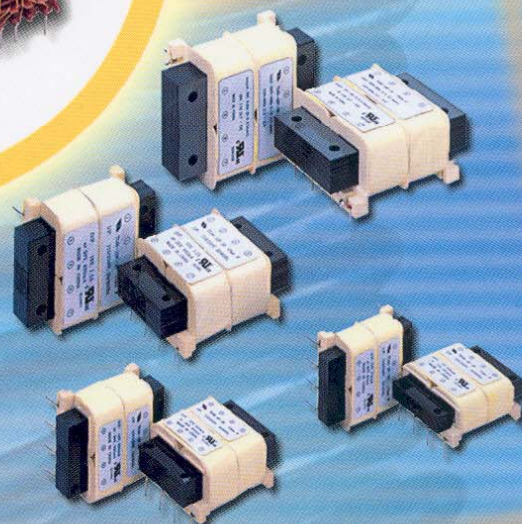
SMD трансформаторы



Высокочастотные трансформаторы



Наборные трансформаторы

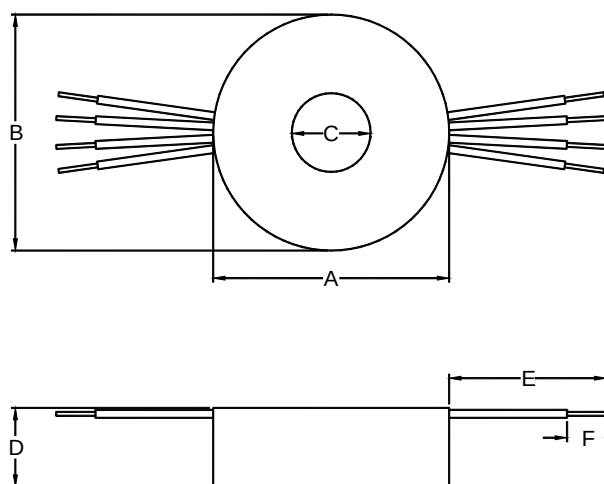


Сдвоенные трансформаторы



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03035 Киев, ул. Урицкого 32, оф. 1	тел./факс: +38 044 520- 04-77, 520-04-78, 520-04-79
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123007, Москва, Хорошевское шоссе, 76-Г	тел./факс: (495) 797-8993
Минск	<u>chip@rainbow.by</u>
220095, Минск, ул. Плеханова, д. 72, офис 22	тел.: + 37517 249-8273, факс: + 37517 248-8812
Санкт-Петербург	<u>spb@rainbow.msk.ru</u>
190000, Санкт-Петербург, пер. Пирогова, д. 7	тел.: (812) 324-09-02, тел./факс (812) 314-95-95
Екатеринбург	<u>ural@rainbow.msk.ru</u>
620026, Екатеринбург, ул. Куйбышева, д. 48-В	Отдел продаж — тел.: (343)261-71-17, 261-64-46; Директор филиала — тел.: 261-53-79; факс (343) 269-4989
Новосибирск	<u>nsk@rainbow.msk.ru</u>
630073 г. Новосибирск, проспект Карла Маркса, д. 57, офис 601	тел./факс: (383) 211-9087, 211-9638

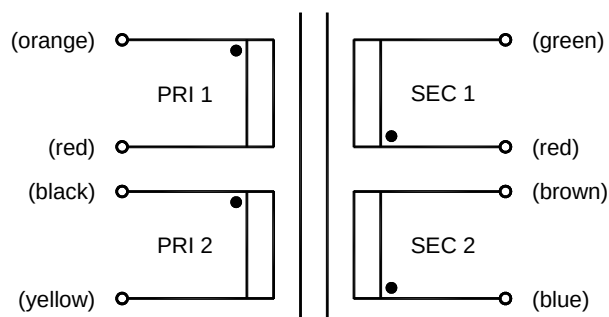


TL35 Series

- Low magnetic stray field emissions
- Low standby current
- High efficiency
- High ambient operating temperature (+60°C maximum)
- All leads wires are UL1332 200°C 300V
- Power – 1.6VA to 500VA
- Primary – Dual primary (115V/230V 50/60Hz)
- Secondary – Series or parallel
- Dielectric Strength – 4000Vrms
- Insulation Class – Class F (155°C)
- Safety Approvals – UL506, CUL C22.2 #66-1988, UL1411, CUL C22.2 #1-98, TUV / EN60950 / EN60065 / CE

Mounting

The transformer are normally supplied with one metal disk and two rubber washer for simple and easy one screw mounting



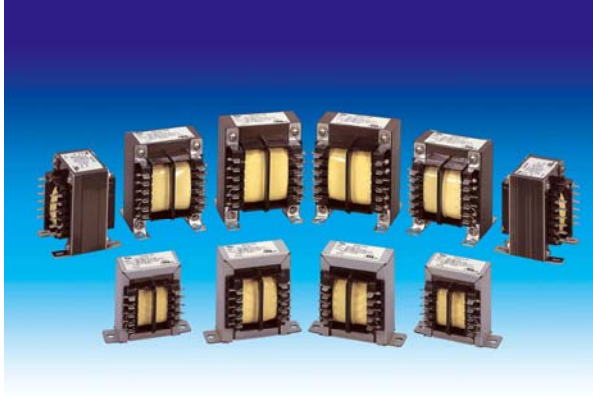
Product Series	Dimensions (mm)					
	A	B	C	D	E	F
1.6 (VA)	44.5	41.0	7.5	20.5	150	8
3.2 (VA)	49.5	45.5	5.0	20.5	150	8
5.0 (VA)	53.5	49.0	3.5	21.0	150	8
7.0 (VA)	53.5	50.0	5.0	23.5	150	8
10 (VA)	60.5	56.0	7.0	25.5	150	8
15 (VA)	66.5	60.0	6.0	27.5	150	8
25 (VA)	65.5	61.5	12.0	36.0	150	8
35 (VA)	78.5	71.5	18.5	34.0	150	8
50 (VA)	86.5	80.0	22.5	36.0	150	8
65 (VA)	94.5	89.0	20.5	36.5	150	8
85 (VA)	101	94.5	28.0	39.5	150	8
100 (VA)	101	96.0	34.0	44.0	150	8
120 (VA)	103	98.0	33.0	46.0	150	8
160 (VA)	122	116	38.0	46.0	250	8
200 (VA)	118	113	37.0	50.0	250	8
250 (VA)	123	118	42.0	53.0	250	8
300 (VA)	127	123	43.0	54.0	250	8
400 (VA)	139	134	44.0	61.0	250	8
500 (VA)	143	138	46.0	65.0	250	8
Tolerance	max.	max.	min.	max.	± 5	± 2

Product Series	Part Number	Input Voltage (V)	Secondary RMS Rating	
			Series	Parallel
1.6VA	TL35-0016-012	2 x 115	12V C.T. @133mA	6V @266mA
	TL35-0016-014	2 x 115	14V C.T. @114mA	7V @228mA
	TL35-0016-018	2 x 115	18V C.T. @89mA	9V @178mA
	TL35-0016-024	2 x 115	24V C.T. @67mA	12V @134mA
	TL35-0016-030	2 x 115	30V C.T. @53mA	15V @106mA
	TL35-0016-036	2 x 115	36V C.T. @44mA	18V @88mA
	TL35-0016-044	2 x 115	44V C.T. @36mA	22V @72mA
	TL35-0016-048	2 x 115	48V C.T. @33mA	24V @66mA
3.2VA	TL35-0032-012	2 x 115	12V C.T. @266mA	6V @532mA
	TL35-0032-014	2 x 115	14V C.T. @229mA	7V @458mA
	TL35-0032-018	2 x 115	18V C.T. @178mA	9V @356mA
	TL35-0032-024	2 x 115	24V C.T. @133mA	12V @266mA
	TL35-0032-030	2 x 115	30V C.T. @107mA	15V @214mA
	TL35-0032-036	2 x 115	36V C.T. @89mA	18V @178mA
	TL35-0032-044	2 x 115	44V C.T. @73mA	22V @146mA
	TL35-0032-048	2 x 115	48V C.T. @66mA	24V @132mA
5.0VA	TL35-0050-012	2 x 115	12V C.T. @416mA	6V @832mA
	TL35-0050-014	2 x 115	14V C.T. @357mA	7V @714mA
	TL35-0050-018	2 x 115	18V C.T. @278mA	9V @556mA
	TL35-0050-024	2 x 115	24V C.T. @208mA	12V @416mA
	TL35-0050-030	2 x 115	30V C.T. @167mA	15V @334mA
	TL35-0050-036	2 x 115	36V C.T. @139mA	18V @278mA
	TL35-0050-044	2 x 115	44V C.T. @114mA	22V @228mA
	TL35-0050-048	2 x 115	48V C.T. @104mA	24V @208mA
7.0VA	TL35-0070-012	2 x 115	12V C.T. @583mA	6V @1166mA
	TL35-0070-014	2 x 115	14V C.T. @500mA	7V @1000mA
	TL35-0070-018	2 x 115	18V C.T. @389mA	9V @778mA
	TL35-0070-024	2 x 115	24V C.T. @292mA	12V @584mA
	TL35-0070-030	2 x 115	30V C.T. @233mA	15V @466mA
	TL35-0070-036	2 x 115	36V C.T. @194mA	18V @388mA
	TL35-0070-044	2 x 115	44V C.T. @159mA	22V @318mA
	TL35-0070-048	2 x 115	48V C.T. @145mA	24V @290mA
10VA	TL35-0100-012	2 x 115	12V C.T. @833mA	6V @1666mA
	TL35-0100-014	2 x 115	14V C.T. @714mA	7V @1428mA
	TL35-0100-018	2 x 115	18V C.T. @556mA	9V @1112mA
	TL35-0100-024	2 x 115	24V C.T. @417mA	12V @834mA
	TL35-0100-030	2 x 115	30V C.T. @333mA	15V @666mA
	TL35-0100-036	2 x 115	36V C.T. @278mA	18V @556mA
	TL35-0100-044	2 x 115	44V C.T. @227mA	22V @454mA
	TL35-0100-048	2 x 115	48V C.T. @208mA	24V @416mA
15VA	TL35-0150-012	2 x 115	12V C.T. @1250mA	6V @2500mA
	TL35-0150-014	2 x 115	14V C.T. @1071mA	7V @2142mA
	TL35-0150-018	2 x 115	18V C.T. @833mA	9V @1666mA
	TL35-0150-024	2 x 115	24V C.T. @625mA	12V @1250mA
	TL35-0150-030	2 x 115	30V C.T. @500mA	15V @1000mA
	TL35-0150-036	2 x 115	36V C.T. @417mA	18V @834mA
	TL35-0150-044	2 x 115	44V C.T. @341mA	22V @682mA
	TL35-0150-048	2 x 115	48V C.T. @312mA	24V @624mA

Product Series	Part Number	Input Voltage (V)	Secondary RMS Rating	
			Series	Parallel
25VA	TL35-0250-012	2 x 115	12V C.T. @2083mA	6V @4166mA
	TL35-0250-014	2 x 115	14V C.T. @1785mA	7V @3570mA
	TL35-0250-018	2 x 115	18V C.T. @1377mA	9V @2754mA
	TL35-0250-024	2 x 115	24V C.T. @1041mA	12V @2082mA
	TL35-0250-030	2 x 115	30V C.T. @832mA	15V @1664mA
	TL35-0250-036	2 x 115	36V C.T. @694mA	18V @1388mA
	TL35-0250-044	2 x 115	44V C.T. @568mA	22V @1136mA
	TL35-0250-048	2 x 115	48V C.T. @520mA	24V @1040mA
35VA	TL35-0350-012	2 x 115	12V C.T. @2916mA	6V @5832mA
	TL35-0350-014	2 x 115	14V C.T. @2500mA	7V @5000mA
	TL35-0350-018	2 x 115	18V C.T. @1944mA	9V @3888mA
	TL35-0350-024	2 x 115	24V C.T. @1458mA	12V @2916mA
	TL35-0350-030	2 x 115	30V C.T. @1167mA	15V @2334mA
	TL35-0350-036	2 x 115	36V C.T. @972mA	18V @1944mA
	TL35-0350-044	2 x 115	44V C.T. @795mA	22V @1590mA
	TL35-0350-048	2 x 115	48V C.T. @729mA	24V @1458mA
50VA	TL35-0500-012	2 x 115	12V C.T. @4166mA	6V @8332mA
	TL35-0500-014	2 x 115	14V C.T. @3571mA	7V @7142mA
	TL35-0500-018	2 x 115	18V C.T. @2777mA	9V @5554mA
	TL35-0500-024	2 x 115	24V C.T. @2083mA	12V @4166mA
	TL35-0500-030	2 x 115	30V C.T. @1666mA	15V @3332mA
	TL35-0500-036	2 x 115	36V C.T. @1388mA	18V @2776mA
	TL35-0500-044	2 x 115	44V C.T. @1136mA	22V @2272mA
	TL35-0500-048	2 x 115	48V C.T. @1041mA	24V @2082mA
65VA	TL35-0650-012	2 x 115	12V C.T. @5416mA	6V @10832mA
	TL35-0650-014	2 x 115	14V C.T. @4642mA	7V @9284mA
	TL35-0650-018	2 x 115	18V C.T. @3611mA	9V @7222mA
	TL35-0650-024	2 x 115	24V C.T. @2708mA	12V @5416mA
	TL35-0650-030	2 x 115	30V C.T. @2166mA	15V @4322mA
	TL35-0650-036	2 x 115	36V C.T. @1805mA	18V @3610mA
	TL35-0650-044	2 x 115	44V C.T. @1477mA	22V @2954mA
	TL35-0650-048	2 x 115	48V C.T. @1354mA	24V @2708mA
85VA	TL35-0850-012	2 x 115	12V C.T. @7083mA	6V @14166mA
	TL35-0850-014	2 x 115	14V C.T. @6071mA	7V @12142mA
	TL35-0850-018	2 x 115	18V C.T. @4722mA	9V @9444mA
	TL35-0850-024	2 x 115	24V C.T. @3541mA	12V @7082mA
	TL35-0850-030	2 x 115	30V C.T. @2833mA	15V @5666mA
	TL35-0850-036	2 x 115	36V C.T. @2361mA	18V @4722mA
	TL35-0850-044	2 x 115	44V C.T. @1931mA	22V @3862mA
	TL35-0850-048	2 x 115	48V C.T. @1770mA	24V @3540mA

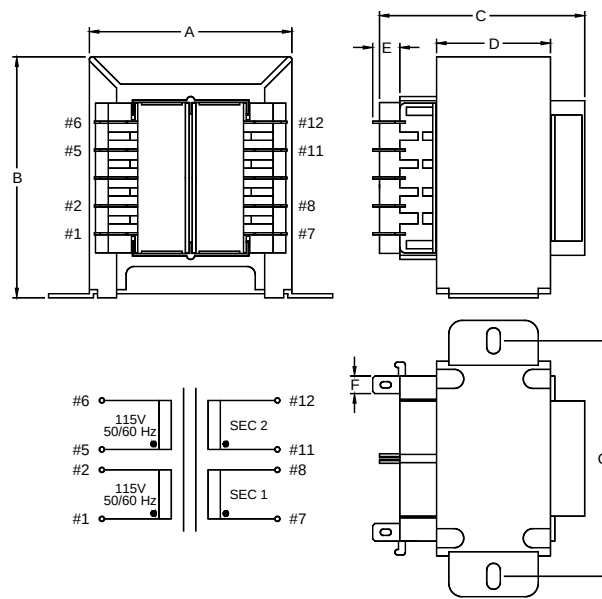
Product Series	Part Number	Input Voltage (V)	Secondary RMS Rating	
			Series	Parallel
100VA	TL35-1000-018	2 x 115	18V C.T. @5.55A	9V @11.10A
	TL35-1000-020	2 x 115	20V C.T. @5.00A	10V @10.00A
	TL35-1000-024	2 x 115	24V C.T. @4.16A	12V @8.32A
	TL35-1000-030	2 x 115	30V C.T. @3.33A	15V @6.66A
	TL35-1000-036	2 x 115	36V C.T. @2.77A	18V @5.54A
	TL35-1000-044	2 x 115	44V C.T. @2.27A	22V @4.54A
	TL35-1000-048	2 x 115	48V C.T. @2.08A	24V @4.16A
	TL35-1000-060	2 x 115	60V C.T. @1.66A	30V @3.32A
	TL35-1000-070	2 x 115	70V C.T. @1.42A	35V @2.84A
	TL35-1000-076	2 x 115	76V C.T. @1.31A	38V @2.62A
	TL35-1000-110	2 x 115	110V C.T. @0.90A	55V @1.80A
	TL35-1000-230	2 x 115	230V C.T. @0.43A	115V @0.86A
120VA	TL35-1200-018	2 x 115	18V C.T. @6.66A	9V @13.32A
	TL35-1200-020	2 x 115	20V C.T. @6.00A	10V @12.00A
	TL35-1200-024	2 x 115	24V C.T. @5.00A	12V @10.00A
	TL35-1200-030	2 x 115	30V C.T. @4.00A	15V @8.00A
	TL35-1200-036	2 x 115	36V C.T. @3.33A	18V @6.66A
	TL35-1200-044	2 x 115	44V C.T. @2.72A	22V @5.44A
	TL35-1200-048	2 x 115	48V C.T. @2.50A	24V @5.00A
	TL35-1200-060	2 x 115	60V C.T. @2.00A	30V @4.00A
	TL35-1200-070	2 x 115	70V C.T. @1.71A	35V @3.42A
	TL35-1200-076	2 x 115	76V C.T. @1.57A	38V @3.14A
	TL35-1200-110	2 x 115	110V C.T. @1.09A	55V @2.18A
	TL35-1200-230	2 x 115	230V C.T. @0.52A	115V @1.04A
160VA	TL35-1600-020	2 x 115	20V C.T. @8.00A	10V @16.00A
	TL35-1600-024	2 x 115	24V C.T. @6.66A	12V @13.33A
	TL35-1600-030	2 x 115	30V C.T. @5.33A	15V @10.66A
	TL35-1600-036	2 x 115	36V C.T. @4.44A	18V @8.88A
	TL35-1600-044	2 x 115	44V C.T. @3.63A	22V @7.26A
	TL35-1600-048	2 x 115	48V C.T. @3.33A	24V @6.66A
	TL35-1600-060	2 x 115	60V C.T. @2.66A	30V @5.32A
	TL35-1600-070	2 x 115	70V C.T. @2.28A	35V @4.56A
	TL35-1600-076	2 x 115	76V C.T. @2.10A	38V @4.20A
	TL35-1600-110	2 x 115	110V C.T. @1.45A	55V @2.90A
	TL35-1600-230	2 x 115	230V C.T. @0.69A	115V @1.38A
200VA	TL35-2000-024	2 x 115	24V C.T. @8.33A	12V @16.66A
	TL35-2000-030	2 x 115	30V C.T. @6.66A	15V @13.32A
	TL35-2000-036	2 x 115	36V C.T. @5.55A	18V @11.10A
	TL35-2000-044	2 x 115	44V C.T. @4.54A	22V @9.08A
	TL35-2000-048	2 x 115	48V C.T. @4.16A	24V @8.32A
	TL35-2000-060	2 x 115	60V C.T. @3.33A	30V @6.66A
	TL35-2000-070	2 x 115	70V C.T. @2.85A	35V @5.70A
	TL35-2000-076	2 x 115	76V C.T. @2.63A	38V @5.26A
	TL35-2000-110	2 x 115	110V C.T. @1.81A	55V @3.62A
	TL35-2000-230	2 x 115	230V C.T. @0.86A	115V @1.72A

Product Series	Part Number	Input Voltage (V)	Secondary RMS Rating	
			Series	Parallel
250VA	TL35-2500-024	2 x 115	24V C.T. @10.41A	12V @20.82A
	TL35-2500-030	2 x 115	30V C.T. @8.33A	15V @16.66A
	TL35-2500-036	2 x 115	36V C.T. @6.94A	18V @13.88A
	TL35-2500-044	2 x 115	44V C.T. @5.68A	22V @11.36A
	TL35-2500-048	2 x 115	48V C.T. @5.20A	24V @10.40A
	TL35-2500-060	2 x 115	60V C.T. @4.16A	30V @8.32A
	TL35-2500-066	2 x 115	66V C.T. @3.78A	33V @7.56A
	TL35-2500-070	2 x 115	70V C.T. @3.57A	35V @7.14A
	TL35-2500-076	2 x 115	76V C.T. @3.28A	38V @6.56A
	TL35-2500-110	2 x 115	110V C.T. @2.27A	55V @4.54A
	TL35-2500-230	2 x 115	230V C.T. @1.08A	115V @2.16A
300VA	TL35-3000-030	2 x 115	30V C.T. @10.00A	15V @20.00A
	TL35-3000-036	2 x 115	36V C.T. @8.33A	18V @16.66A
	TL35-3000-048	2 x 115	48V C.T. @6.25A	24V @12.50A
	TL35-3000-060	2 x 115	60V C.T. @5.00A	30V @10.00A
	TL35-3000-066	2 x 115	66V C.T. @4.54A	33V @9.08A
	TL35-3000-070	2 x 115	70V C.T. @4.28A	35V @8.56A
	TL35-3000-076	2 x 115	76V C.T. @3.94A	38V @7.88A
	TL35-3000-090	2 x 115	90V C.T. @3.33A	45V @6.66A
	TL35-3000-110	2 x 115	110V C.T. @2.72A	55V @5.44A
	TL35-3000-230	2 x 115	230V C.T. @1.30A	115V @2.60A
400VA	TL35-4000-048	2 x 115	48V C.T. @8.33A	24V @16.66A
	TL35-4000-060	2 x 115	60V C.T. @6.66A	30V @13.32A
	TL35-4000-066	2 x 115	66V C.T. @6.06A	33V @12.12A
	TL35-4000-070	2 x 115	70V C.T. @5.71A	35V @11.42A
	TL35-4000-076	2 x 115	76V C.T. @5.26A	38V @10.52A
	TL35-4000-090	2 x 115	90V C.T. @4.44A	45V @8.88A
	TL35-4000-110	2 x 115	110V C.T. @3.63A	55V @7.26A
500VA	TL35-5000-230	2 x 115	230V C.T. @1.73A	115V @3.46A
	TL35-5000-048	2 x 115	48V C.T. @10.41A	24V @20.83A
	TL35-5000-060	2 x 115	60V C.T. @8.33A	30V @16.66A
	TL35-5000-066	2 x 115	66V C.T. @7.57A	33V @15.14A
	TL35-5000-070	2 x 115	70V C.T. @7.14A	35V @14.28A
	TL35-5000-076	2 x 115	76V C.T. @6.57A	38V @13.14A
	TL35-5000-090	2 x 115	90V C.T. @5.55A	45V @11.10A
	TL35-5000-110	2 x 115	110V C.T. @4.54A	55V @9.08A

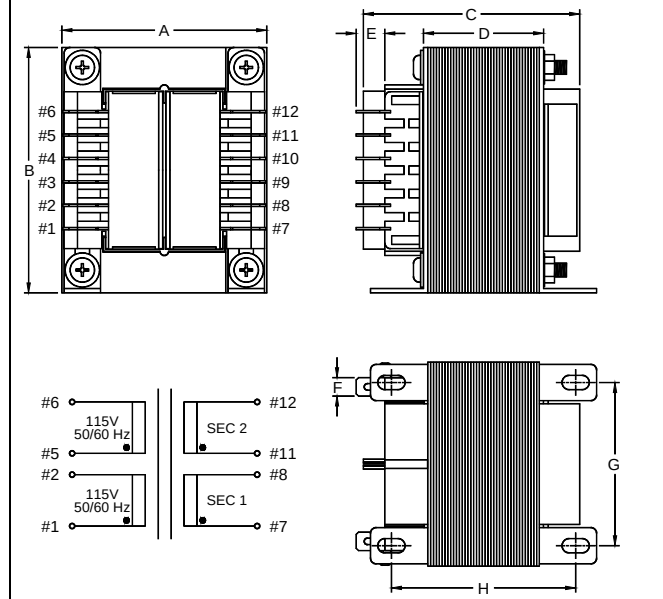


TL94 Series

- Power – 25VA to 175VA
- Dielectric Strength – 4000Vrms
- Primary – Dual primary (115V/230V 50/60Hz)
- Secondary – Series or parallel
- Terminal – Solder lug / quick-connect type terminal
- Insulation Class – Class F (155°C)
- Flammability Rating – UL94V-0 (bobbin)
- Safety Approvals – UL506, CSA C22.2 #66 , TUV / EN60950 & CE



MOUNTING STYLE A



MOUNTING STYLE B

Product Series	Dimensions (mm)								Mtg. Style	Mtg. Screw
	A	B	C	D	E	F	G	H		
25 (VA)	49.8	60.0	47.6	28.6	7.9	4.75	60.3	--	A	#6
43 (VA)	57.2	69.2	52.3	28.6	7.9	4.75	71.4	--	A	#6
80 (VA)	63.5	76.2	60.3	35.5	7.9	4.75	50.8	55.5	B	#6
130 (VA)	71.5	85.8	73.0	41.5	9.5	6.35	57.2	63.5	B	#8
175 (VA)	80.0	96.0	79.0	41.5	9.5	6.35	64.0	64.0	B	#8

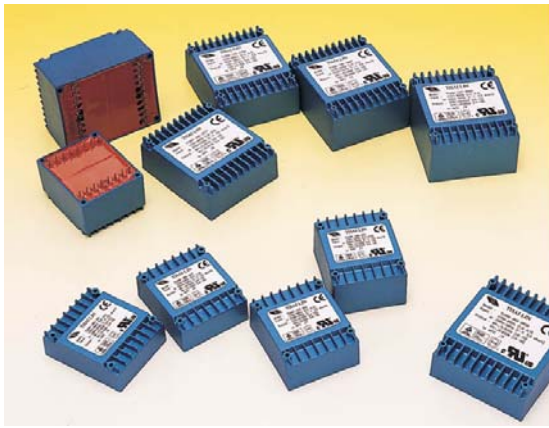
Note: 1) The Mtg. Screw size is the maximum allowable screw size.

2) Unused terminals are omitted for standard parts. Unused terminals can be provided on request.

3) For 25VA & 43VA series, maximum 10 terminals are available.

4) For 80VA to 175VA series, maximum 12 terminals are available.

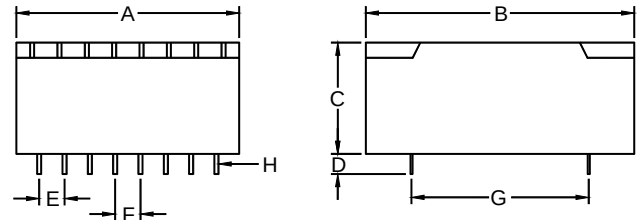
Product Series	Part Number	Input Voltage (V)	Secondary RMS Rating	
			Series	Parallel
25VA	TL94-025-010	2 x 115	10V C.T. @2.5A	5V @5.0A
	TL94-025-012	2 x 115	12.6V C.T. @2.0A	6.3V @4.0A
	TL94-025-016	2 x 115	16V C.T. @1.6A	8V @3.2A
	TL94-025-020	2 x 115	20V C.T. @1.25A	10V @2.5A
	TL94-025-024	2 x 115	24V C.T. @1.0A	12V @2.0A
	TL94-025-028	2 x 115	28V C.T. @0.9A	14V @1.86A
	TL94-025-036	2 x 115	36V C.T. @0.7A	18V @1.4A
	TL94-025-230	2 x 115	230V C.T. @0.11A	115V @0.22A
43VA	TL94-043-010	2 x 115	10V C.T. @4.3A	5V @8.6A
	TL94-043-012	2 x 115	12.6V C.T. @3.4A	6.3V @6.8A
	TL94-043-016	2 x 115	16V C.T. @2.7A	8V @5.4A
	TL94-043-020	2 x 115	20V C.T. @2.2A	10V @4.4A
	TL94-043-024	2 x 115	24V C.T. @1.8A	12V @3.6A
	TL94-043-028	2 x 115	28V C.T. @1.5A	14V @3.0A
	TL94-043-036	2 x 115	36V C.T. @1.2A	18V @2.4A
	TL94-043-230	2 x 115	230V C.T. @0.19A	115V @0.38A
80VA	TL94-080-010	2 x 115	10V C.T. @8.0A	5V @16.0A
	TL94-080-012	2 x 115	12.6V C.T. @6.3A	6.3V @12.6A
	TL94-080-016	2 x 115	16V C.T. @5.0A	8V @10.0A
	TL94-080-020	2 x 115	20V C.T. @4.0A	10V @8.0A
	TL94-080-024	2 x 115	24V C.T. @3.3A	12V @6.6A
	TL94-080-028	2 x 115	28V C.T. @2.8A	14V @5.6A
	TL94-080-036	2 x 115	36V C.T. @2.2A	18V @4.4A
	TL94-080-230	2 x 115	230V C.T. @0.35A	115V @0.7A
130VA	TL94-130-010	2 x 115	10V C.T. @13.0A	5V @26.0A
	TL94-130-012	2 x 115	12.6V C.T. @10.3A	6.3V @20.6A
	TL94-130-016	2 x 115	16V C.T. @8.1A	8V @16.2A
	TL94-130-020	2 x 115	20V C.T. @6.5A	10V @13.0A
	TL94-130-024	2 x 115	24V C.T. @5.4A	12V @10.8A
	TL94-130-028	2 x 115	28V C.T. @4.6A	14V @9.2A
	TL94-130-036	2 x 115	36V C.T. @3.6A	18V @7.2A
	TL94-130-230	2 x 115	230V C.T. @0.57A	115V @1.14A
175VA	TL94-175-010	2 x 115	10V C.T. @17.5A	5V @35.0A
	TL94-175-012	2 x 115	12.6V C.T. @14.0A	6.3V @28.0A
	TL94-175-016	2 x 115	16V C.T. @11.0A	8V @22.0A
	TL94-175-020	2 x 115	20V C.T. @8.8A	10V @17.6A
	TL94-175-024	2 x 115	24V C.T. @7.3A	12V @14.6A
	TL94-175-028	2 x 115	28V C.T. @6.25A	14V @12.5A
	TL94-175-036	2 x 115	36V C.T. @4.8A	18V @9.6A
	TL94-175-230	2 x 115	230V C.T. @0.76A	115V @1.52A



- Power – 2VA to 70VA
- Dielectric Strength – 3750Vrms
- Ambient operation temperature (+40°C)
- 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

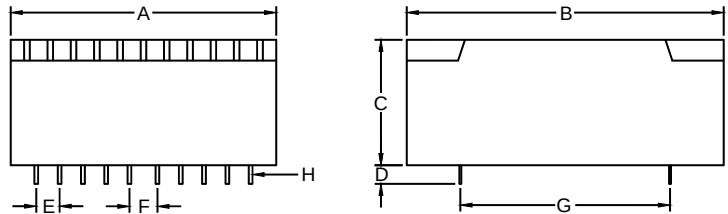
Empty pin shall be omitted if necessary.



Series	Dimension (mm)							
	<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>	<i>F</i>	<i>G</i>	<i>H</i>
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

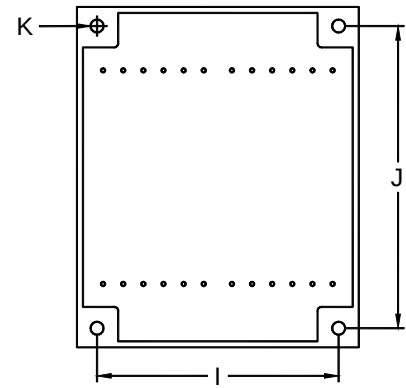
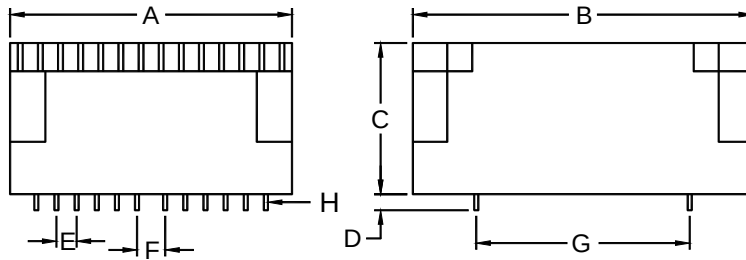
Empty pin shall be omitted if necessary.



Series	Dimension (mm)							
	<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>	<i>F</i>	<i>G</i>	<i>H</i>
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

TL48E & TL48U Series

Empty pin shall be omitted if necessary.



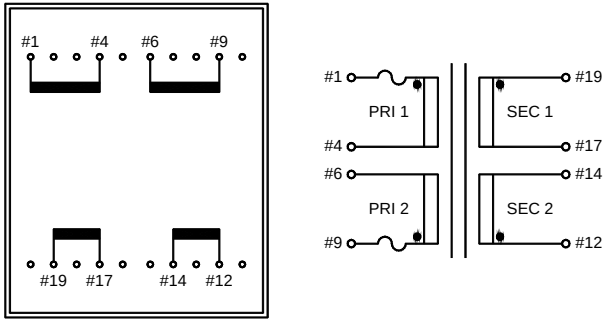
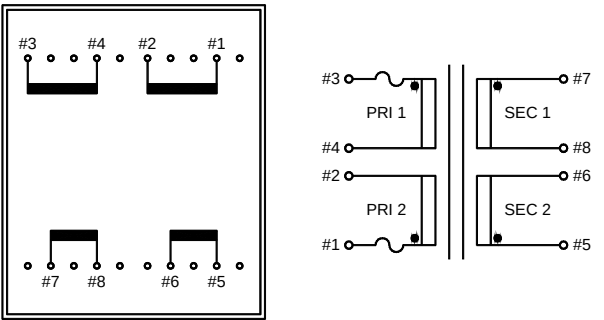
Series	Dimension (mm)										
	A	B	C	D	E	F	G	H	I	J	K
35 (VA)	70	84.5	37.5	4.0	5.0	7.0	53.0	Ø1.0	60	75	Ø3.2
40 (VA)	70	84.5	37.5	4.0	5.0	7.0	53.0	Ø1.0	60	75	Ø3.2
42 (VA)	70	84.5	37.5	4.0	5.0	7.0	53.0	Ø1.0	60	75	Ø3.2
48 (VA)	70	84.5	37.5	4.0	5.0	7.0	53.0	Ø1.0	60	75	Ø3.2
52 (VA)	70	84.5	47.5	4.0	5.0	7.0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

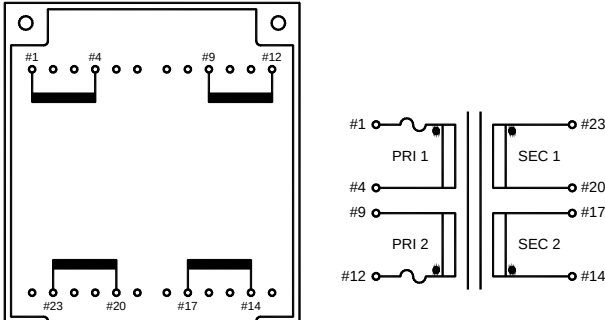
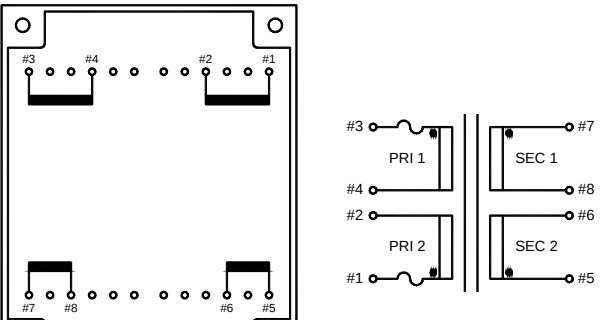
E TYPE	U TYPE
Bottom View	Bottom View
Input Voltage : 115V/60Hz (at Pin 1 – Pin 3) (Pin 1 & Pin 7 short, Pin 3 & Pin 5 short) 230V/50Hz (at Pin 1 – Pin 5) (Pin 3 & Pin 7 short) Output Voltage : (Pin 10 – 12 & Pin 14 – 16)	Input Voltage : 115V/60Hz (at Pin 1 – Pin 2) (Pin 1 & Pin 3 short, Pin 2 & Pin 4 short) 230V/50Hz (at Pin 1 – Pin 4) (Pin 2 & Pin 3 short) Output Voltage : (Pin 5 – 6 & Pin 7 – 8)

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

TL39E & TL39U Series

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

TL48E & TL48U Series

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

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

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

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

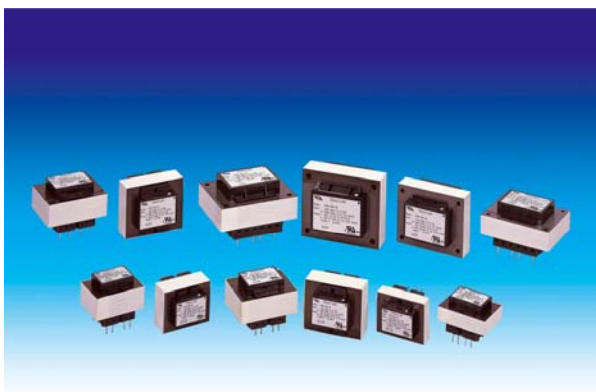
	TL39X-115-0078	2 x 115	230V @78mA	115V @156mA
24VA	TL39X-005-2400	2 x 115	10V @2400mA	5V @4800mA
	TL39X-006-2000	2 x 115	12V @2000mA	6V @4000mA
	TL39X-008-1500	2 x 115	16V @1500mA	8V @3000mA
	TL39X-009-1333	2 x 115	18V @1333mA	9V @2666mA
	TL39X-010-1200	2 x 115	20V @1200mA	10V @2400mA
	TL39X-012-1000	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

Series	Part Number	Input Voltage (V)	Secondary RMS Rating	
			Series	Parallel
35VA	TL48X-005-3500	2 x 115	10V @3500mA	5V @7000mA
	TL48X-006-2916	2 x 115	12V @2916mA	6V @5832mA
	TL48X-008-2187	2 x 115	16V @2187mA	8V @4374mA
	TL48X-009-1944	2 x 115	18V @1944mA	9V @3844mA
	TL48X-010-1750	2 x 115	20V @1750mA	10V @3500mA
	TL48X-012-1458	2 x 115	24V @1458mA	12V @2916mA
	TL48X-015-1166	2 x 115	30V @1166mA	15V @2332mA
	TL48X-017-1029	2 x 115	34V @1029mA	17V @2058mA
	TL48X-018-0972	2 x 115	36V @927mA	18V @1854mA
	TL48X-020-0875	2 x 115	40V @875mA	20V @1750mA
	TL48X-021-0833	2 x 115	42V @833mA	21V @1666mA
	TL48X-024-0729	2 x 115	48V @729mA	24V @1458mA
	TL48X-028-0625	2 x 115	56V @625mA	28V @1250mA
40VA	TL48X-005-4000	2 x 115	10V @4000mA	5V @8000mA
	TL48X-006-3333	2 x 115	12V @3333mA	6V @6666mA
	TL48X-008-2500	2 x 115	16V @2500mA	8V @5000mA
	TL48X-009-2222	2 x 115	18V @2222mA	9V @4444mA
	TL48X-010-2000	2 x 115	20V @2000mA	10V @4000mA
	TL48X-012-1666	2 x 115	24V @1666mA	12V @3332mA
	TL48X-015-1333	2 x 115	30V @1333mA	15V @2666mA
	TL48X-017-1176	2 x 115	34V @1176mA	17V @2352mA
	TL48X-018-1111	2 x 115	36V @1111mA	18V @2222mA
	TL48X-020-1000	2 x 115	40V @1000mA	20V @2000mA
	TL48X-021-0952	2 x 115	42V @952mA	21V @1904mA
	TL48X-024-0833	2 x 115	48V @833mA	24V @1666mA
	TL48X-028-0714	2 x 115	56V @714mA	28V @1428mA
42VA	TL48X-005-4200	2 x 115	10V @4200mA	5V @8400mA
	TL48X-006-3500	2 x 115	12V @3500mA	6V @7000mA
	TL48X-008-2625	2 x 115	16V @2625mA	8V @5250mA
	TL48X-009-2333	2 x 115	18V @2333mA	9V @4666mA

	TL48X-010-2100	2 x 115	20V @2100mA	10V @4200mA
	TL48X-012-1750	2 x 115	24V @1750mA	12V @3500mA
	TL48X-015-1400	2 x 115	30V @1400mA	15V @2800mA
	TL48X-017-1235	2 x 115	34V @1235mA	17V @2470mA
	TL48X-018-1166	2 x 115	36V @1166mA	18V @2332mA
	TL48X-020-1050	2 x 115	40V @1050mA	20V @2100mA
	TL48X-021-1000	2 x 115	42V @1000mA	21V @2000mA
	TL48X-024-0875	2 x 115	48V @875mA	24V @1750mA
	TL48X-028-0750	2 x 115	56V @750mA	28V @1500mA
48VA	TL48X-005-4800	2 x 115	10V @4800mA	5V @9600mA
	TL48X-006-4000	2 x 115	12V @4000mA	6V @8000mA
	TL48X-008-3000	2 x 115	16V @3000mA	8V @6000mA
	TL48X-009-2666	2 x 115	18V @2666mA	9V @5332mA
	TL48X-010-2400	2 x 115	20V @2400mA	10V @4800mA
	TL48X-012-2000	2 x 115	24V @2000mA	12V @4000mA
	TL48X-015-1600	2 x 115	30V @1600mA	15V @3200mA
	TL48X-017-1412	2 x 115	34V @1412mA	17V @2824mA
	TL48X-018-1333	2 x 115	36V @1333mA	18V @2666mA
	TL48X-020-1200	2 x 115	40V @1200mA	20V @2400mA
	TL48X-021-1143	2 x 115	42V @1143mA	21V @2286mA
	TL48X-024-1000	2 x 115	48V @1000mA	24V @2000mA
	TL48X-028-0857	2 x 115	56V @857mA	28V @1714mA

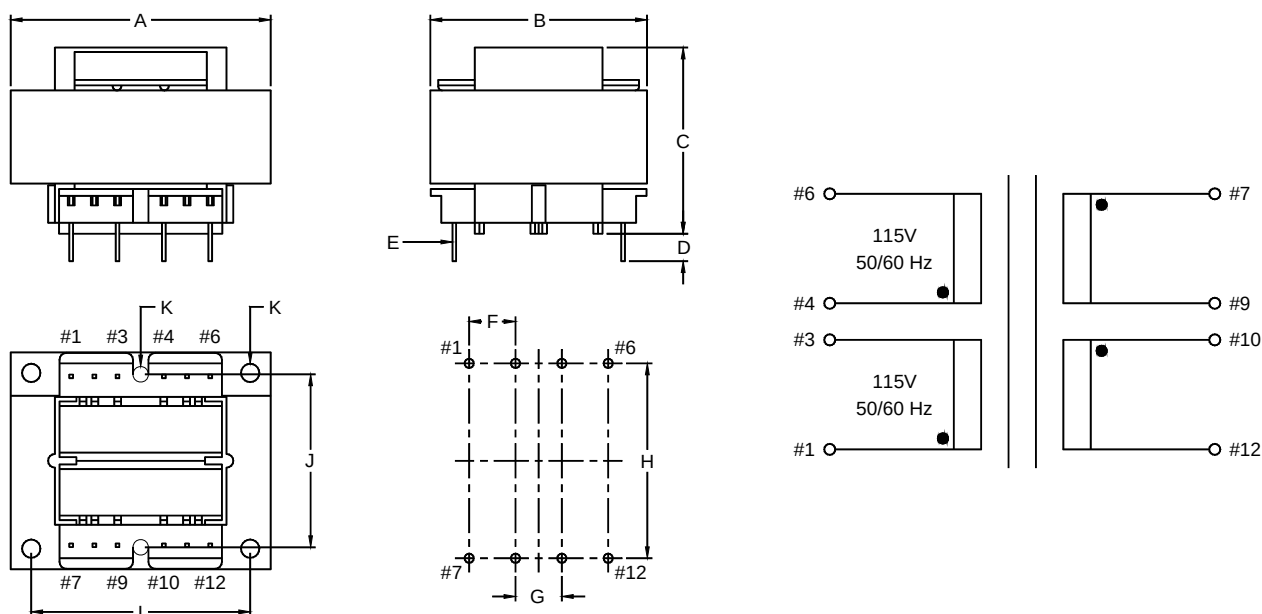
Series	Part Number	Input Voltage (V)	Secondary RMS Rating	
			Series	Parallel
52VA	TL48X-005-5200	2 x 115	10V @5200mA	5V @10400mA
	TL48X-006-4333	2 x 115	12V @4333mA	6V @8666mA
	TL48X-008-3250	2 x 115	16V @3250mA	8V @6500mA
	TL48X-009-2888	2 x 115	18V @2888mA	9V @5776mA
	TL48X-010-2600	2 x 115	20V @2600mA	10V @5200mA
	TL48X-012-2166	2 x 115	24V @2166mA	12V @4332mA
	TL48X-015-1733	2 x 115	30V @1733mA	15V @3466mA
	TL48X-017-1529	2 x 115	34V @1529mA	17V @3058mA
	TL48X-018-1444	2 x 115	36V @1444mA	18V @2888mA
	TL48X-020-1300	2 x 115	40V @1300mA	20V @2600mA
	TL48X-021-1238	2 x 115	42V @1238mA	21V @2476mA
	TL48X-024-1083	2 x 115	48V @1083mA	24V @2166mA
	TL48X-028-0928	2 x 115	56V @928mA	28V @1856mA
56VA	TL48X-005-5600	2 x 115	10V @5600mA	5V @11200mA
	TL48X-006-4666	2 x 115	12V @4666mA	6V @9332mA
	TL48X-008-3500	2 x 115	16V @3500mA	8V @7000mA
	TL48X-009-3111	2 x 115	18V @3111mA	9V @6222mA
	TL48X-010-2800	2 x 115	20V @2800mA	10V @5600mA
	TL48X-012-2333	2 x 115	24V @2333mA	12V @4666mA
	TL48X-015-1866	2 x 115	30V @1866mA	15V @3732mA
	TL48X-017-1647	2 x 115	34V @1647mA	17V @3294mA
	TL48X-018-1555	2 x 115	36V @1555mA	18V @3110mA
	TL48X-020-1400	2 x 115	40V @1400mA	20V @2800mA
	TL48X-021-1333	2 x 115	42V @1333mA	21V @2666mA
	TL48X-024-1166	2 x 115	48V @1166mA	24V @2332mA
	TL48X-028-1000	2 x 115	56V @1000mA	28V @2000mA
60VA	TL48X-005-6000	2 x 115	10V @6000mA	5V @12000mA
	TL48X-006-5000	2 x 115	12V @5000mA	6V @10000mA
	TL48X-008-3750	2 x 115	16V @3750mA	8V @7500mA
	TL48X-009-3333	2 x 115	18V @3333mA	9V @6666mA
	TL48X-010-3000	2 x 115	20V @3000mA	10V @6000mA
	TL48X-012-2500	2 x 115	24V @2500mA	12V @5000mA
	TL48X-015-2000	2 x 115	30V @2000mA	15V @4000mA
	TL48X-017-1764	2 x 115	34V @1764mA	17V @3528mA
	TL48X-018-1666	2 x 115	36V @1666mA	18V @3332mA
	TL48X-020-1500	2 x 115	40V @1500mA	20V @3000mA
	TL48X-021-1428	2 x 115	42V @1428mA	21V @2856mA

	TL48X-024-1250	2 x 115	48V @1250mA	24V @2500mA
	TL48X-028-1071	2 x 115	56V @1071mA	28V @2142mA
70VA	TL48X-005-7000	2 x 115	10V @7000mA	5V @14000mA
	TL48X-006-5833	2 x 115	12V @5833mA	6V @11666mA
	TL48X-008-4375	2 x 115	16V @4375mA	8V @8750mA
	TL48X-009-3888	2 x 115	18V @3888mA	9V @7776mA
	TL48X-010-3500	2 x 115	20V @3500mA	10V @7000mA
	TL48X-012-2916	2 x 115	24V @2916mA	12V @5832mA
	TL48X-015-2333	2 x 115	30V @2333mA	15V @4666mA
	TL48X-017-2058	2 x 115	34V @2058mA	17V @4116mA
	TL48X-018-1944	2 x 115	36V @1944mA	18V @3888mA
	TL48X-020-1750	2 x 115	40V @1750mA	20V @3500mA
	TL48X-021-1666	2 x 115	42V @1666mA	21V @3332mA
	TL48X-024-1458	2 x 115	48V @1458mA	24V @2916mA
	TL48X-028-1250	2 x 115	56V @1250mA	28V @2500mA



TL88 Series

- Power – 2.5VA to 56VA
- Dielectric Strength – 4000Vrms
- Primary – Dual primary (115V/230V 50/60Hz)
- Secondary – Series or parallel
- Insulation Class – Class F (155°C)
- Safety Approvals – UL506, CSA C22.2 #66, TUV / EN60950 & CE



Product Series	Dimension (mm)										
	A	B	C	D	E	F	G	H	I	J	K
2.5 (VA)	41.0	33.0	28.6	4.5	SQ0.64	5.08	6.35	25.4	--	27	2.8
5.0 (VA)	41.0	33.0	34.9	4.5	SQ0.64	5.08	10.16	25.4	--	27	2.8
10 (VA)	48.0	40.0	34.9	4.5	SQ0.8	5.08	10.16	29.0	--	32	3.0
20 (VA)	57.0	47.5	41.3	4.5	SQ0.8	10.16	10.16	37.0	--	38	3.5
30 (VA)	66.0	55.0	39.7	4.5	SQ1.0	14.0	7.0	42.7	56.0	44.0	4.0
56 (VA)	76.0	63.5	46.0	4.5	SQ1.0	15.2	7.6	48.3	64.0	50.8	4.5
Tolerance (mm)	±1.0	±1.0	±1.0	±1.0	±0.1	±0.2	±0.3	±0.5	±0.5	±0.5	max.

Note : Dimension "E" is pin size, and dimension "K" is the maximum allowable screw size.

Product Series	Part Number	Input Voltage (V)	Secondary RMS Rating	
			Series	Parallel
2.5VA	TL88-025-10	2 x 115	10V C.T. @0.25A	5V @0.5A
	TL88-025-12	2 x 115	12.6V C.T. @0.2A	6.3V @0.4A
	TL88-025-16	2 x 115	16V C.T. @0.15A	8V @0.3A
	TL88-025-20	2 x 115	20V C.T. @0.12A	10V @0.25A
	TL88-025-24	2 x 115	24V C.T. @0.1A	12V @0.2A
	TL88-025-28	2 x 115	28V C.T. @0.09A	14V @0.18A
	TL88-025-36	2 x 115	36V C.T. @0.07A	18V @0.14A
5.0VA				

	TL88-050-10	2 x 115	10V C.T. @0.5A	5V @1.0A
	TL88-050-12	2 x 115	12.6V C.T. @0.4A	6.3V @0.8A
	TL88-050-16	2 x 115	16V C.T. @0.31A	8V @0.62A
	TL88-050-20	2 x 115	20V C.T. @0.25A	10V @0.5A
	TL88-050-24	2 x 115	24V C.T. @0.21A	12V @0.42A
	TL88-050-28	2 x 115	28V C.T. @0.18A	14V @0.36A
	TL88-050-36	2 x 115	36V C.T. @0.14A	18V @0.28A
10VA	TL88-100-10	2 x 115	10V C.T. @1.0A	5V @2.0A
	TL88-100-12	2 x 115	12.6V C.T. @0.8A	6.3V @1.6A
	TL88-100-16	2 x 115	16V C.T. @0.62A	8V @1.25A
	TL88-100-20	2 x 115	20V C.T. @0.5A	10V @1.0A
	TL88-100-24	2 x 115	24V C.T. @0.42A	12V @0.83A
	TL88-100-28	2 x 115	28V C.T. @0.36A	14V @0.72A
	TL88-100-36	2 x 115	36V C.T. @0.28A	18V @0.56A
20VA	TL88-200-10	2 x 115	10V C.T. @2.0A	5V @4.0A
	TL88-200-12	2 x 115	12.6V C.T. @1.6A	6.3V @3.2A
	TL88-200-16	2 x 115	16V C.T. @1.25A	8V @2.5A
	TL88-200-20	2 x 115	20V C.T. @1.0A	10V @2.0A
	TL88-200-24	2 x 115	24V C.T. @0.83A	12V @1.66A
	TL88-200-28	2 x 115	28V C.T. @0.72A	14V @1.44A
	TL88-200-36	2 x 115	36V C.T. @0.56A	18V @1.12A
30VA	TL88-300-10	2 x 115	10V C.T. @3.0A	5V @6.0A
	TL88-300-12	2 x 115	12.6V C.T. @2.4A	6.3V @4.8A
	TL88-300-16	2 x 115	16V C.T. @1.9A	8V @3.8A
	TL88-300-20	2 x 115	20V C.T. @1.5A	10V @3.0A
	TL88-300-24	2 x 115	24V C.T. @1.25A	12V @2.5A
	TL88-300-28	2 x 115	28V C.T. @1.06A	14V @2.12A
	TL88-300-36	2 x 115	36V C.T. @0.82A	18V @1.64A
56VA	TL88-560-10	2 x 115	10V C.T. @5.6A	5V @11.2A
	TL88-560-12	2 x 115	12.6V C.T. @4.4A	6.3V @8.8A
	TL88-560-16	2 x 115	16V C.T. @3.5A	8V @7.0A
	TL88-560-20	2 x 115	20V C.T. @2.8A	10V @5.6A
	TL88-560-24	2 x 115	24V C.T. @2.33A	12V @4.66A
	TL88-560-28	2 x 115	28V C.T. @2.0A	14V @4.0A
	TL88-560-36	2 x 115	36V C.T. @1.56A	18V @3.12A

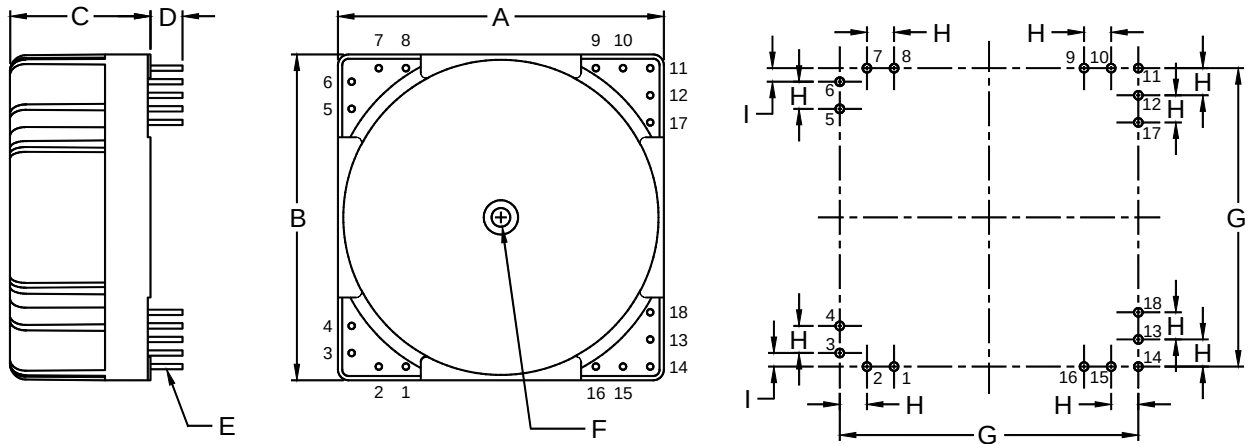
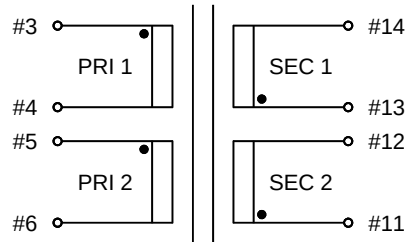
* ta = 60°C for 2.5 & 5.0VA Series

* ta = 40°C for 10, 20, 30 & 56VA Series

TL99 Series



- Low magnetic stray field emissions
- Low standby current
- Low profile
- Magnetic shielded
- Fully encapsulated
- High efficiency
- High ambient operating temperature (+60°C maximum)
- Power – 1.6VA to 85VA
- Primary – Dual primary (115V/230V 50/60Hz)
- Secondary – Series or parallel
- Dielectric Strength – 4000Vrms
- Insulation Class – Class F (155°C)
- Safety Approved – UL506, CUL C22.2 #66-1988, UL1411, CUL C22.2 #1-98, TUV / EN60950 / EN60065 / CE



Product Series	Dimensions (mm)								
	A	B	C	D	E	F	G	H	I
1.6 (VA)	40.0	40.0	18.5	4.0	SQ0.64	φ3.5	35.56	5.08	2.54
3.2 (VA)	45.0	45.0	19.5	4.0	SQ0.64	φ3.5	40.64	5.08	2.54
5.0 (VA)	50.0	50.0	19.5	4.0	SQ0.64	φ3.5	45.72	5.08	2.54
7.0 (VA)	50.0	50.0	23.1	4.0	SQ0.64	φ3.5	45.72	5.08	2.54
10 (VA)	56.0	56.0	26.0	4.0	SQ0.8	φ3.5	50.80	5.08	2.54
15 (VA)	61.0	61.0	26.3	4.0	SQ0.8	φ3.5	55.88	5.08	2.54
25 (VA)	61.0	61.0	37.5	4.0	SQ0.8	φ3.5	55.88	5.08	2.54
35 (VA)	75.0	75.0	37.5	4.0	SQ0.8	φ6.0	66.04	5.08	2.54
50 (VA)	82.4	82.4	37.5	4.0	SQ1.0	φ6.0	76.02	5.08	2.54
65 (VA)	92.0	92.0	39.0	4.0	SQ1.0	φ7.0	83.82	5.08	2.54
85 (VA)	100.0	100.0	42.0	4.0	SQ1.0	φ7.0	91.44	5.08	2.54

Note: 1) Unused pins are omitted for standard parts. Unused pins can be provided on request.

2) Pin positions #1, 8, 9, 16, 17 & 18 are invalid for the 1.6VA series.

3) 1.6VA to 25VA series – blind center hole; 35VA to 85VA series – through center hole.

Product Series	Part Number	Input Voltage (V)	Secondary RMS Rating	
			Series	Parallel
1.6VA	TL99-0016-012	2 x 115	12V C.T. @133mA	6V @266mA
	TL99-0016-014	2 x 115	14V C.T. @114mA	7V @228mA
	TL99-0016-018	2 x 115	18V C.T. @89mA	9V @178mA
	TL99-0016-024	2 x 115	24V C.T. @67mA	12V @134mA
	TL99-0016-030	2 x 115	30V C.T. @53mA	15V @106mA
	TL99-0016-036	2 x 115	36V C.T. @44mA	18V @88mA
	TL99-0016-044	2 x 115	44V C.T. @36mA	22V @72mA
	TL99-0016-048	2 x 115	48V C.T. @33mA	24V @66mA
3.2VA	TL99-0032-012	2 x 115	12V C.T. @266mA	6V @532mA
	TL99-0032-014	2 x 115	14V C.T. @229mA	7V @458mA
	TL99-0032-018	2 x 115	18V C.T. @178mA	9V @356mA
	TL99-0032-024	2 x 115	24V C.T. @133mA	12V @266mA
	TL99-0032-030	2 x 115	30V C.T. @107mA	15V @214mA
	TL99-0032-036	2 x 115	36V C.T. @89mA	18V @178mA
	TL99-0032-044	2 x 115	44V C.T. @73mA	22V @146mA
	TL99-0032-048	2 x 115	48V C.T. @66mA	24V @132mA
5.0VA	TL99-0050-012	2 x 115	12V C.T. @416mA	6V @832mA
	TL99-0050-014	2 x 115	14V C.T. @357mA	7V @714mA
	TL99-0050-018	2 x 115	18V C.T. @278mA	9V @556mA
	TL99-0050-024	2 x 115	24V C.T. @208mA	12V @416mA
	TL99-0050-030	2 x 115	30V C.T. @167mA	15V @334mA
	TL99-0050-036	2 x 115	36V C.T. @139mA	18V @278mA
	TL99-0050-044	2 x 115	44V C.T. @114mA	22V @228mA
	TL99-0050-048	2 x 115	48V C.T. @104mA	24V @208mA
7.0VA	TL99-0070-012	2 x 115	12V C.T. @583mA	6V @1166mA
	TL99-0070-014	2 x 115	14V C.T. @500mA	7V @1000mA
	TL99-0070-018	2 x 115	18V C.T. @389mA	9V @778mA
	TL99-0070-024	2 x 115	24V C.T. @292mA	12V @584mA
	TL99-0070-030	2 x 115	30V C.T. @233mA	15V @466mA
	TL99-0070-036	2 x 115	36V C.T. @194mA	18V @388mA
	TL99-0070-044	2 x 115	44V C.T. @159mA	22V @318mA
	TL99-0070-048	2 x 115	48V C.T. @145mA	24V @290mA
10VA	TL99-0100-012	2 x 115	12V C.T. @833mA	6V @1666mA
	TL99-0100-014	2 x 115	14V C.T. @714mA	7V @1428mA
	TL99-0100-018	2 x 115	18V C.T. @556mA	9V @1112mA
	TL99-0100-024	2 x 115	24V C.T. @417mA	12V @834mA
	TL99-0100-030	2 x 115	30V C.T. @333mA	15V @666mA
	TL99-0100-036	2 x 115	36V C.T. @278mA	18V @556mA
	TL99-0100-044	2 x 115	44V C.T. @227mA	22V @454mA
	TL99-0100-048	2 x 115	48V C.T. @208mA	24V @416mA
15VA	TL99-0150-012	2 x 115	12V C.T. @1250mA	6V @2500mA
	TL99-0150-014	2 x 115	14V C.T. @1071mA	7V @2142mA
	TL99-0150-018	2 x 115	18V C.T. @833mA	9V @1666mA
	TL99-0150-024	2 x 115	24V C.T. @625mA	12V @1250mA
	TL99-0150-030	2 x 115	30V C.T. @500mA	15V @1000mA
	TL99-0150-036	2 x 115	36V C.T. @417mA	18V @834mA
	TL99-0150-044	2 x 115	44V C.T. @341mA	22V @682mA
	TL99-0150-048	2 x 115	48V C.T. @312mA	24V @624mA

Product Series	Part Number	Input Voltage (V)	Secondary RMS Rating	
			Series	Parallel
25VA	TL99-0250-012	2 x 115	12V C.T. @2083mA	6V @4166mA
	TL99-0250-014	2 x 115	14V C.T. @1785mA	7V @3570mA
	TL99-0250-018	2 x 115	18V C.T. @1377mA	9V @2754mA
	TL99-0250-024	2 x 115	24V C.T. @1041mA	12V @2082mA
	TL99-0250-030	2 x 115	30V C.T. @832mA	15V @1664mA
	TL99-0250-036	2 x 115	36V C.T. @694mA	18V @1388mA
	TL99-0250-044	2 x 115	44V C.T. @568mA	22V @1136mA
	TL99-0250-048	2 x 115	48V C.T. @520mA	24V @1040mA
35VA	TL99-0350-012	2 x 115	12V C.T. @2916mA	6V @5832mA
	TL99-0350-014	2 x 115	14V C.T. @2500mA	7V @5000mA
	TL99-0350-018	2 x 115	18V C.T. @1944mA	9V @3888mA
	TL99-0350-024	2 x 115	24V C.T. @1458mA	12V @2916mA
	TL99-0350-030	2 x 115	30V C.T. @1167mA	15V @2334mA
	TL99-0350-036	2 x 115	36V C.T. @972mA	18V @1944mA
	TL99-0350-044	2 x 115	44V C.T. @795mA	22V @1590mA
	TL99-0350-048	2 x 115	48V C.T. @729mA	24V @1458mA
50VA	TL99-0500-012	2 x 115	12V C.T. @4166mA	6V @8332mA
	TL99-0500-014	2 x 115	14V C.T. @3571mA	7V @7142mA
	TL99-0500-018	2 x 115	18V C.T. @2777mA	9V @5554mA
	TL99-0500-024	2 x 115	24V C.T. @2083mA	12V @4166mA
	TL99-0500-030	2 x 115	30V C.T. @1666mA	15V @3332mA
	TL99-0500-036	2 x 115	36V C.T. @1388mA	18V @2776mA
	TL99-0500-044	2 x 115	44V C.T. @1136mA	22V @2272mA
	TL99-0500-048	2 x 115	48V C.T. @1041mA	24V @2082mA
65VA	TL99-0650-012	2 x 115	12V C.T. @5416mA	6V @10832mA
	TL99-0650-014	2 x 115	14V C.T. @4642mA	7V @9284mA
	TL99-0650-018	2 x 115	18V C.T. @3611mA	9V @7222mA
	TL99-0650-024	2 x 115	24V C.T. @2708mA	12V @5416mA
	TL99-0650-030	2 x 115	30V C.T. @2166mA	15V @4322mA
	TL99-0650-036	2 x 115	36V C.T. @1805mA	18V @3610mA
	TL99-0650-044	2 x 115	44V C.T. @1477mA	22V @2954mA
	TL99-0650-048	2 x 115	48V C.T. @1354mA	24V @2708mA
85VA	TL99-0850-012	2 x 115	12V C.T. @7083mA	6V @14166mA
	TL99-0850-014	2 x 115	14V C.T. @6071mA	7V @12142mA
	TL99-0850-018	2 x 115	18V C.T. @4722mA	9V @9444mA
	TL99-0850-024	2 x 115	24V C.T. @3541mA	12V @7082mA
	TL99-0850-030	2 x 115	30V C.T. @2833mA	15V @5666mA
	TL99-0850-036	2 x 115	36V C.T. @2361mA	18V @4722mA
	TL99-0850-044	2 x 115	44V C.T. @1931mA	22V @3862mA
	TL99-0850-048	2 x 115	48V C.T. @1770mA	24V @3540mA



- Power – 0.6VA to 36VA
- Dielectric Strength – 3750Vrms
- High ambient operation temperature (+70°C maximum)
- Primary (115V 60Hz or 230V 50Hz)
- Secondary – Single or Dual
- Insulation Class – Class B (130°C)
- Safety Approvals – UL506, CSA C22.2 #6, TUV / EN61558, CE

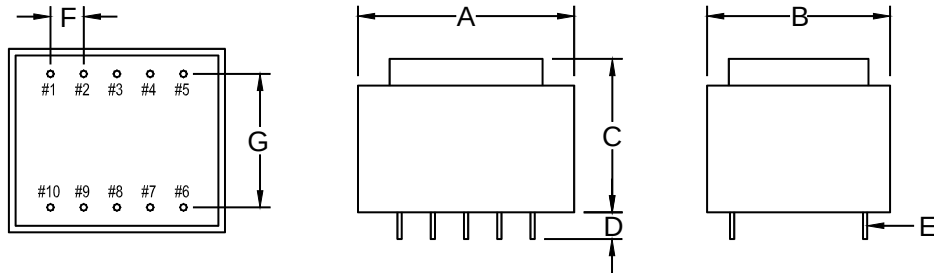
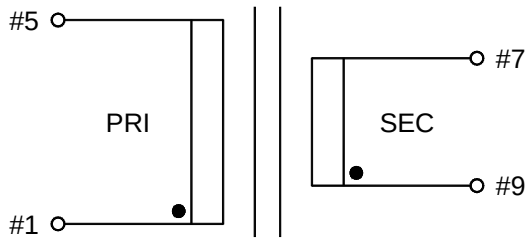
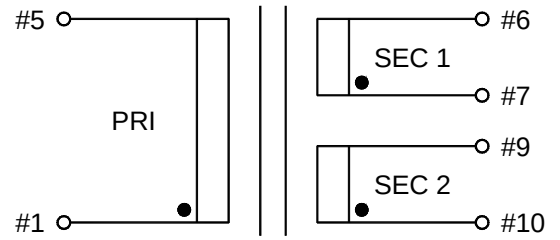


Fig A

Empty pin shall be omitted if necessary.



Single Output



Double Output

Series	Dimension (mm)						
	A	B	C	D	E	F	G
0.6 (VA)	32.6	27.6	15.2	4.0	0.64x0.64	5.0	20.0
1.0 (VA)	32.3	27.3	22.8	4.0	0.64x0.64	5.0	20.0
1.2 (VA)	32.3	27.3	22.8	4.0	0.64x0.64	5.0	20.0
1.5 (VA)	32.3	27.3	22.8	4.0	0.64x0.64	5.0	20.0
1.8 (VA)	32.6	27.6	27.8	4.0	0.64x0.64	5.0	20.0
2.1 (VA)	32.6	27.6	27.8	4.0	0.64x0.64	5.0	20.0
2.3 (VA)	32.6	27.6	29.8	4.0	0.64x0.64	5.0	20.0
2.4 (VA)	32.6	27.6	27.8	4.0	0.64x0.64	5.0	20.0
2.7 (VA)	32.6	27.6	29.8	4.0	0.64x0.64	5.0	20.0
2.8 (VA)	32.6	27.6	29.8	4.0	0.64x0.64	5.0	20.0
Tolerance (mm)	±0.5	±0.5	±0.5	±1.0	±0.1	±0.2	±0.5

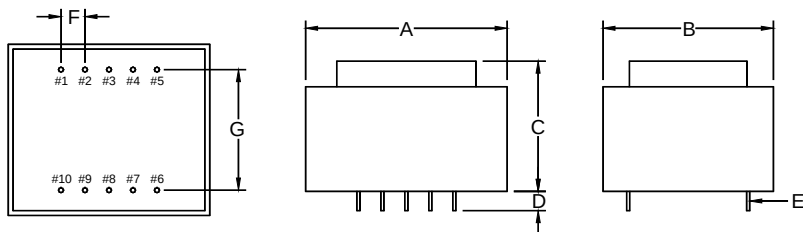


Fig B

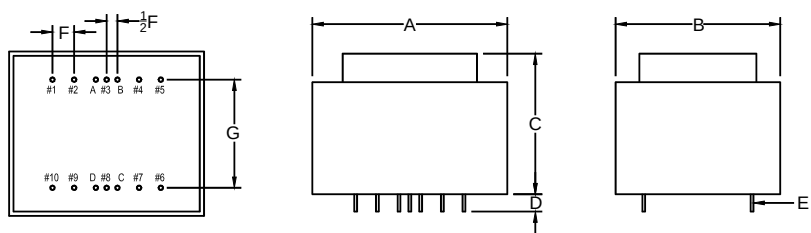


Fig C

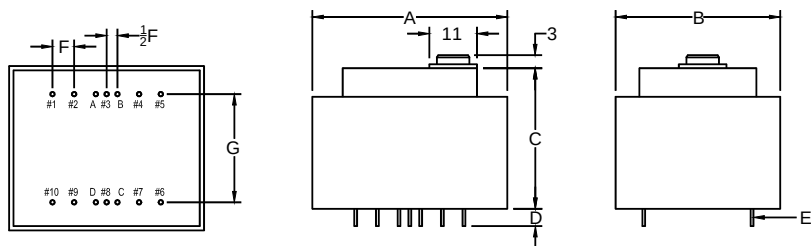


Fig D

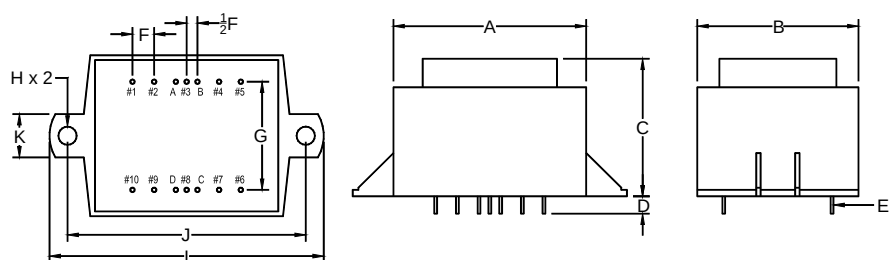
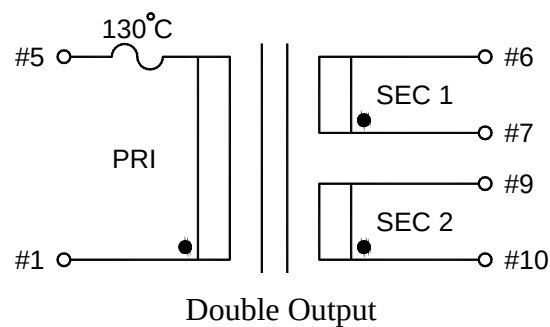
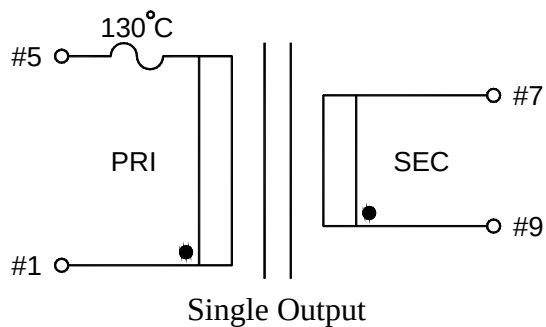


Fig E

Empty pin shall be omitted if necessary.



Series	Dimension (mm)											Fig
	A	B	C	D	E	F	G	H	I	J	K	
3.2 (VA)	41.5	35.5	28.5	4.0	0.64x0.64	5.0	25.0	--	--	--	--	B
4.0 (VA)	41.5	35.5	28.5	4.0	0.64x0.64	5.0	25.0	--	--	--	--	
5.0 (VA)	45.5	38.5	33.5	4.0	0.64x0.64	5.0	25.0	4.2	64.0	55.0	10.0	C, D, E
Tolerance (mm)	Max.	Max.	Max.	±1.0	±0.1	±0.2	±0.5	±0.2	Max	±0.5	±0.5	

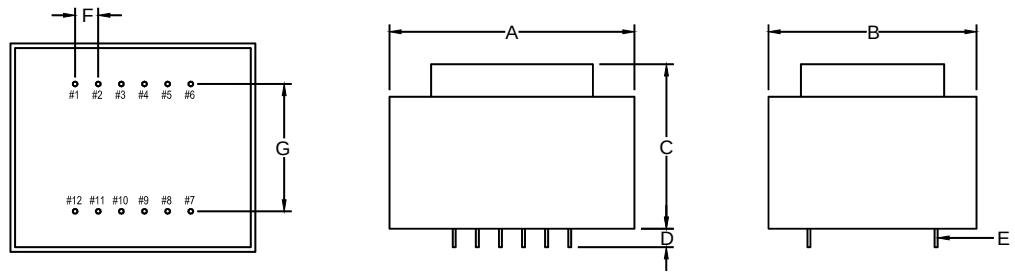


Fig F

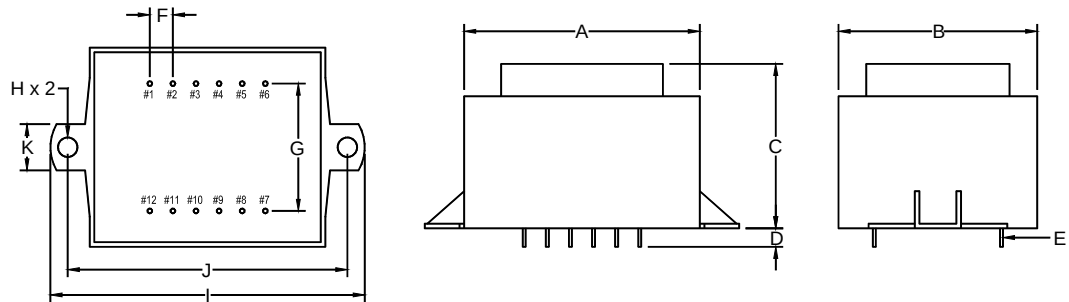


Fig G

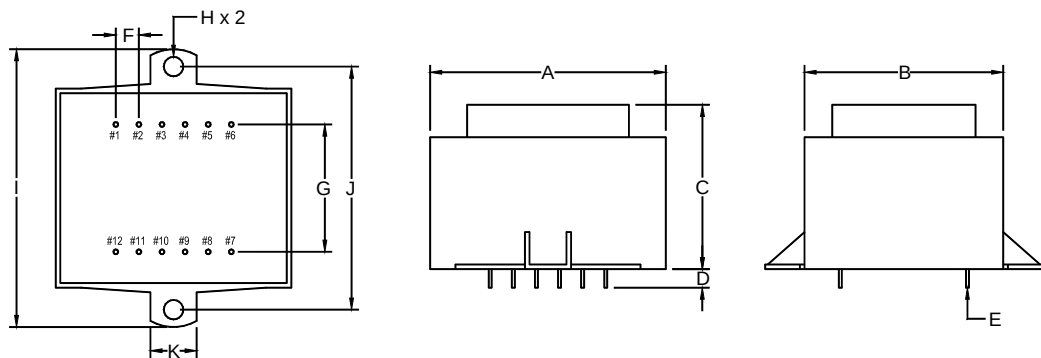
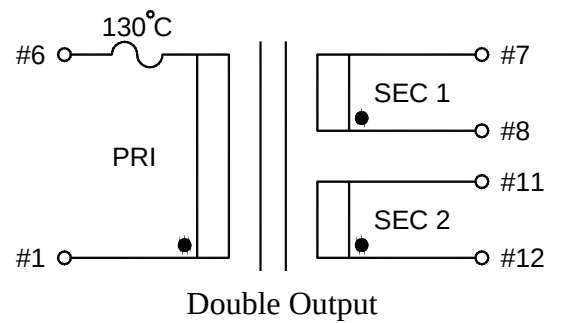
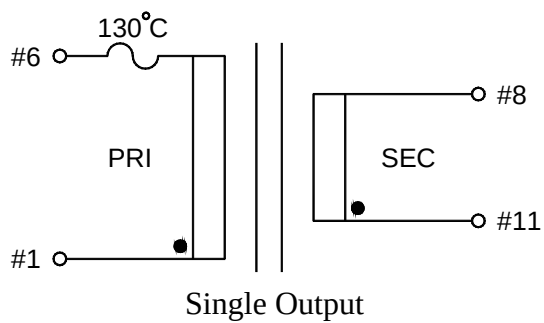


Fig H

Empty pin shall be omitted if necessary.



Series	Dimension (mm)										
	A	B	C	D	E	F	G	H	I	J	K
8.0 (VA)	53.0	45.0	35.5	4.0	0.64x0.64	5.0	27.5	Ø4.2	67.0	60.5	10.0
10 (VA)	53.0	45.0	35.5	4.0	0.64x0.64	5.0	27.5	Ø4.2	59.0	52.5	10.0
Tolerance (mm)	Max.	Max.	Max.	±1.0	±0.1	±0.2	±0.5	±0.2	Max.	±0.5	±0.5

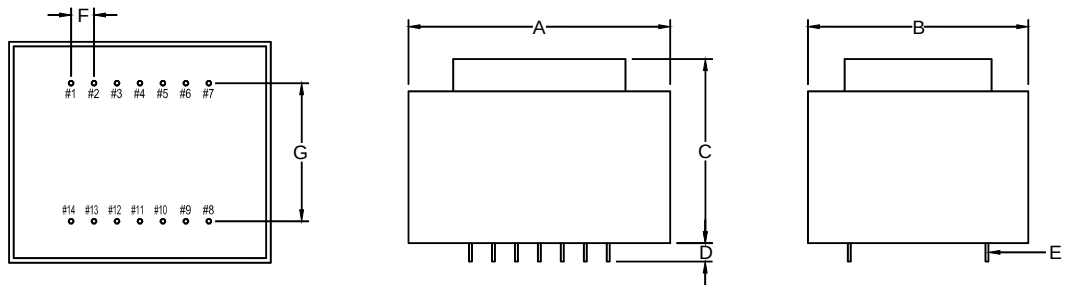


Fig I

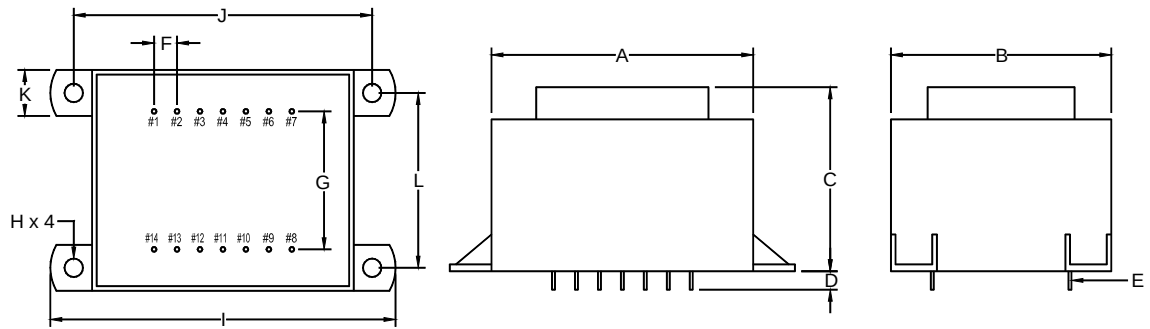
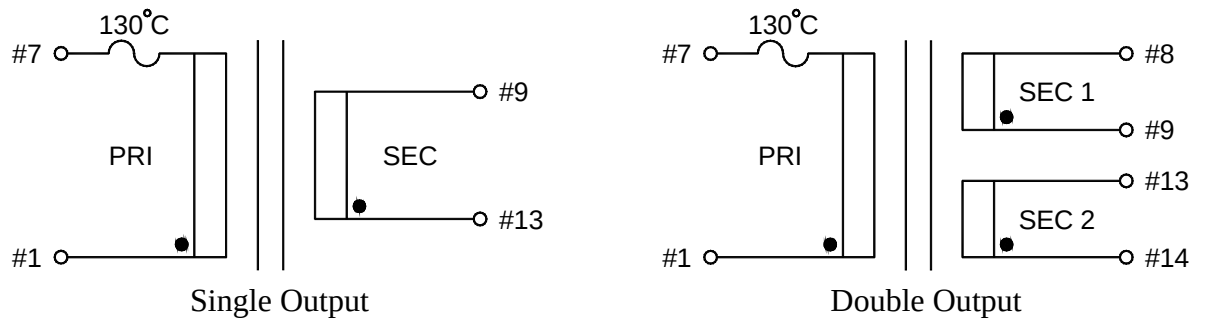


Fig J

Empty pin shall be omitted if necessary.



Series	Dimension (mm)											
	A	B	C	D	E	F	G	H	I	J	K	L
16 (VA)	58.5	49.5	40.0	4.0	0.64x0.64	5.0	30.0	Ø4.2	76.5	65.0	10.0	37.5
Tolerance (mm)	Max.	Max.	Max.	±1.0	±0.1	±0.2	±0.5	±0.2	Max.	±0.5	±0.5	±0.5

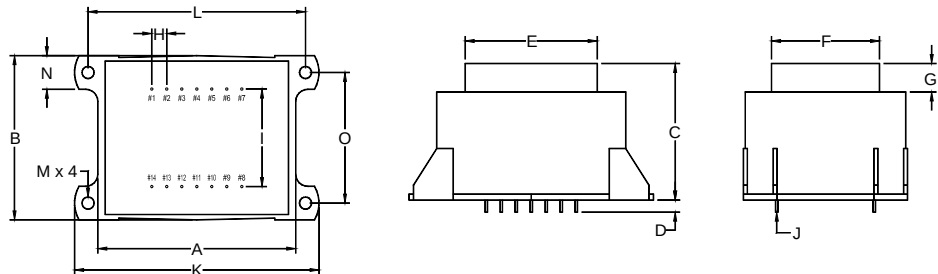
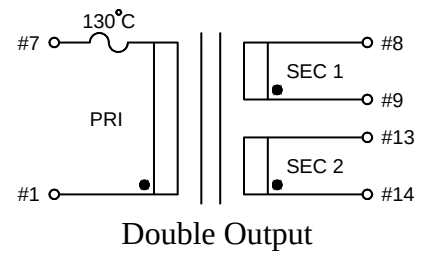
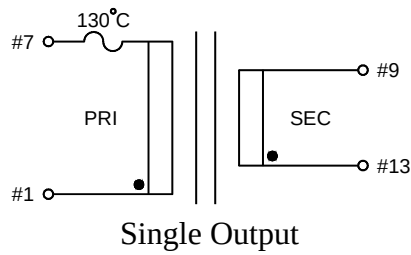


Fig K

Empty pin shall be omitted if necessary.



Series	Dimension (mm)											
	A	B	C	D	E	F	G	H	I	J	K	L
20 (VA)	67.0	56.0	46.5	4.0	Ø0.8	5.0	32.5	Ø4.2	82.5	72.5	11.2	43.5
22 (VA)	67.0	56.0	46.5	4.0	Ø0.8	5.0	32.5	Ø4.2	82.5	72.5	11.2	43.5
25 (VA)	67.0	56.0	46.5	4.0	Ø0.8	5.0	32.5	Ø4.2	82.5	72.5	11.2	43.5
Tolerance (mm)	Max.	Max.	Max.	±1.0	±0.1	±0.2	±0.5	±0.2	Max.	±0.5	±0.5	±0.5

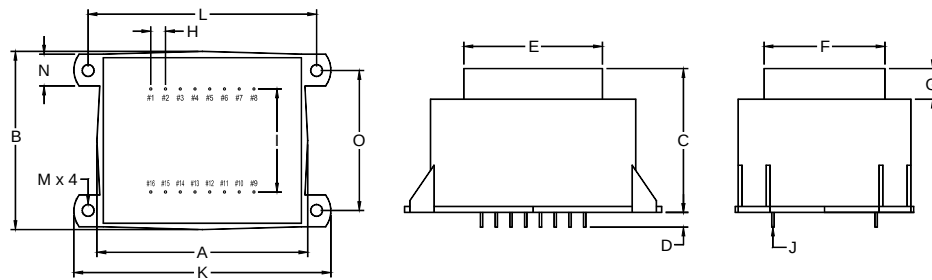
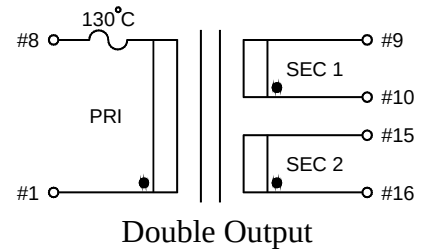
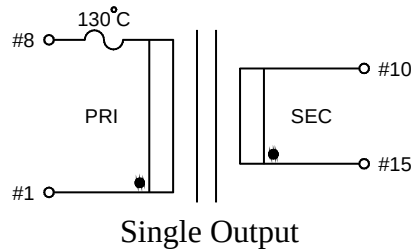


Fig L

Empty pin shall be omitted if necessary.



Series	Dimension (mm)											
	A	B	C	D	E	F	G	H	I	J	K	L
30 (VA)	72.5	61.0	50.0	4.0	Ø0.8	5.0	35.0	Ø4.2	88.0	77.5	10.8	47.5
36 (VA)	72.5	61.0	50.0	4.0	Ø0.8	5.0	35.0	Ø4.2	88.0	77.5	10.8	47.5
Tolerance (mm)	Max.	Max.	Max.	±1.0	±0.1	±0.2	±0.5	±0.2	Max.	±0.5	±0.5	±0.5

Series	Part Number 230V/50Hz	Part Number 115V/60Hz	Output Voltage (V)	Output Current (mA)	Part Number 230V/50Hz	Part Number 115V/60Hz	Output Voltage (V)	Output Current (mA)
0.6VA	TL30S-060-100	TL30US-060-100	6	100	TL30D-060-050	TL30UD-060-050	6 x 2	50
	TL30S-072-083	TL30US-072-083	7.2	83	TL30D-072-042	TL30UD-072-042	7.2 x 2	42
	TL30S-090-067	TL30US-090-067	9	67	TL30D-090-033	TL30UD-090-033	9 x 2	33
	TL30S-100-060	TL30US-100-060	10	60	TL30D-100-030	TL30UD-100-030	10 x 2	30
	TL30S-120-050	TL30US-120-050	12	50	TL30D-120-025	TL30UD-120-025	12 x 2	25
	TL30S-150-040	TL30US-150-040	15	40	TL30D-150-020	TL30UD-150-020	15 x 2	20
	TL30S-180-033	TL30US-180-033	18	33	TL30D-180-017	TL30UD-180-017	18 x 2	17
	TL30S-240-025	TL30US-240-025	24	25	TL30D-240-012	TL30UD-240-012	24 x 2	12
1.0VA	TL30S-060-167	TL30US-060-167	6	167	TL30D-060-083	TL30UD-060-083	6 x 2	83
	TL30S-072-139	TL30US-072-139	7.2	139	TL30D-072-069	TL30UD-072-069	7.2 x 2	69
	TL30S-090-111	TL30US-090-111	9	111	TL30D-090-056	TL30UD-090-056	9 x 2	56
	TL30S-100-100	TL30US-100-100	10	100	TL30D-100-050	TL30UD-100-050	10 x 2	50
	TL30S-120-083	TL30US-120-083	12	83	TL30D-120-042	TL30UD-120-042	12 x 2	42

	TL30S-150-067 TL30S-180-056 TL30S-240-042	TL30US-150-067 TL30US-180-056 TL30US-240-042	15 18 24	67 56 42	TL30D-150-033 TL30D-180-028 TL30D-240-021	TL30UD-150-033 TL30UD-180-028 TL30UD-240-021	15 x 2 18 x 2 24 x 2	33 28 21
1.2VA	TL30S-060-200 TL30S-072-167 TL30S-090-133 TL30S-100-120 TL30S-120-100 TL30S-150-080 TL30S-180-067 TL30S-240-050	TL30US-060-200 TL30US-072-167 TL30US-090-133 TL30US-100-120 TL30US-120-100 TL30US-150-080 TL30US-180-067 TL30US-240-050	6 7.2 9 10 12 15 18 24	200 167 133 120 100 80 67 50	TL30D-060-100 TL30D-072-083 TL30D-090-067 TL30D-100-060 TL30D-120-050 TL30D-150-040 TL30D-180-033 TL30D-240-025	TL30UD-060-100 TL30UD-072-083 TL30UD-090-067 TL30UD-100-060 TL30UD-120-050 TL30UD-150-040 TL30UD-180-033 TL30UD-240-025	6 x 2 7.2 x 2 9 x 2 10 x 2 12 x 2 15 x 2 18 x 2 24 x 2	100 83 67 60 50 40 33 25
1.5VA	TL30S-060-250 TL30S-072-208 TL30S-090-167 TL30S-100-150 TL30S-120-125 TL30S-150-100 TL30S-180-083 TL30S-240-062	TL30US-060-250 TL30US-072-208 TL30US-090-167 TL30US-100-150 TL30US-120-125 TL30US-150-100 TL30US-180-083 TL30US-240-062	6 7.2 9 10 12 15 18 24	250 208 167 150 125 100 83 62	TL30D-060-125 TL30D-072-104 TL30D-090-083 TL30D-100-075 TL30D-120-062 TL30D-150-050 TL30D-180-042 TL30D-240-031	TL30UD-060-125 TL30UD-072-104 TL30UD-090-083 TL30UD-100-075 TL30UD-120-062 TL30UD-150-050 TL30UD-180-042 TL30UD-240-031	6 x 2 7.2 x 2 9 x 2 10 x 2 12 x 2 15 x 2 18 x 2 24 x 2	125 104 83 75 62 50 42 31
1.8VA	TL30S-060-300 TL30S-072-250 TL30S-090-200 TL30S-100-180 TL30S-120-150 TL30S-150-120 TL30S-180-100 TL30S-240-076	TL30US-060-300 TL30US-072-250 TL30US-090-200 TL30US-100-180 TL30US-120-150 TL30US-150-120 TL30US-180-100 TL30US-240-076	6 7.2 9 10 12 15 18 24	300 250 200 180 150 120 100 76	TL30D-060-150 TL30D-072-125 TL30D-090-100 TL30D-100-090 TL30D-120-075 TL30D-150-060 TL30D-180-050 TL30D-240-038	TL30UD-060-150 TL30UD-072-125 TL30UD-090-100 TL30UD-100-090 TL30UD-120-075 TL30UD-150-060 TL30UD-180-050 TL30UD-240-038	6 x 2 7.2 x 2 9 x 2 10 x 2 12 x 2 15 x 2 18 x 2 24 x 2	150 125 100 90 75 60 50 38
2.1VA	TL30S-060-350 TL30S-072-292 TL30S-090-234 TL30S-100-210 TL30S-120-176 TL30S-150-140 TL30S-180-118 TL30S-240-088	TL30US-060-350 TL30US-072-292 TL30US-090-234 TL30US-100-210 TL30US-120-176 TL30US-150-140 TL30US-180-118 TL30US-240-088	6 7.2 9 10 12 15 18 24	350 292 234 210 176 140 118 88	TL30D-060-175 TL30D-072-146 TL30D-090-117 TL30D-100-105 TL30D-120-088 TL30D-150-070 TL30D-180-059 TL30D-240-044	TL30UD-060-175 TL30UD-072-146 TL30UD-090-117 TL30UD-100-105 TL30UD-120-088 TL30UD-150-070 TL30UD-180-059 TL30UD-240-044	6 x 2 7.2 x 2 9 x 2 10 x 2 12 x 2 15 x 2 18 x 2 24 x 2	175 146 117 105 88 70 59 44
2.3VA	TL30S-060-383 TL30S-072-319 TL30S-090-255 TL30S-100-230 TL30S-120-191 TL30S-150-153 TL30S-180-127 TL30S-240-096	TL30US-060-383 TL30US-072-319 TL30US-090-255 TL30US-100-230 TL30US-120-191 TL30US-150-153 TL30US-180-127 TL30US-240-096	6 7.2 9 10 12 15 18 24	383 319 255 230 191 153 127 96	TL30D-060-191 TL30D-072-159 TL30D-090-127 TL30D-100-115 TL30D-120-095 TL30D-150-076 TL30D-180-063 TL30D-240-048	TL30UD-060-191 TL30UD-072-159 TL30UD-090-127 TL30UD-100-115 TL30UD-120-095 TL30UD-150-076 TL30UD-180-063 TL30UD-240-048	6 x 2 7.2 x 2 9 x 2 10 x 2 12 x 2 15 x 2 18 x 2 24 x 2	191 159 127 115 95 76 63 48

Series	Part Number 230V/50Hz	Part Number 115V/60Hz	Output Voltage (V)	Output Current (mA)	Part Number 230V/50Hz	Part Number 115V/60Hz	Output Voltage (V)	Output Current (mA)
2.4VA	TL30S-060-400 TL30S-072-334 TL30S-090-268 TL30S-100-240 TL30S-120-200 TL30S-150-160 TL30S-180-134 TL30S-240-100	TL30US-060-400 TL30US-072-334 TL30US-090-268 TL30US-100-240 TL30US-120-200 TL30US-150-160 TL30US-180-134 TL30US-240-100	6 7.2 9 10 12 15 18 24	400 334 268 240 200 160 134 100	TL30D-060-200 TL30D-072-167 TL30D-090-134 TL30D-100-120 TL30D-120-100 TL30D-150-080 TL30D-180-067 TL30D-240-050	TL30UD-060-200 TL30UD-072-167 TL30UD-090-134 TL30UD-100-120 TL30UD-120-100 TL30UD-150-080 TL30UD-180-067 TL30UD-240-050	6 x 2 7.2 x 2 9 x 2 10 x 2 12 x 2 15 x 2 18 x 2 24 x 2	200 167 134 120 100 80 67 50
2.7VA	TL30S-060-450 TL30S-072-375 TL30S-090-300 TL30S-100-270 TL30S-120-225 TL30S-150-180 TL30S-180-150 TL30S-240-112	TL30US-060-450 TL30US-072-375 TL30US-090-300 TL30US-100-270 TL30US-120-225 TL30US-150-180 TL30US-180-150 TL30US-240-112	6 7.2 9 10 12 15 18 24	450 375 300 270 225 180 150 112	TL30D-060-225 TL30D-072-187 TL30D-090-150 TL30D-100-135 TL30D-120-112 TL30D-150-090 TL30D-180-075 TL30D-240-056	TL30UD-060-225 TL30UD-072-187 TL30UD-090-150 TL30UD-100-135 TL30UD-120-112 TL30UD-150-090 TL30UD-180-075 TL30UD-240-056	6 x 2 7.2 x 2 9 x 2 10 x 2 12 x 2 15 x 2 18 x 2 24 x 2	225 187 150 135 112 90 75 56
2.8VA	TL30S-060-466	TL30US-060-466	6	466	TL30D-060-233	TL30UD-060-233	6 x 2	233

	TL30S-072-388	TL30US-072-388	7.2	388	TL30D-072-194	TL30UD-072-194	7.2 x 2	194
	TL30S-090-311	TL30US-090-311	9	311	TL30D-090-155	TL30UD-090-155	9 x 2	155
	TL30S-100-280	TL30US-100-280	10	280	TL30D-100-140	TL30UD-100-140	10 x 2	140
	TL30S-120-233	TL30US-120-233	12	233	TL30D-120-116	TL30UD-120-116	12 x 2	116
	TL30S-150-186	TL30US-150-186	15	186	TL30D-150-093	TL30UD-150-093	15 x 2	93
	TL30S-180-155	TL30US-180-155	18	155	TL30D-180-077	TL30UD-180-077	18 x 2	77
	TL30S-240-116	TL30US-240-116	24	116	TL30D-240-058	TL30UD-240-058	24 x 2	58
3.2VA	TL38S-060-533	TL38US-060-533	6	533	TL38D-060-266	TL38UD-060-266	6 x 2	266
	TL38S-072-444	TL38US-072-444	7.2	444	TL38D-072-222	TL38UD-072-222	7.2 x 2	222
	TL38S-090-355	TL38US-090-355	9	355	TL38D-090-177	TL38UD-090-177	9 x 2	177
	TL38S-100-320	TL38US-100-320	10	320	TL38D-100-160	TL38UD-100-160	10 x 2	160
	TL38S-120-266	TL38US-120-266	12	266	TL38D-120-133	TL38UD-120-133	12 x 2	133
	TL38S-150-213	TL38US-150-213	15	213	TL38D-150-106	TL38UD-150-106	15 x 2	106
	TL38S-180-177	TL38US-180-177	18	177	TL38D-180-088	TL38UD-180-088	18 x 2	88
4VA	TL38S-240-133	TL38US-240-133	24	133	TL38D-240-066	TL38UD-240-066	24 x 2	66
	TL38S-060-666	TL38US-060-666	6	666	TL38D-060-333	TL38UD-060-333	6 x 2	333
	TL38S-072-556	TL38US-072-556	7.2	556	TL38D-072-278	TL38UD-072-278	7.2 x 2	278
	TL38S-090-444	TL38US-090-444	9	444	TL38D-090-222	TL38UD-090-222	9 x 2	222
	TL38S-100-400	TL38US-100-400	10	400	TL38D-100-200	TL38UD-100-200	10 x 2	200
	TL38S-120-333	TL38US-120-333	12	333	TL38D-120-167	TL38UD-120-167	12 x 2	167
	TL38S-150-267	TL38US-150-267	15	267	TL38D-150-133	TL38UD-150-133	15 x 2	133
5VA	TL38S-180-222	TL38US-180-222	18	222	TL38D-180-111	TL38UD-180-111	18 x 2	111
	TL38S-240-167	TL38US-240-167	24	167	TL38D-240-083	TL38UD-240-083	24 x 2	83
	TL42S-060-833	TL42US-060-833	6	833	TL42D-060-416	TL42UD-060-416	6 x 2	416
	TL42S-072-694	TL42US-072-694	7.2	694	TL42D-072-347	TL42UD-072-347	7.2 x 2	347
	TL42S-090-555	TL42US-090-555	9	555	TL42D-090-277	TL42UD-090-277	9 x 2	277
	TL42S-100-500	TL42US-100-500	10	500	TL42D-100-250	TL42UD-100-250	10 x 2	250
	TL42S-120-416	TL42US-120-416	12	416	TL42D-120-208	TL42UD-120-208	12 x 2	208
8VA	TL42S-150-333	TL42US-150-333	15	333	TL42D-150-166	TL42UD-150-166	15 x 2	166
	TL42S-180-277	TL42US-180-277	18	277	TL42D-180-138	TL42UD-180-138	18 x 2	138
	TL42S-240-208	TL42US-240-208	24	208	TL42D-240-104	TL42UD-240-104	24 x 2	104
	TL48S-060-1333	TL48US-060-1333	6	1333	TL48D-060-0666	TL48UD-060-0666	6 x 2	666
	TL48S-072-1111	TL48US-072-1111	7.2	1111	TL48D-072-0555	TL48UD-072-0555	7.2 x 2	555
	TL48S-090-0888	TL48US-090-0888	9	888	TL48D-090-0444	TL48UD-090-0444	9 x 2	444
	TL48S-100-0800	TL48US-100-0800	10	800	TL48D-100-0400	TL48UD-100-0400	10 x 2	400
8VA	TL48S-120-0666	TL48US-120-0666	12	666	TL48D-120-0333	TL48UD-120-0333	12 x 2	333
	TL48S-150-0533	TL48US-150-0533	15	533	TL48D-150-0266	TL48UD-150-0266	15 x 2	266
	TL48S-180-0444	TL48US-180-0444	18	444	TL48D-180-0222	TL48UD-180-0222	18 x 2	222
	TL48S-240-0333	TL48US-240-0333	24	333	TL48D-240-0166	TL48UD-240-0166	24 x 2	166

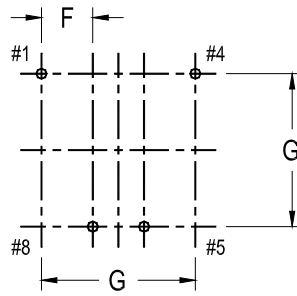
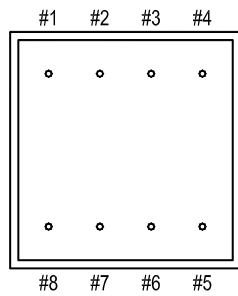
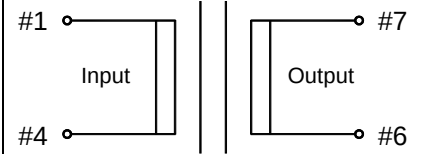
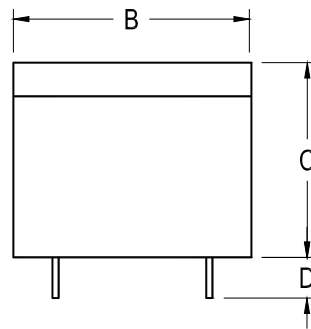
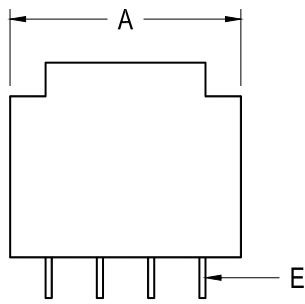
Series	Part Number 230V/50Hz	Part Number 115V/60Hz	Output Voltage (V)	Output Current (mA)	Part Number 230V/50Hz	Part Number 115V/60Hz	Output Voltage (V)	Output Current (mA)
10VA	TL48S-060-1666	TL48US-060-1666	6	1666	TL48D-060-0833	TL48UD-060-0833	6 x 2	833
	TL48S-072-1388	TL48US-072-1388	7.2	1388	TL48D-072-0694	TL48UD-072-0694	7.2 x 2	694
	TL48S-090-1111	TL48US-090-1111	9	1111	TL48D-090-0555	TL48UD-090-0555	9 x 2	555
	TL48S-100-1000	TL48US-100-1000	10	1000	TL48D-100-0500	TL48UD-100-0500	10 x 2	500
	TL48S-120-0833	TL48US-120-0833	12	833	TL48D-120-0416	TL48UD-120-0416	12 x 2	416
	TL48S-150-0666	TL48US-150-0666	15	666	TL48D-150-0333	TL48UD-150-0333	15 x 2	333
	TL48S-180-0555	TL48US-180-0555	18	555	TL48D-180-0277	TL48UD-180-0277	18 x 2	277
16VA	TL48S-240-0416	TL48US-240-0416	24	416	TL48D-240-0208	TL48UD-240-0208	24 x 2	208
	TL54S-060-2666	TL54US-060-2666	6	2666	TL54D-060-1333	TL54UD-060-1333	6 x 2	1333
	TL54S-072-2222	TL54US-072-2222	7.2	2222	TL54D-072-1111	TL54UD-072-1111	7.2 x 2	1111
	TL54S-090-1777	TL54US-090-1777	9	1777	TL54D-090-0888	TL54UD-090-0888	9 x 2	888
	TL54S-100-1600	TL54US-100-1600	10	1600	TL54D-100-0800	TL54UD-100-0800	10 x 2	800
	TL54S-120-1333	TL54US-120-1333	12	1333	TL54D-120-0666	TL54UD-120-0666	12 x 2	666
	TL54S-150-1066	TL54US-150-1066	15	1066	TL54D-150-0533	TL54UD-150-0533	15 x 2	533
20VA	TL54S-180-0888	TL54US-180-0888	18	888	TL54D-180-0444	TL54UD-180-0444	18 x 2	444
	TL54S-240-0666	TL54US-240-0666	24	666	TL54D-240-0333	TL54UD-240-0333	24 x 2	333
	TL60S-060-3333	TL60US-060-3333	6	3333	TL60D-060-1666	TL60UD-060-1666	6 x 2	1666
	TL60S-072-2777	TL60US-072-2777	7.2	2777	TL60D-072-1388	TL60UD-072-1388	7.2 x 2	1388
	TL60S-090-2222	TL60US-090-2222	9	2222	TL60D-090-1111	TL60UD-090-1111	9 x 2	1111
20VA	TL60S-100-2000	TL60US-100-2000	10	2000	TL60D-100-1000	TL60UD-100-1000	10 x 2	1000
	TL60S-120-1666	TL60US-120-1666	12	1666	TL60D-120-0833	TL60UD-120-0833	12 x 2	833

	TL60S-150-1333	TL60US-150-1333	15	1333	TL60D-150-0666	TL60UD-150-0666	15 x 2	666
	TL60S-180-1111	TL60US-180-1111	18	1111	TL60D-180-0555	TL60UD-180-0555	18 x 2	555
	TL60S-240-0833	TL60US-240-0833	24	833	TL60D-240-0416	TL60UD-240-0416	24 x 2	416
22VA	TL60S-060-3666	TL60US-060-3666	6	3666	TL60D-060-1833	TL60UD-060-1833	6 x 2	1833
	TL60S-072-3055	TL60US-072-3055	7.2	3055	TL60D-072-1527	TL60UD-072-1527	7.2 x 2	1527
	TL60S-090-2444	TL60US-090-2444	9	2444	TL60D-090-1222	TL60UD-090-1222	9 x 2	1222
	TL60S-100-2200	TL60US-100-2200	10	2200	TL60D-100-1100	TL60UD-100-1100	10 x 2	1100
	TL60S-120-1833	TL60US-120-1833	12	1833	TL60D-120-0916	TL60UD-120-0916	12 x 2	916
	TL60S-150-1466	TL60US-150-1466	15	1466	TL60D-150-0733	TL60UD-150-0733	15 x 2	733
	TL60S-180-1222	TL60US-180-1222	18	1222	TL60D-180-0611	TL60UD-180-0611	18 x 2	611
	TL60S-240-0916	TL60US-240-0916	24	916	TL60D-240-0458	TL60UD-240-0458	24 x 2	458
25VA	TL60S-060-4166	TL60US-060-4166	6	4166	TL60D-060-2083	TL60UD-060-2083	6 x 2	2083
	TL60S-072-3472	TL60US-072-3472	7.2	3472	TL60D-072-1736	TL60UD-072-1736	7.2 x 2	1736
	TL60S-090-2777	TL60US-090-2777	9	2777	TL60D-090-1388	TL60UD-090-1388	9 x 2	1388
	TL60S-100-2500	TL60US-100-2500	10	2500	TL60D-100-1250	TL60UD-100-1250	10 x 2	1250
	TL60S-120-2083	TL60US-120-2083	12	2083	TL60D-120-1041	TL60UD-120-1041	12 x 2	1041
	TL60S-150-1666	TL60US-150-1666	15	1666	TL60D-150-0833	TL60UD-150-0833	15 x 2	833
	TL60S-180-1388	TL60US-180-1388	18	1388	TL60D-180-0694	TL60UD-180-0694	18 x 2	694
	TL60S-240-1041	TL60US-240-1041	24	1041	TL60D-240-0520	TL60UD-240-0520	24 x 2	520
30VA	TL66S-060-5000	TL66US-060-5000	6	5000	TL66D-060-2500	TL66UD-060-2500	6 x 2	2500
	TL66S-072-4166	TL66US-072-4166	7.2	4166	TL66D-072-2083	TL66UD-072-2083	7.2 x 2	2083
	TL66S-090-3333	TL66US-090-3333	9	3333	TL66D-090-1666	TL66UD-090-1666	9 x 2	1666
	TL66S-100-3000	TL66US-100-3000	10	3000	TL66D-100-1500	TL66UD-100-1500	10 x 2	1500
	TL66S-120-2500	TL66US-120-2500	12	2500	TL66D-120-1250	TL66UD-120-1250	12 x 2	1250
	TL66S-150-2000	TL66US-150-2000	15	2000	TL66D-150-1000	TL66UD-150-1000	15 x 2	1000
	TL66S-180-1666	TL66US-180-1666	18	1666	TL66D-180-0833	TL66UD-180-0833	18 x 2	833
	TL66S-240-1250	TL66US-240-1250	24	1250	TL66D-240-0625	TL66UD-240-0625	24 x 2	625
36VA	TL66S-060-6000	TL66US-060-6000	6	6000	TL66D-060-3000	TL66UD-060-3000	6 x 2	3000
	TL66S-072-5000	TL66US-072-5000	7.2	5000	TL66D-072-2500	TL66UD-072-2500	7.2 x 2	2500
	TL66S-090-4000	TL66US-090-4000	9	4000	TL66D-090-2000	TL66UD-090-2000	9 x 2	2000
	TL66S-100-3600	TL66US-100-3600	10	3600	TL66D-100-1800	TL66UD-100-1800	10 x 2	1800
	TL66S-120-3000	TL66US-120-3000	12	3000	TL66D-120-1500	TL66UD-120-1500	12 x 2	1500
	TL66S-150-2400	TL66US-150-2400	15	2400	TL66D-150-1200	TL66UD-150-1200	15 x 2	1200
	TL66S-180-2000	TL66US-180-2000	18	2000	TL66D-180-1000	TL66UD-180-1000	18 x 2	1000
	TL66S-240-1500	TL66US-240-1500	24	1500	TL66D-240-0750	TL66UD-240-0750	24 x 2	750



TL96 Series

- Power – 0.35VA & 0.5VA
- Various input voltage
- Compact size
- Designed to meet EN61558 & 60950 standards



Product Series	Dimension (mm)						
	A	B	C	D	E	F	G
0.35 (VA)	22.0	23.0	15.0	4.0	Ø0.6	5.0	15.0
0.5 (VA)	22.5	23.2	19.1	4.0	Ø0.6	5.0	15.0
Tolerance (mm)	±0.5	±0.5	±0.5	±1.0	±0.1	±0.3	±0.5

0.35VA Series			
Part Number	Input Voltage	Output Voltage	Output Current
TL96A-060-058	12V 50Hz	6V	58mA
TL96A-080-044		8V	44mA
TL96A-090-039		9V	39mA
TL96A-100-035		10V	35mA
TL96A-120-029		12V	29mA
TL96A-150-023		15V	23mA
TL96A-180-019		18V	19mA
TL96A-240-014		24V	14mA

0.5VA Series			
Part Number	Input Voltage	Output Voltage	Output Current
TL96U-060-083	115V 60Hz	6V	83mA
TL96U-080-063		8V	63mA
TL96U-090-055		9V	55mA
TL96U-100-050		10V	50mA
TL96U-120-042		12V	42mA
TL96U-150-033		15V	33mA
TL96U-180-028		18V	28mA
TL96U-240-021		24V	21mA

TL96B-060-058	24V 50Hz	6V	58mA
TL96B-080-044		8V	44mA
TL96B-090-039		9V	39mA
TL96B-100-035		10V	35mA
TL96B-120-029		12V	29mA
TL96B-150-023		15V	23mA
TL96B-180-019		18V	19mA
TL96B-240-014		24V	14mA
TL96U-060-058	115V 60Hz	6V	58mA
TL96U-080-044		8V	44mA
TL96U-090-039		9V	39mA
TL96U-100-035		10V	35mA
TL96U-120-029		12V	29mA
TL96U-150-023		15V	23mA
TL96U-180-019		18V	19mA
TL96U-240-014		24V	14mA
TL96E-060-058	230V 50Hz	6V	58mA
TL96E-080-044		8V	44mA
TL96E-090-039		9V	39mA
TL96E-100-035		10V	35mA
TL96E-120-029		12V	29mA
TL96E-150-023		15V	23mA
TL96E-180-019		18V	19mA
TL96E-240-014		24V	14mA
TL96F-060-058	240V 50Hz	6V	58mA
TL96F-080-044		8V	44mA
TL96F-090-039		9V	39mA
TL96F-100-035		10V	35mA
TL96F-120-029		12V	29mA
TL96F-150-023		15V	23mA
TL96F-180-019		18V	19mA
TL96F-240-014		24V	14mA

TL96E-060-083	230V 50Hz	6V	83mA
TL96E-080-063		8V	63mA
TL96E-090-055		9V	55mA
TL96E-100-050		10V	50mA
TL96E-120-042		12V	42mA
TL96E-150-033		15V	33mA
TL96E-180-028		18V	28mA
TL96E-240-021		24V	21mA
TL96F-060-083	240V 50Hz	6V	83mA
TL96F-080-063		8V	63mA
TL96F-090-055		9V	55mA
TL96F-100-050		10V	50mA
TL96F-120-042		12V	42mA
TL96F-150-033		15V	33mA
TL96F-180-028		18V	28mA
TL96F-240-021		24V	21mA
TL96H-060-083	400V 50Hz	6V	83mA
TL96H-080-063		8V	63mA
TL96H-090-055		9V	55mA
TL96H-100-050		10V	50mA
TL96H-120-042		12V	42mA
TL96H-150-033		15V	33mA
TL96H-180-028		18V	28mA
TL96H-240-021		24V	21mA