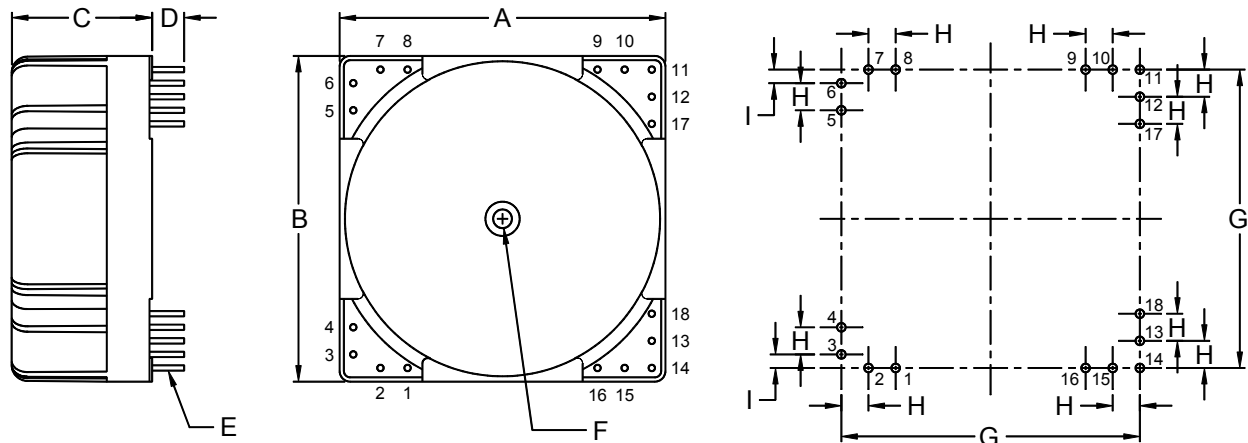
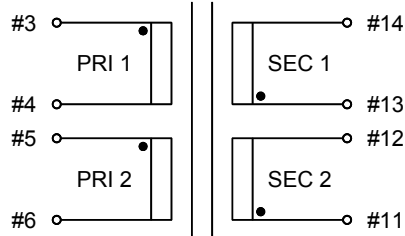


**TOROIDAL TRANSFORMER  
PCB MOUNTING  
LOW PROFILE**



**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.

	TOROIDAL TRANSFORMER PCB MOUNTING LOW PROFILE
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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

	TOROIDAL TRANSFORMER PCB MOUNTING LOW PROFILE
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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