

Power Transformers

OFF-LINE Switch Mode



ELECTRICAL SPECIFICATIONS-TOPSWITCH FAMILY (at 25°C)

- Units designed to match the application of TOPXXX series, from Power Integration with universal AC input as designated.
- Operating temperature range : 0°C~70°C

PART NUMBER	MATCHED TO IC NO.	PACKAGE	ELECTRICAL SPECIFICATION												
			V _{in} Vac (50/60Hz)	V _{out 1} Vdc	I _o (CONT) Amps	V _{out 2} Vdc	I _o (CONT) Amps	V _{out 3} Vdc	I _o (CONT) Amps	V _{out 4} Vdc	I _o (CONT) Amps	P _w (CONT) Watt	P _w (PEAK) Watt	L _p (TYP) μH	HI-POT (MIN) Vrms
TS102Y01	TOP102YAI	EE16H	48(DC)	+5	1.13	-5	1.13					12.0	17.0	210	1500
TS200Y01	TOP200YAI	EF20H	90-260	+3	3.5							10.5	12.0	2800	3000
TS201Y01	TOP201YAI	EF20H	90-260	+3	3.5							10.5	22.0	2800	3000
TS202Y01	TOP202YAI	EE22V	85-265	+5	1.047	+12	1.047					18.0	30.0	560	3000
TS204Y01	TOP204YAI	EI28V	85-265	+15	1.0							15.0	60.0	627	3000
TS221Y01	TOP221YAI	EF16V	85-145	+14	0.57							8.0	12.0	892	3000
TS222Y01	TOP222YAI	EE22V	145-265	+5	1.00	+15	1.00					20.0	25.0	1770	3000
TS223Y01	TOP223YAI	EE22V	85-265	+5	0.8	+12	0.4	-12	0.4	+17	0.4	20.5	30.0	634	3000
TS222Y02	TOP222YAI	EL19V	180-260	+5	1.5	+3.6	0.15	+2.5	0.02	-2.5	0.02	8.5	25.0	1500	3000
TS222P01	TOP222P	EE16V	85-265	+15	0.5							7.5	10.0	1637	3000
TS224P01	TOP224P	EI25V	100-120	+12	1.0							12.0	30.0	596	3000
TS200Y02	TOP200YAI	EE16H	85-265	+5	1.0							5.0	12.0	4200	3000
TS202Y02	TOP202YAI	EE22V	85-265	+7.5	2.0							15.0	30.0	620	3000
TS204Y02	TOP204YAI	EI28V	85-265	+15	2.0							30.0	60.0	627	3000
TS210P01	TOP210PFI	EE16H	85-265	+5	0.8							4.0	5.0	8000	3000
TS201Y02	TOP201YAI	EF25H	85-265	+12	1.25							15.0	22.0	1884	3000
TS202Y03	TOP202YAI	EF20H	85-265	+5	1.047	+12	1.047					18.0	30.0	560	3000
TS104Y01	TOP104YAI	EI28V	90-132	+10	0.01	+27	2.5	+6	0.05			68.0	75.0	627	3000
TS210P02	TOP210PFI	EE16V	90-132	+12	0.25							3.0	8.0	820	3000
TS202Y04	TOP202YAI	EE22V	85-265	+7.5	2.0							15.0	30.0	620	3000
TS224Y01	TOP224YAI	EFD20	85-265	+14.5	1.1							16.0	45.0	1620	3000
TS223Y02	TOP223YAI	EI28V	80-360	+5	1.0	+12	0.3	+20	0.3	+32	0.02	15.5	30.0	620	3000
TS223Y03	TOP223YAI	EFD25	85-265	+5	1.5	+12	0.15	-12	0.15	-60	0.06	15.0	30.0	1120	3000
TS222P02	TOP222P	EE19V	85-265	+15	0.5							7.5	10.0	1637	3000
TS223P01	TOP223P	EF20H	85-265	+5	0.3	+28	0.2					7.5	15.0	1420	3000
TS224Y02	TOP224YAI	EF30H	85-265	+23	1.52							35.0	45.0	960	4000
TS223Y04	TOP223YAI	EE22V	85-265	+12	1.03	-12	0.97					24.0	30.0	634	3000
TS202Y05	TOP202YAI	EE16H	85-265	+5	1.047	+12	1.047					18.0	30.0	560	1500
TS221Y02	TOP221YAI	EE13V	85-145	+14	0.57							8.0	12.0	892	1000
TS200Y03	TOP200YAI	EE16H	85-265	+24	0.04	+11	0.004					1.1	12.0	6000	2500
TS223Y05	TOP223YAI	EE22V	90-132	+8	4.5	+5	0.5					38.5	50.0	634	3000
TS222P03	TOP222P	EE16V	50-100(DC)	+5	1.05							5.25	15.0	1008	3000
TS224Y03	TOP224YAI	EE25V	50-100(DC)	+24	1.0							24.0	75.0	440	3000
TS222Y03	TOP222YAI	EE19V	85-265	+5	1.0	+24	0.1					7.4	15.0	1084	3750
TS224Y04	TOP224YAI	EI28V	92-133	+5	0.2	+8	4.5					37.0	75.0	881	3000
TS223Y06	TOP223YAI	EE19H	50-100(DC)	+6	1.5							9.0	50.0	480	3000
TS221Y03	TOP221YAI	EE19H	195-265	+24	0.29	+6	0.1					7.6	12.0	3099	3000
TS223Y07	TOP223YAI	EI28V	185-265	+12	0.85	+6	5.13					41.0	50.0	1570	3000
TS223Y08	TOP223YAI	EPC30	185-265	+12	0.85	+6	5.13					41.0	50.0	1570	3000
TS225Y01	TOP225YAI	EI30V	200 - 255	+28	2.14							60.0	100.0	1138	1000
TS227Y01	TOP227YAI	EI28V	85-265	+12	5.0							60.0	90.0	500	3000
TS224Y05	TOP224YAI	ETD29H	92-132	+12	0.3	+8	4.5					40.0	75.0	1380	4800
TS223P02	TOP223P	EF20H	85-265	+6.5	1.5							10.0	15.0	1170	3000

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			V _{in} Vac (50/60Hz)	V _{out 1} Vdc	I _o (CONT) Amps	V _{out 2} Vdc	I _o (CONT) Amps	V _{out 3} Vdc	I _o (CONT) Amps	V _{out 4} Vdc	I _o (CONT) Amps	P _w (CONT) Watt	P _w (PEAK) Watt	L _p (TYP) μH	HI-POT (MIN) Vrms
TS221Y04	TOP221YAI	EE16V	85-265	+5	0.72							3.6	7.0	2431	3000
TS209P01	TOP209P	EE16V	85-265	+5	0.4							2.0	2.0	10000	3000
TS224P03	TOP224P	EE25V	85-265	+12	1.0							12.0	20.0	650	3000
TS223Y09	TOP223YAI	EE25V	85-265	+5	3.0							15.0	30.0	980	3000
TS221P01	TOP221P	EE16H	185-265	+6.2	0.4	+13.5	0.03					2.9	9.0	2925	3000
TS221P02	TOP221P	EE16V	85-265	+5	0.7							3.5	6.0	2430	3000
TS224Y06	TOP224YAI	EE25V	98-138	+30	0.87							26.0	75.0	575	3000
TS224Y07	TOP224YAI	EI28V	172-265	+14	1.78							25.0	75.0	1675	3000
TS227Y02	TOP227YAI	EI40V	190-265	+25	6.0							150.0	150.0	650	3000
TS221Y05	TOP221YAI	EF16H	85-265	+5	0.72							3.6	7.0	2431	3000
TS221Y06	TOP221YAI	EE16V	85-265	+5	0.72	-5	0.2					4.6	7.0	2431	3000
TS412G01	TOP412G	EFD20	42-60(DC)	+5	1.2							6.0	12.0	1678	1500
TS414G01	TOP414G	EFD20	36-72(DC)	+5	2.0							10.0	18.0	614	1500
TS225Y02	TOP225YAI	EI28V	85-265	+12	4.0							48.0	60.0	600	3000
TS234Y01	TOP234YAI	EF25V	85-265	+12	2.5							30.0	45.0	1016	3000
TS223P03	TOP223P	EPC19	99-198	-48	0.02	-24	0.3	-48	0.015	-165	0.02	12.2	25.0	905	1500
TS227Y03	TOP227YAI	ETD34H	195-265	+10	10.0							100.0	150.0	600	3000
TS227Y04	TOP227YAI	EI33V	85-265	+24	1.875	-24	1.875					90.0	90.0	750	3000
TS221P03	TOP221P	EE19H	85-265	+5	0.5	+12	0.2					4.9	6.0	2968	3000
TS226Y01	TOP226YAI	ETD34H	207-253	+12	1.5	+24	3.0					90.0	125.0	600	3000
TS412G02	TOP412G	EFD20	40-150(DC)	+5	0.6							3.0	18.0	534	1500
TS103Y01	TOP103YAI	EFD20	40-50(DC)	+5	0.25	+15	1.3					21.0	22.0	168	1500
TS223P04	TOP223P	EF20H	85-265	+5	1.0							5.0	15.0	1170	3000
TS227Y05	TOP227YAI	EI28V	85-265	+5	1.0	+12	1.0					17.0	90.0	500	3000
TS227Y06	TOP227YAI	EI28V	85-265	+5	3.0	+12	2.0					39.0	90.0	500	3000
TS227Y07	TOP227YAI	EI28V	85-265	+5	6.0							30.0	90.0	500	3000
TS227Y08	TOP227YAI	EI28V	85-265	+12	1.0							12.0	90.0	500	3000
TS412G03	TOP412G	EE16V	46-80(DC)	+3.3	0.6	+24	0.3					9.0	15.0	345	1500
TS227Y09	TOP227YAI	ERL28V	85-265	+15	4.66							70.0	90.0	275	3000
TS223Y10	TOP223YAI	ERL28V	200-250	+24	1.25							30.0	50.0	1333	3000
TS104Y02	TOP104YAI	EL19H	40-60(DC)	+15	1.67							25.0	25.0	319	3000
TS223Y11	TOP223YAI	EFD25	85-265	+5	1.5	+12	0.15	-12	0.15			11.1	30.0	1120	3000
TS224Y08	TOP224YAI	EFD25	85-265	+14.5	1.1	+12	0.15	-12	0.15			20.0	45.0	1620	3000
TS222Y04	TOP222YAI	EE19V	85-265	+5	2.0							10.0	15.0	1084	3000
TS234Y02	TOP234YAI	EF25H	85-265	+3.3	2.3	+12	1.1	+16	1.1			38.0	45.0	1650	3000
TS221Y07	TOP221YAI	EE16V	48(DC)	+5	0.6	-24	0.042	-48	0.021			5.0	12.0	210	3000
TS221Y08	TOP221YAI	EE16V	85-265	+9.75	0.5							4.8	7.0	4000	3000
TS232Y01	TOP232YAI	EF20H	175-265	+3.3	0.25	+5	0.25	+15	0.2			5.125	10.0	1650	3000
TS232Y02	TOP232YAI	EF20H	175-265	+12	0.25							3.0	10.0	1650	3000
TS226Y02	TOP226YAI	ETD29V	85-265	+12	2.5	+65	0.5					62.5	75.0	391	3000
TS234Y03	TOP234YAI	EF25V	85-265	+12	2.5							30.0	45.0	1016	3000
TS233Y01	TOP233YAI	EF20H	195-265	+24	0.8	+5	0.2					20.2	50.0	1618	3000
TS232Y03	TOP232YAI	EE16V	195-265	+24	0.1	+5	0.1					2.9	10.0	602	3000
TS227Y10	TOP227YAI	ETD34H	195-265	+13.5	10.0							135.0	150.0	600	3000

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PART NUMBER	MATCHED TO IC NO.	PACKAGE	ELECTRICAL SPECIFICATION												
			V _{in} Vac (50/60Hz)	V _{out 1} Vdc	I _o (CONT) Amps	V _{out 2} Vdc	I _o (CONT) Amps	V _{out 3} Vdc	I _o (CONT) Amps	V _{out 4} Vdc	I _o (CONT) Amps	P _w (CONT) Watt	P _w (PEAK) Watt	L _p (TYP) μH	HI-POT (MIN) Vrms
TS200Y04	TOP200YAI	EE16H	85-265	+30	0.08	-30	0.08					4.8	12.0	4200	3000
TS210P04	TOP210PFI	EE16H	85-265	+15.0	0.3							4.5	5.0	4000	3000
TS414G02	TOP414G	EFD20	36-72(DC)	+6	0.1	+15	0.68					10.8	18.0	614	1000
TS227Y11	TOP227YAI	ETD39H	195-265	+13.6	9.9							135.0	150.0	683	3000
TS224Y09	TOP224YAI	EFD20	90-264	+20	0.5							10.0	45.0	580	3000
TS234Y04	TOP234YAI	EF25V	85-265	+14	2.5							35.0	45.0	1016	4000
TS249Y01	TOP249YAI	ETD44H	195-265	+13.5	14.8							200.0	250.0	650	4000
TS414G03	TOP414G	EFD25	18-90(DC)	+5	0.3	+24	0.1					4.0	21.0	370	4000
TS245Y01	TOP245YAI	EI28V	185-265	+24	2.5							60.0	85.0	500	3000
TS243Y01	TOP243YAI	EF25V	195-265	+18	1.8							32.4	45.0	872	3000
TS249Y02	TOP249YAI	ETD39H	85-265	+29	6.2							180.0	180.0	683	3000
TS222Y05	TOP222YAI	EE19V	85-265	+8	0.02	+8	0.25	+12	0.05	+15	0.35	8.01	15.0	1084	3000
TS222Y06	TOP222YAI	EF20H	85-265	+8	0.02	+8	0.25	+12	0.05	+15/+15*3	0.2/0.05*3	8.01	15.0	1084	3000
TS246Y01	TOP246YAI	EI28V	195-265	+19	5.0							95.0	125.0	500	3000
TS247Y01	TOP247YAI	ETD39H	207-253	+33	4.0							132.0	165.0	683	3000
TS249Y03	TOP249YAI	ETD44H	195-265	+33	7.5							247.5	250.0	650	3000
TS210P05	TOP210PFI	EF16H	195-265	+12	0.5							6.0	8.0	4300	3000
TS246Y02	TOP246YAI	EI28V	85-265	+45	1.2							54.0	90.0	500	3000
TS232Y04	TOP232YAI	EE19V	176-265	+5	1.8	+12	0.4					13.8	25.0	1349	3750
TS243Y02	TOP243YAI	EF25V	100-265	+5	1.0	+6	1.0	-5	1.0	-6	1.0	22.0	30.0	708	3000
TS243Y03	TOP243YAI	EE19H	175-265	+12	1.0							12.0	45.0	872	3000
TS243Y04	TOP243YAI	EF25V	175-265	+24	1.3	+5	0.5					33.7	45.0	872	3000
TS245Y02	TOP245YAI	EI28V	175-265	+24	2.5	+5	0.7					63.5	85.0	500	3000
TS243Y05	TOP243YAI	EE19H	175-265	+5	1.5							7.5	45.0	872	3000
TS245Y03	TOP245YAI	EF30H	195-265	+35	2.0	+5	0.1					70.6	85.0	485	3000
TS247Y02	TOP247YAI	EF30H	85-265	+24	3.0	+8	0.05					72.5	125.0	125	3000