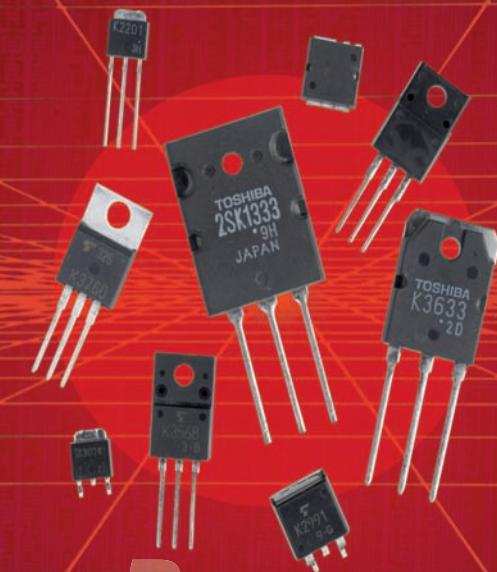




SELECTION GUIDE

Power MOSFET



Power MOSFET

VS-6 (TSOP6)

Part Number	Maximum Ratings		Circuit Configuration	R _{DS(ON)} max (m Ω)					Q _g typ. (nC)	C _{iss} typ. (pF)	Marking	Remark
	V _{DSS} (V)	I _D (A)		10V	4.5V	2.5V	2.0V	1.8V				
TPC6004	20	6	N-ch Single	—	24	32	37	—	17	1400	S2C	U-MOSIII
TPC6003	30	6		24	32	—	—	—	25	1250	S2D	U-MOSIII
TPC6005	30	6		—	28	35	41	—	19	1420	S2E	U-MOSIII
TPC6006-H	40	3.9		75	100	—	—	—	2.4	251	S2F	Ultra High speed U-MOSIII
TPC6105	—20	—2.7	P-ch Single	—	110	160	—	300	6	470	S3E	U-MOSIII
TPC6107	—20	—4.5		—	55	100	180	—	9.8	680	S3G	U-MOSIV
TPC6104	—20	—5.5		—	40	60	—	120	19	1430	S3D	U-MOSIII
TPC6108	—30	—4.5		60	100	—	—	—	13	570	S3H	U-MOSIV

VS-8

Part Number	Maximum Ratings		Circuit Configuration	R _{DS(ON)} max (m Ω)					Q _g typ. (nC)	C _{iss} typ. (pF)	Marking	Remark
	V _{DSS} (V)	I _D (A)		10V	4.5V	2.5V	2.0V	1.8V				
TPCF8001	30	7	N-ch Single	23	31	—	—	—	25.4	1270	F2A	U-MOSIII
TPCF8101	—12	—6	P-ch Single	—	28	40	—	85	18	1600	F3A	U-MOSIII
TPCF8103	—20	—2.7		—	110	160	—	300	6	470	F3C	U-MOSIII
TPCF8102	—20	—6		—	30	41	—	90	19	1550	F3B	U-MOSIII
TPCF8104	—30	—6		28	38	—	—	—	34	1760	F3D	U-MOSIII
TPCF8201	20	3	N-ch Dual	—	49	66	100	—	7.5	590	F4A	U-MOSIII
TPCF8301	—20	—2.7	P-ch Dual	—	110	160	—	300	6	470	F3C	U-MOSIII
TPCF8302	—20	—3		—	59	95	200	—	11	800	F5B	U-MOSIV
TPCF8303	—20	—3		—	58	87	—	250	11	880	F5C	U-MOSIV
TPCF8304	—30	—3.2		72	105	—	—	—	14	600	F5D	U-MOSIV
TPCF8402	30	4	N-ch+P-ch	50	77	—	—	—	10	470	F6B	U-MOSIII
	—30	—3.2		72	105	—	—	—	14	600		U-MOSIV
TPCF8A01	20	3/1	N-ch+SBD	—	49	66	100	—	7.5	590	F7A	U-MOSIII
TPCF8B01	—20	—2.7/—1	P-ch+SBD	—	110	160	—	300	6	470	F8A	U-MOSIII

PS-8

Part Number	Maximum Ratings		Circuit Configuration	R _{DS(ON)} max (m Ω)				Q _g typ. (nC)	C _{iss} typ. (pF)	Remark
	V _{DSS} (V)	I _D (A)		10V	4.5V	2.5V	1.8V			
TPCP8401	20	0.1	N-ch+P-ch	—	3 Ω (4V)	4 Ω	—	—	9.3	π-MOSV1
	—12	—5.5	Load Switch	—	38	58	103	20	1520	U-MOSIII
TPCP8402	30	4.2	N-ch+P-ch	50	77	—	—	10	470	U-MOSIV
	—30	—3.4		72	105	—	—	14	600	U-MOSIII
TPCP8403	40	4.7		40	60	—	—	16	770	U-MOSIII
	—40	—3.4		70	105	—	—	15	680	U-MOSIV
TPCP8002	20	9.1	N-ch Single	—	10	13.7	—	48	3700	U-MOSIV
TPCP8001-H	30	7.2		16	25	—	—	11	640	Ultra High speed U-MOSIII
TPCP8003-H	100	2.2		180	190	—	—	Q _{sw} ²	TBD	Ultra High speed U-MOSIII
TPCP8101	—20	—5.6	P-ch Single	—	30	41	90	19	1550	U-MOSIII
TPCP8201	30	4.2	N-ch Dual	50	77	—	—	10	470	U-MOSIII
TPCP8203	40	4.7		40	60	—	—	TBD	TBD	U-MOSIII
TPCP8302	—20	—5	P-ch Dual	—	33 (4V)	45	95	20	1500	U-MOSV1

TSSOP-8



Part Number	Maximum Ratings		Circuit Configuration	R _{DS(ON)} max (m Ω)				Q _g typ. (nC)	C _{iss} typ. (pF)	Remark
	V _{DSS} (V)	I _D (A)		10V	4.0V	2.5V	2.0V			
TPCS8007	200	1.9	N-ch Single	450	—	—	—	10	600	π-MOSV MACHII
TPCS8009-H	150	2.1		350	—	—	—	10	600	U-MOSII MACHII
TPCS8008-H	250	1.7		580	—	—	—	10	600	U-MOSII MACHII
TPCS8104	−30	−11	P-ch Single	12	18	—	—	107	5710	U-MOSIV
TPCS8105	−30	10		13.5	19.5	—	—	107	5710	U-MOSIV
TPCS8205	20	5	N-ch Dual	—	45	60	90	11	760	U-MOSII
TPCS8209	20	5		—	30	40	60	15	1280	U-MOSIII
TPCS8210*	20	5		—	30	40	60	15	1280	U-MOSIII
TPCS8204	20	6		—	17	22	35	22	2160	U-MOSIII
TPCS8208*	20	6		—	17	22	35	22	2160	U-MOSIII
TPCS8211	20	6		—	24	29	45	20	1590	U-MOSIII
TPCS8212*	20	6		—	24	29	45	20	1590	U-MOSIII
TPCS8214	30	6		—	13.5	18.5	—	42	3240	U-MOSIV
TPCS8302	−20	−5	P-ch Dual	—	35★	60	95	28.5	1590	U-MOSIII
TPCS8303	−20	−5		—	21★	30	80	33	2560	U-MOSIV

☆: Common Drain, ★: at V_{DS} = 4.5V

SOP Advance



Part Number	Maximum Ratings		Circuit Configuration	R _{DS(ON)} max (m Ω)			Q _g typ. (nC)	C _{iss} typ. (pF)	Remark
	V _{DSS} (V)	I _D (A)		10V	4.5V	4.0V			
TPCA8011-H	20	40	N-ch Single	—	3.5	7.5	—	2900	Ultra High speed U-MOSIII
TPCA8005-H	30	27		9	4.5	—	24	1395	Ultra High speed U-MOSIII
TPCA8003-H	30	35		6.6	4.5	—	25	1465	Ultra High speed U-MOSIII
TPCA8004-H	30	40		4.6	4.5	—	37	2265	Ultra High speed U-MOSIII
TPCA8019-H	30	45		3.1	(4.1)	—	37.1	4614	U-MOSV-H*
TPCA8020-H	40	7.5		27	35	—	11	650	Ultra High speed U-MOSIII
TPCA8014-H	40	30		9	14	—	22	1365	U-MOSIII
TPCA8015-H	40	35		5.4	7.9	—	37	2155	U-MOSIII
TPCA8016-H	60	25		21	26	—	22	1375	U-MOSIII
TPCA8006-H	100	18		67	—	—	12	780	π-MOSVII
TPCA8022-H	100	22		26	—	—	38	2230	Ultra High speed U-MOSIII
TPCA8009-H	150	7		350	—	—	10	600	π-MOSV
TPCA8010-H	200	5.5		450	—	—	10	600	π-MOSV
TPCA8008-H	250	4		580	—	—	10	600	π-MOSV
TPCA8105	−12	−6	P-ch Single	—	33	51	18	1600	U-MOSIII
TPCA8102	−30	−40		6	—	14	109	4600	U-MOSIII
TPCA8103	−30	−40		4.2	—	6.8	184	7880	U-MOSIV
TPCA8107-H	−40	−7.5		30	37	—	27	1190	Ultra High speed U-MOSIII
TPCA8104	−60	−40		16	—	24	90	4300	U-MOSIII

☆: under development

SOP-8



Part Number	Maximum Ratings		Circuit Configuration	R _{DS(ON)} max (mΩ)				Q _g typ. (nC)	C _{iss} typ. (pF)	Remark
	V _{DSS} (V)	I _D (A)		10V	4.5V	4.0V	2.5V			
TPC8021-H	30	11	N-ch Single	25	17	—	—	11	640	Ultra High speed U-MOSIII
TPC8014	30	11		14	22	—	—	39	1860	U-MOSIII
TPC8025	30	13		9	14,5	—	—	tbd	tbd	U-MOSIV
TPC8020-H	30	13		9	13	—	—	23	1395	Ultra High speed U-MOSIII
TPC8026	30	13		6,6	10	—	—	tbd	tbd	U-MOSIV
TPC8017-H*	30	15		6,6	9,5	—	—	25	1465	Ultra High speed U-MOSIII
TPC8018-H*	30	18		4,6	6,2	—	—	38	2265	Ultra High speed U-MOSIII
TPC8028	30	18		4,3	8	—	—	tbd	tbd	U-MOSIV
TPC8029	30	18		3,8	7	—	—	tbd	tbd	U-MOSIV
TPC8027	30	18		2,7	5,5	—	—	113	4200	U-MOSIV
TPC8022-H	40	7.5		27	35	—	—	11	650	Ultra High speed U-MOSIII
TPC8012-H	200	1.8		400	—	—	—	11	440	π-MOSV
TPC8109	−30	−10	P-ch Single	20	—	30	—	45	2260	U-MOSIII
TPC8111	−30	−11		12	—	18	—	107	5710	U-MOSIV
TPC8113	−30	−11		10	—	18	—	107	4500	U-MOSIV
TPC8107	−30	−13		7	—	15	—	130	5880	U-MOSIII
TPC8112*	−30	−13		6	—	14	—	130	5880	U-MOSIII
TPC8114*	−30	−18		4,5	—	6,8	—	180	7480	U-MOSIV
TPC8115	−20	−10		—	10	—	14	115	9130	U-MOSIV
TPC8116-H	−40	−7.5	N-ch Dual	30	37	—	—	27	1190	Ultra High speed U-MOSIII
TPC8110	−40	−8		25	—	35	—	48	2180	U-MOSIII
TPC8208	20	5		—	—	50	70	9.5	780	U-MOSIII
TPC8207	20	6		—	—	20	30	22	2010	U-MOSIII
TPC8211	30	5.5		36	44	—	—	25	1250	U-MOSIII
TPC8212-H	30	6		21	27	—	—	16	840	Ultra High speed U-MOSIII
TPC8210	30	8		15	20	—	—	75	3530	U-MOSIII
TPC8213-H	60	5	N-ch+P-ch	50	56	—	—	11	625	Ultra High speed U-MOSIII
TPC8214-H	100	2.2		180	190	—	—	4.5	360	Ultra High speed U-MOSIII
TPC8405	30	6		26	33	—	—	27	1240	U-MOSIII
	−30	−4.5		33	42	—	—	40	1540	U-MOSIV
TPC8406-H	40	6.5		27	35	—	—	11	650	Ultra High speed U-MOSIII
	−40	−6.5		30	37	—	—	27	1970	
TPC8A01	30	6	N-ch/ N-ch+SBD	25	30	—	—	17	940	High Speed U-MOSIII
	30	8.5/1		18	21	—	—	49	2295	U-MOSIII
TPC8A02-H	30	16/1		5.6	8.5	—	—	34	1970	Ultra High speed U-MOSIII

*: Al strap

PW-Mini (SOT-89)



Part Number	Maximum Ratings		$R_{DS(ON)}$ max (Ω)		Q_g typ. (nC)	C_{iss} typ. (pF)	Remark
	$V_{DSS}(V)$	$I_D(A)$	10V	4.0V			
2SJ360	-60	-1	0.73	1.2	6.5	155	L^2 - π -MOSV
2SJ508	-100	-1	1.9	2.5	6.3	135	L^2 - π -MOSV
2SK2615	60	2	0.3	0.44	6	150	L^2 - π -MOSV
2SK3658	60	2	0.3	0.44	5	140	L^2 - π -MOSV
2SK2963	100	1	0.7	0.95	6.3	140	L^2 - π -MOSV
2SK2992	200	1	3.5	-	3.8	90	π -MOSV
2SK3471	500	0.5	18	-	38	75	π -MOSV

LSTM (TO-92 Mod)



Part Number	Maximum Ratings		$R_{DS(ON)}$ max (Ω)		Q_g typ. (nC)	C_{iss} typ. (pF)	Remark
	$V_{DSS}(V)$	$I_D(A)$	10V	4.0V			
2SJ537	-50	-5	0.19	0.34	18	470	L^2 - π -MOSVI
2SJ507	-60	-1	0.7	1.0	5.6	170	L^2 - π -MOSV
2SJ509	-100	-1	1.9	2.5	6.3	135	L^2 - π -MOSV
2SK2989	50	5	0.15	0.33	6.5	145	π -MOSVI
2SK2961	60	2	0.27	0.38	5.8	170	L^2 - π -MOSV
2SK2962	100	1	0.7	0.95	6.3	140	L^2 - π -MOSV
2SK3670	150	1	1.7	-	4.6	230	π -MOSV
2SK2998	500	0.5	18	-	3.8	75	π -MOSV

TPS



Part Number	Maximum Ratings		$R_{DS(ON)}$ max (Ω)		Q_g typ. (nC)	C_{iss} typ. (pF)	Remark
	$V_{DSS}(V)$	$I_D(A)$	10V	4.0V			
2SJ378	-60	-5	0.19	0.28	22	630	L^2 - π -MOSV
2SK2229	60	5	0.16	0.3	12	370	L^2 - π -MOSV
2SK2200	100	3	0.35	0.45	13.5	280	L^2 - π -MOSV
2SK2400	100	5	0.23	0.3	22	500	L^2 - π -MOSV
2SK2835	200	5	0.8	-	10	440	π -MOSV
2SK3374	450	1	4.6	-	5	180	π -MOSV
2SK3302	500	0.5	18	-	3.8	75	π -MOSV
2SK2599	500	2	3.2	-	9	380	π -MOSV
2SK2846	600	2	5.0	-	9	380	π -MOSV

PW-Mold / New PW-Mold

(T0252AB SMD/T0251AA leaded)



Part Number	Maximum Ratings		$R_{DS(ON)}$ max (Ω)		Q_g typ. (nC)	C_{iss} typ. (pF)	Remark
	$V_{DSS}(V)$	$I_D(A)$	10V	4.0V			
2SJ668	-60	-5	0.17	0.25	15	700	U-MOSIII
2SJ567	-200	-2.5	2.0	—	10	410	π -MOSV
2SJ610	-250	-2	2.55	—	24	381	π -MOSV
2SK4033*	60	5	0.10	0.3	12	370	L^2 - π -MOSV
2SK2201	100	3	0.35	0.45	13.5	280	L^2 - π -MOSV
2SK2399	100	5	0.23	0.3	22	500	L^2 - π -MOSV
2SK3669	100	10	0.125	—	8	480	π -MOSVII
2SK3205	150	5	0.5	0.75	12	330	L^2 - π -MOSV
2SK2920	200	5	0.8	—	10	440	π -MOSV
2SK3462	250	3	1.7	—	12	267	π -MOSV
2SK3342	250	4.5	1.0	—	10	440	π -MOSV
2SK3498	400	1	5.5	—	5.7	145	π -MOSV
2SK3472	450	1	4.6	—	5	180	π -MOSV
2SK3373	500	2	3.2	—	9	380	π -MOSV
2SK4103	500	5	1.5	—	16	550	π -MOSVI
2SK3371	600	1	9.0	—	9	190	π -MOSV
2SK2865	600	2	5.0	—	9	380	π -MOSV
2SK3301	900	1	20	—	6	165	π -MOSIII

*: only SMD version available

NEW PW-Mold2 (T0251AA)

Part Number	Maximum Ratings		$R_{DS(ON)}$ max (Ω)		Q_g typ. (nC)	C_{iss} typ. (pF)	Remark
	$V_{DSS}(V)$	$I_D(A)$	10V	4.0V			
2SJ681(Q)	-60	-5	0.17	0.25	15	tba	U-MOSIII
2SJ680(Q)	-200	-2.5	2	—	10	410	π -MOSV
2SK4017(Q)	60	5	0.1	0.15	15	730	U-MOSIII
2SK4018(Q)	100	3	0.35	0.45	13.5	280	L^2 - π -MOSV
2SK4019(Q)	100	5	0.23	0.3	22	500	L^2 - π -MOSV
2SK4020(Q)	200	5	0.8	—	10	440	π -MOSV
2SK4021(Q)	250	4.5	1	—	10	440	π -MOSV
2SK4023(Q)	450	1	4.6	—	5	180	π -MOSV
2SK4026(Q)	600	1	9	—	9	190	π -MOSV
2SK4002(Q)	600	2	5	—	9	380	π -MOSV
2SK4003(Q)	600	3	2,2	—	20	600	π -MOSVI



DP (T0252AB SMD/T0251AA leaded)

Part Number	Maximum Ratings		$R_{DS(ON)}$ max (Ω)		Q_g typ. (nC)	C_{iss} typ. (pF)	Remark
	$V_{DSS}(V)$	$I_D(A)$	10V	4.0V			
2SK2614	50	20	0.046	0.08	25	900	L^2 - π -MOSV
2SK2782	60	20	0.055	0.09	25	880	L^2 - π -MOSV
2SK2845	900	1	9	—	15	350	π -MOSIII



TFP



Part Number	Maximum Ratings		$R_{DS(ON)}$ max (m Ω)		Q_g typ. (nC)	C_{iss} typ. (pF)	Remark
	$V_{DS}(V)$	$I_D(A)$	10V	4.0V			
2SJ619	-100	-16	210	320	48	1100	L^2 - π -MOSV
2SJ620	-100	-18	90	120	140	2900	L^2 - π -MOSV
2SK3843	40	75	3.5	8 ★	210	11200	U-MOSIII
2SK4034	60	75	5.8	10	210	9300	U-MOSII
2SK3842	60	75	5.8	—	196	12400	U-MOSIII
2SK3387	150	18	120	180	57	1380	L^2 - π -MOSV
2SK3443	150	30	55	—	45	2030	π -MOSV
2SK3444	200	25	82	—	44	2080	π -MOSV
2SK3388	250	20	105	—	100	4000	π -MOSV
2SK3445	250	20	105	—	45	2090	π -MOSV
2SK3499	400	10	550	—	34	1340	π -MOSV
2SK3544	450	13	400	—	34	1600	π -MOSV
2SK3466	500	5	1500	—	17	780	π -MOSV
2SK3538	500	8	850	—	30	1300	π -MOSV
2SK3398	500	12	520	—	45	2040	π -MOSV
2SK3438	600	10	1000	—	28	1200	π -MOSV

★: at $V_{GS} = 4.5V$

TO-220NIS (TO-220 isolated)



Part Number	Maximum Ratings		$R_{DS(ON)}$ max (Ω)		Q_g typ. (nC)	C_{iss} typ. (pF)	Remark
	$V_{DS}(V)$	$I_D(A)$	10V	4.0V			
2SJ438	-60	-5	0.19	0.28	22	630	L^2 - π -MOSV
2SJ304	-60	-14	0.12	0.19	45	1200	L^2 - π -MOSIV
2SJ349	-60	-20	0.045	0.09	90	2800	L^2 - π -MOSV
2SJ334	-60	-30	0.038	0.06	110	3300	L^2 - π -MOSV
2SJ380	-100	-12	0.21	0.32	48	1100	L^2 - π -MOSV
2SJ464	-100	-18	0.09	0.12	140	2900	L^2 - π -MOSV
2SJ407	-200	-5	1.0	—	20	800	π -MOSV
2SJ512	-250	-5	1.25	—	22	800	π -MOSV
2SJ516	-250	-6.5	0.8	—	29	1120	π -MOSV
2SK3754	30	5	0.089	0.099	25	1250	U-MOSIII
2SK3846	40	26	0.018	—	40	1980	U-MOSIII
2SK2507	50	25	0.046	0.08	25	900	L^2 - π -MOSV
2SK2886	50	45	0.02	0.036	66	2200	L^2 - π -MOSV
2SK2232	60	25	0.046	0.08	38	1000	L^2 - π -MOSV
2SK3662	60	35	0.0125	0.019	91	5120	U-MOSIII

TO-220NIS (TO-220 isolated)



Part Number	Maximum Ratings		R _{DS (ON)} max (Ω)		Q _g typ. (nC)	C _{iss} typ. (pF)	Remark
	V _{DSS} (V)	I _D (A)	10V	4.0V			
2SK2385	60	36	0.03	0.055	60	1800	L ² -π-MOSV
2SK3844	60	45	0.0058	—	70	12400	U-MOSIII
2SK2391	100	20	0.085	0.13	50	1100	L ² -π-MOSV
2SK2882	150	18	0.12	0.18	57	1380	L ² -π-MOSV
2SK2381	200	5	0.8	—	10	440	π-MOSV
2SK2350	200	8.5	0.4	—	17	700	π-MOSV
2SK2965	200	11	0.26	—	30	1200	π-MOSV
2SK2382	200	15	0.18	—	40	2000	π-MOSV
2SK2417	250	7.5	0.5	—	20	700	π-MOSV
2SK2508	250	13	0.25	—	40	1800	π-MOSV
2SK3994	250	20	0.105	—	45	2090	π-MOSV
2SK2679	400	5.5	1.2	—	17	720	π-MOSV
2SK2952	400	8.5	0.55	—	34	1340	π-MOSV
2SK3543	450	2	2.45	—	9	380	π-MOSV
2SK3126	450	10	0.65	—	35	1400	π-MOSV
2SK3310	450	10	0.65	—	23	920	π-MOSV
2SK3407	450	10	0.65	—	35	1400	π-MOSV
2SK3743	450	13	0.4	—	34	1600	π-MOSV
2SK2862	500	3	3.2	—	9	380	π-MOSV
2SK2662	500	5	1.5	—	17	780	π-MOSV
2SK3316*	500	5	1.8	—	17	780	π-MOSV
2SK2543	500	8	0.85	—	30	1300	π-MOSV
2SK2842	500	12	0.52	—	45	2040	π-MOSV
2SK3313*	500	12	0.62	—	45	2040	π-MOSV
2SK3067	600	2	5.0	—	9	380	π-MOSV
2SK2750	600	3.5	2.2	—	20	800	π-MOSV
2SK2545	600	6	1.25	—	30	1300	π-MOSV
2SK3947*	600	6	1.4	—	28	1050	π-MOSV
2SK3130	600	6	1.55	—	30	1300	π-MOSV
2SK2843	600	10	0.75	—	45	2040	π-MOSV
2SK2996	600	10	1.0	—	38	1500	π-MOSV
2SK3265	700	10	0.75	—	53	1700	π-MOSV
2SK2605	800	5	2.2	—	34	1080	π-MOSIII
2SK2718	900	2.5	6.4	—	21	510	π-MOSIII
2SK2700	900	3	4.3	—	25	750	π-MOSIII
2SK2717	900	5	2.5	—	45	1200	π-MOSIII

*: High speed Body Diode

TO-220SIS (TO-220 isolated)

Internal Copper Connector replaces Al Bonding Wire



Part Number	Maximum Ratings		$R_{DS(ON)}$ max (Ω)		Q_g typ. (nC)	C_{iss} typ. (pF)	Corresponding Part number
	$V_{DSS}(V)$	$I_D(A)$	10V	4.0V			
2SK3757	450	2	2.45	—	9	330	2SK3543
2SK3563	500	5	1.5	—	16	550	2SK2662
2SK3868*	500	5	1.7	—	16	550	2SK3316
2SK3561	500	8	0.85	—	28	1050	2SK2543
2SK4042	500	8	0.85	—	28	1050	—
2SK3568	500	12	0.52	—	42	1500	2SK2842
2SK4012	500	13	0.4	—	50	2450	—
2SK3934	500	15	0.3	—	62	3100	—
2SK3767	600	2	4.5	—	9	320	2SK3067
2SK3567	600	3.5	2.2	—	16	550	2SK2750
2SK3562	600	6	1.25	—	28	1050	2SK2545
2SK3947*	600	6	1.4	—	28	1050	—
2SK3667	600	7.5	0.85	—	33	1300	2SK2996
2SK3569	600	10	0.75	—	42	1500	2SK2843
2SK4015*	600	10	0.86	—	42	1500	—
2SK4016*	600	13	0.5	—	62	3150	2SK3130
2SK3797	600	13	0.43	—	62	3100	—
2SK4013	800	6	1.7	—	35	1500	2SK2605 (2,2 Ω)
2SK3566	900	2.5	6.4	—	12	470	2SK2718
2SK3564	900	3	4.3	—	17	700	2SK2700
2SK3798	900	4	3.5	—	26	800	—
2SK3565	900	5	2.5	—	28	1150	2SK2717
2SK3742	900	5	2.5	—	25	1150	2SK2717
2SK4014	900	6	2	—	45	1650	—
2SK3799	900	8	1.3	—	60	2200	—

*: High speed Body Diode

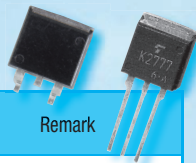
TO-220AB

Part Number	Maximum Ratings		$R_{DS(ON)}$ max (Ω)		Q_g typ. (nC)	C_{iss} typ. (pF)	Remark
	$V_{DSS}(V)$	$I_D(A)$	10V	4.0V			
2SK2314	100	27	0.085	0.13	50	1100	L ² - π -MOSV
2SK2542	500	8	0.85	—	30	1300	π -MOSV
2SK2914	250	7.5	0.5	—	20	700	π -MOSV
2SK2841	400	10	0.55	—	34	1340	π -MOSV
2SK2661	500	5	1.5	—	17	780	π -MOSV
2SK3758*	500	5	1.5	—	16	550	π -MOSVI
2SK3759*	500	8	0.85	—	28	1050	π -MOSVI
2SK2544	600	6	1.25	—	30	1300	π -MOSV
2SK2866	600	10	0.75	—	45	2040	π -MOSV
2SK3085	600	3.5	2.2	—	20	800	π -MOSV
2SK3760*	600	3.5	2.2	—	16	550	π -MOSVI
2SK3761*	600	6	1.25	—	28	1050	π -MOSVI
2SK2603	800	3	3.6	—	25	750	π -MOSIII
2SK2608	900	3	4.3	—	25	750	π -MOSIII
2SK2733	900	1	9	—	15	370	π -MOSIII
2SK3762*	900	2.5	6.4	—	12	470	π -MOSIV
2SK3763*	900	3	4.3	—	17	700	π -MOSIV
2SK1119	1000	4	3.8	—	60	700	π -MOSII.5

*: improved Q_g -Characteristics and switching speed



TO-220FL/SM (TO-262/TO-263AB)

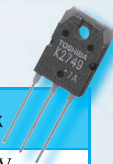


Part Number	Maximum Ratings		R _{DS(ON)} max (Ω)		Q _g typ. (nC)	C _{iss} typ. (pF)	Remark
	V _{DSS} (V)	I _D (A)	10V	4.0V			
2SJ312	-60	-14	0.12	0.19	45	1200	L ² -π-MOSIV
2SJ401	-60	-20	0.045	0.09	90	2800	L ² -π-MOSV
2SJ402	-60	-30	0.038	0.06	110	3300	L ² -π-MOSV
2SJ412	-100	-16	0.21	0.32	48	1100	L ² -π-MOSV
2SK3847*	40	32	0.018	—	40	1980	U-MOSIII
2SK3051	50	45	0.03	—	36	1250	π-MOSV
2SK2311	60	25	0.046	0.08	38	1000	L ² -π-MOSV
2SK2266	60	45	0.03	0.055	60	1800	L ² -π-MOSV
2SK2376	60	45	0.017	0.025	110	3350	L ² -π-MOSV
2SK2789	100	27	0.085	0.13	50	1100	L ² -π-MOSV
2SK2401	200	15	0.18	—	40	2000	π-MOSV
2SK3625	200	25	0.082	—	44	—	π-MOSV
2SK2598	250	13	0.25	—	40	1800	π-MOSV
2SK2993	250	20	0.105	—	100	4000	π-MOSV
2SK2838	400	5.5	1.2	—	17	720	π-MOSV
2SK2949	400	10	0.55	—	34	1340	π-MOSV
2SK3309	450	10	0.65	—	23	920	π-MOSV
2SK3403	450	13	0.4	—	34	1600	π-MOSV
2SK2991	500	5	1.5	—	17	780	π-MOSV
2SK3417#	500	5	1.8	—	17	780	π-MOSV
2SK2776	500	8	0.85	—	30	1300	π-MOSV
2SK3068	500	12	0.52	—	45	2040	π-MOSV
2SK3312	600	6	1.25	—	22	1000	π-MOSV
2SK2889	600	10	0.75	—	45	2040	π-MOSV
2SK3399	600	10	0.75	—	35	1750	π-MOSV
2SK3437	600	10	1.0	—	28	1200	π-MOSV
2SK2777	600	6	1.25	—	30	1300	π-MOSV
2SK2889	600	10	0.75	—	45	2040	π-MOSV
2SK2883	800	3	3.6	—	25	1080	π-MOSIII
2SK2884	800	5	2.2	—	34	1060	π-MOSIII
2SK3879	800	6.5	1.7	—	35	1500	π-MOSIV
2SK1930	1000	4	3.8	—	60	700	π-MOSII.5

*: only SMD Version available

#: incl. High Speed Diode

TO-3P(N) (TO-247)



Part Number	Maximum Ratings		R _{DS(on)} max (Ω)		Q _g typ. (nC)	C _{iss} typ. (pF)	Remark
	V _{DSS} (V)	I _D (A)	10V	4.0V			
2SK3506	30	45	0.02	—	39	1500	π-MOSV
2SK2550	50	45	0.03	—	36	1250	π-MOSV
2SK2744	50	45	0.02	—	68	2300	π-MOSV
2SK2551	50	50	0.011	—	130	4000	π-MOSV
2SK2745	50	50	0.0095	0.016	130	4000	L ² -π-MOSV
2SK3129	50	60	0.007	—	135	3700	π-MOSVI
2SK2233	60	45	0.03	0.055	60	1800	L ² -π-MOSV
2SK2398	60	45	0.03	—	60	1800	π-MOSV
2SK2173	60	50	0.017	0.025	110	3350	L ² -π-MOSV
2SK2445	60	50	0.018	—	110	3350	π-MOSV
2SK2313	60	60	0.011	0.015	170	5400	L ² -π-MOSV
2SK3845	60	70	0.0058	—	196	12400	U-MOSIII
2SK3940	75	70	0.007	—	200	12500	U-MOSIII
2SK1381	100	50	0.032	0.046	88	3700	L ² -π-MOSIII
2SK3176	200	30	0.052	—	125	5400	π-MOSV
2SK2967	250	30	0.068	—	132	5400	π-MOSV
2SK2601	500	10	1.0	—	30	1200	π-MOSV
2SK4107	500	15	0.4	—	48	2450	π-MOSVI
2SK3314*	500	15	0.49	—	58	2600	π-MOSV
2SK3905	500	17	0.31	—	62	3100	U-MOSVI
2SK4108	500	20	0.27	—	62	3100	π-MOSVI
2SK3907	500	23	0.23	—	60	4250	π-MOSVI, MachII
2SK3936*	500	23	0.25	—	60	4250	π-MOSVI, MachII
2SK2602	600	6	1.25	—	30	1300	π-MOSV
2SK2699	600	12	0.65	—	58	2600	π-MOSV
2SK3903	600	14	0.44	—	62	3100	π-MOSV
2SK2915	600	16	0.4	—	80	3520	π-MOSV
2SK3911	600	20	0.32	—	60	4250	π-MOSVI, MachII
2SK3906*	600	20	0.33	—	60	4250	π-MOSVI, MachII
2SK2604	800	5	2.2	—	34	1080	π-MOSIII
2SK2746	800	7	1.7	—	55	1500	π-MOSIII
2SK3633	800	7	1.7	—	35	1500	π-MOSIV
2SK2607	800	9	1.2	—	68	2160	π-MOSIII
2SK2719	900	3	4.3	—	25	750	π-MOSIII
2SK2610	900	5	2.5	—	45	1200	π-MOSIII
2SK3700	900	5	2.5	—	28	1150	π-MOSIV
2SK4115	900	7	2.0	—	45	1650	π-MOSIV
2SK3878	900	9	1.4	—	60	2200	π-MOSIV
2SK3473	900	9	1.6	—	38	1450	π-MOSIV
2SK2968	900	10	1.25	—	70	2150	π-MOSIII
2SK1359	1000	5	3.8	—	60	700	π-MOSII.5
2SK1120	1000	8	1.8	—	120	1300	π-MOSII.5
2SK2613	1000	8	1.7	—	65	2000	π-MOSIII

*: High Speed Body Diode

TO-3P(N)IS

Part Number	Maximum Ratings		$R_{DS(ON)}$ max (Ω)		Q_g typ. (nC)	C_{iss} typ. (pF)	Remark
	$V_{DSS}(V)$	$I_D(A)$	10V	4.0V			
2SK2995	250	30	0.068	—	132	5400	π -MOSV
2SK2916	500	14	0.4	—	58	2600	π -MOSV
2SK2917	500	18	0.27	—	80	3720	π -MOSV
2SK2953	600	15	0.4	—	80	3520	π -MOSV
2SK3453	700	10	1.0	—	53	1700	π -MOSIV
2SK3880	800	6.5	1.7	—	35	1200	π -MOSIV
2SK2606	800	8	1.2	—	68	2160	π -MOSIII
2SK2847	900	8	1.4	—	58	2040	π -MOSIII
2SK3017	900	8.5	1.25	—	70	2150	π -MOSIII
2SK1365	1000	7	1.8	—	120	1300	π -MOSII.5



TO-3P(L)

Part Number	Maximum Ratings		$R_{DS(ON)}$ max (Ω)		Q_g typ. (nC)	C_{iss} typ. (pF)	Remark
	$V_{DSS}(V)$	$I_D(A)$	10V	4.0V			
2SK2267	60	60	0.011	0.015	170	5400	L^2 - π -MOSV
2SK1382	100	60	0.02	0.029	176	7000	L^2 - π -MOSIII
2SK1486	300	32	0.095	—	140	3500	π -MOSIII.5
2SK1544	500	25	0.2	—	150	3700	π -MOSIII.5
2SK3131*	500	50	0.11	—	280	11000	π -MOSV
2SK3132	500	50	0.095	—	280	11000	π -MOSV
2SK1489	1000	12	1.0	—	110	2000	π -MOSII.5

*: High Speed Body Diode

TO-3P(SM)

Part Number	Maximum Ratings		$R_{DS(ON)}$ max (Ω)		Q_g typ. (nC)	C_{iss} typ. (pF)	Remark
	$V_{DSS}(V)$	$I_D(A)$	10V	4.0V			
2SK3117	500	20	0.27	—	80	3720	π -MOSV



Discrete Semiconductor package

Dimensional Out Line

VS-6 (TSOP6) Top view dimensions: 0.95, 0.3±0.1, 1.6^{+0.2}_{-0.1}, 2.8^{+0.2}_{-0.3}, 2.9±0.2, 0.05^{+0.05}_{-0.05}, 0.7±0.05, 0.16^{+0.05}_{-0.05}, 0.25^{+0.25}_{-0.15} Side view dimensions: 2.9±0.1, 0.3^{+0.1}_{-0.05}, 1.5±0.1, 1.9±0.1, 0.65, 0.8±0.05, 0.71^{+0.04}_{-0.16}, 0.16, 0.475, 0.24^{+0.10}_{-0.09} Lead view dimensions: 0.16±0.05, 0.25±0.15	VS-8 Top view dimensions: 2.9±0.1, 0.3^{+0.1}_{-0.05}, 1.5±0.1, 1.9±0.1, 0.65, 0.8±0.05, 0.71^{+0.04}_{-0.16}, 0.16, 0.475, 0.24^{+0.10}_{-0.09} Side view dimensions: 2.9±0.1, 0.3^{+0.1}_{-0.05}, 1.5±0.1, 1.9±0.1, 0.65, 0.8±0.05, 0.71^{+0.04}_{-0.16}, 0.16, 0.475, 0.24^{+0.10}_{-0.09} Lead view dimensions: 0.16±0.05, 0.25±0.15	PS-8 Top view dimensions: 0.33±0.05, 0.33^{+0.05}_{-0.05}, 0.475, 0.65, 2.9±0.1, 0.17^{+0.02}_{-0.02}, 2.4±0.1, 2.8±0.1, 0.8±0.05, 1.12^{+0.13}_{-0.12}, 1.12^{+0.13}_{-0.12}, 0.28^{+0.10}_{-0.11}, 0.28^{+0.10}_{-0.11} Side view dimensions: 0.33±0.05, 0.33^{+0.05}_{-0.05}, 0.475, 0.65, 2.9±0.1, 0.17^{+0.02}_{-0.02}, 2.4±0.1, 2.8±0.1, 0.8±0.05, 1.12^{+0.13}_{-0.12}, 1.12^{+0.13}_{-0.12}, 0.28^{+0.10}_{-0.11}, 0.28^{+0.10}_{-0.11} Lead view dimensions: 0.16±0.05, 0.25±0.15	TSSOP-8 Top view dimensions: 0.65, 0.25±0.05, 4.4±0.1, 6.4±0.3, 3.3 max, 3.0±0.1, 0.85^{+0.05}_{-0.05}, 0.16^{+0.04}_{-0.02}, 0.6±0.2 Side view dimensions: 0.65, 0.25±0.05, 4.4±0.1, 6.4±0.3, 3.3 max, 3.0±0.1, 0.85^{+0.05}_{-0.05}, 0.16^{+0.04}_{-0.02}, 0.6±0.2 Lead view dimensions: 0.16±0.05, 0.25±0.15
SOP-8 Top view dimensions: 0.595, 1.27, 0.4±0.1, 4.4±0.2, 6.0±0.3, 5.5 max, 5.0±0.2, 0.1^{+0.1}_{-0.05}, 1.5±0.2, 0.15^{+0.1}_{-0.05}, 0.5±0.2 Side view dimensions: 0.595, 1.27, 0.4±0.1, 4.4±0.2, 6.0±0.3, 5.5 max, 5.0±0.2, 0.1^{+0.1}_{-0.05}, 1.5±0.2, 0.15^{+0.1}_{-0.05}, 0.5±0.2 Lead view dimensions: 0.16±0.05, 0.25±0.15	SOP Advance Top view dimensions: 1.27, 0.4±0.1, 6.0±0.3, 5.0±0.2, 0.5±0.1, 0.15^{+0.05}_{-0.05}, 0.595, 5.0±0.2, 0.95^{+0.05}_{-0.05}, 0.166^{+0.05}_{-0.05}, 0.6±0.1, 4.25±0.2, 3.5±0.2, 0.8^{+0.1}_{-0.1} Side view dimensions: 1.27, 0.4±0.1, 6.0±0.3, 5.0±0.2, 0.5±0.1, 0.15^{+0.05}_{-0.05}, 0.595, 5.0±0.2, 0.95^{+0.05}_{-0.05}, 0.166^{+0.05}_{-0.05}, 0.6±0.1, 4.25±0.2, 3.5±0.2, 0.8^{+0.1}_{-0.1} Lead view dimensions: 0.16±0.05, 0.25±0.15	PW-Mini (SOT-89) Top view dimensions: 4.6 max, 1.7 max, 1.6 max, 0.4±0.05, 4.2 max, 0.45^{+0.08}_{-0.05}, 0.8 min, 2.5±0.1, 0.4^{+0.08}_{-0.05}, 0.4^{+0.08}_{-0.05}, 1.5±0.1, 1.5±0.1 Side view dimensions: 4.6 max, 1.7 max, 1.6 max, 0.4±0.05, 4.2 max, 0.45^{+0.08}_{-0.05}, 0.8 min, 2.5±0.1, 0.4^{+0.08}_{-0.05}, 0.4^{+0.08}_{-0.05}, 1.5±0.1, 1.5±0.1 Lead view dimensions: 0.16±0.05, 0.25±0.15	DP (TO-252AB) Top view dimensions: 6.8 max, 5.2±0.2, 0.6 max, 0.6±0.15, 0.95 max, 0.6±0.15, 2.3, 2.3, 0.1±0.1, 1.1±0.2, 2.5 max, 0.6 max, 1.5±0.2, 0.6 max Side view dimensions: 6.8 max, 5.2±0.2, 0.6 max, 0.6±0.15, 0.95 max, 0.6±0.15, 2.3, 2.3, 0.1±0.1, 1.1±0.2, 2.5 max, 0.6 max, 1.5±0.2, 0.6 max Lead view dimensions: 0.16±0.05, 0.25±0.15
New PW-Mold (TO-252AB) Top view dimensions: 6.5±0.2, 5.2±0.2, 1.5±0.2, 0.6 max, 1.2 max, 5.5±0.2, 2.5±0.2, 2.3±0.15, 2.3±0.15, 0.6 max, 0.1±0.1, 0.8 max, 0.6±0.15, 1.05 max Side view dimensions: 6.5±0.2, 5.2±0.2, 1.5±0.2, 0.6 max, 1.2 max, 5.5±0.2, 2.5±0.2, 2.3±0.15, 2.3±0.15, 0.6 max, 0.1±0.1, 0.8 max, 0.6±0.15, 1.05 max Lead view dimensions: 0.16±0.05, 0.25±0.15	TFP Top view dimensions: 9.2 max, 7.0±0.1, 0.8 max, 0.4±0.1, 9.2 max, 2.0, 1.5, 2.0, 2.5, 1.0±0.2, 3.6±0.2, 0.4±0.2, 3.0 max Side view dimensions: 9.2 max, 7.0±0.1, 0.8 max, 0.4±0.1, 9.2 max, 2.0, 1.5, 2.0, 2.5, 1.0±0.2, 3.6±0.2, 0.4±0.2, 3.0 max Lead view dimensions: 0.16±0.05, 0.25±0.15	TO-220SM (TO-263AB) Top view dimensions: 10.3 max, 1.32, 0.1, 1.5, 3±0.2, 2.54±0.25, 2.54±0.25, 0.76, 0.6, 1.5, 4.7 max, 2.6 Side view dimensions: 10.3 max, 1.32, 0.1, 1.5, 3±0.2, 2.54±0.25, 2.54±0.25, 0.76, 0.6, 1.5, 4.7 max, 2.6 Lead view dimensions: 0.16±0.05, 0.25±0.15	TO-3P(SM) (I³-Pack) Top view dimensions: 15.9 max, 11.0, 1.5, 0.1, 13.5, 15.3 max, 1.5, 0.6, 3.0, 5.45, 5.45, 1.2, 4.5±0.3, 2.0, 3.4, 3.0 max Side view dimensions: 15.9 max, 11.0, 1.5, 0.1, 13.5, 15.3 max, 1.5, 0.6, 3.0, 5.45, 5.45, 1.2, 4.5±0.3, 2.0, 3.4, 3.0 max Lead view dimensions: 0.16±0.05, 0.25±0.15

In Brackets (xx) Common Package Codes. Toshiba Package might deviate in Dimensions.

Discrete Semiconductor package

Dimensional Out Line

LSTM (TO-92 MOD)	TPS	DP (TO-251AA)	PW-Mold (TO-251AA)
TO-220NIS TO-220 isolated	TO-220SIS TO-220 isolated	TO220AB	TO-220FL (TO-262)
TO-3P(N) (TO247 AD)	TO-3P(L)	TO-3P(N)IS (TO247 AD)	PW-Mold2

NEW

In Brackets (xx) Common Package Codes. Toshiba Package might deviate in Dimensions.

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