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Type No.	Package type	Applications	Absolute maximum ratings						Electrical characteristics (Ta = 25 ℃)						
									hFE @ VCE · IC			fT @ VCE · IC			tf (toff) max (μs)
			VCBO (V)	VCEO (V)	VEBO (V)	IC (A)	PC (W)	TJ (℃)	hFE	VCE (V)	IC (A)	fT (MHz)	VCE (V)	IC (A)	
2SC3151	TO3PB	Switching regulator	900	800	7	1.5	60†	150	10 to 40	5	0.1	15	10	0.1	0.7
2SC3152	TO3PB	Switching regulator	900	800	7	3	80†	150	10 to 40	5	0.2	15	10	0.2	0.7
2SC3153	TO3PB	Switching regulator	900	800	7	6	100†	150	10 to 40	5	0.4	15	10	0.4	0.7
2SC3277	TO3PB	Switching regulator	500	400	7	10	90†	150	>15	5	1.2	20	10	1.2	1
2SC3448	TO3PB	High-speed switching regulator	800	500	7	4	60†	150	15 to 50	5	0.3	18	10	0.3	0.3
2SC3449	TO3PB	High-speed switching regulator	800	500	7	7	80†	150	15 to 50	5	0.6	18	10	0.6	0.3
2SC3450	TO3PB	High-speed switching regulator	800	500	7	10	90†	150	15 to 50	5	0.8	18	10	0.8	0.3
2SC3451	TO3PB	High-speed switching regulator	800	500	7	15	100†	150	15 to 50	5	1.2	18	10	1.2	0.3
2SC3458	TO3PB	High-speed switching regulator	1100	800	7	3	80†	150	10 to 40	5	0.2	15	10	0.2	0.3
2SC3459	TO3PB	High-speed switching regulator	1100	800	7	4.5	90†	150	10 to 40	5	0.3	15	10	0.3	0.3
2SC3460	TO3PB	High-speed switching regulator	1100	800	7	6	100†	150	10 to 40	5	0.4	15	10	0.4	0.3
2SC3461	TO3PB	High-speed switching regulator	1100	800	7	8	140†	150	10 to 40	5	0.6	15	10	0.6	0.3
2SC3466	TO3PB	Switching regulator	1200	650	7	8	120†	150	10 to 40	5	1	5	10	1	0.7
2SC3552	TO3PB	High-speed switching regulator	1100	800	7	12	150†	150	10 to 40	5	0.8	15	10	0.8	0.3
2SC3988	TO3PB	High-speed switching regulator	800	500	7	25	150†	150	15 to 50	5	2.4	18	10	2.4	0.3
2SC4108	TO3PB	High-speed switching regulator	500	400	7	12	100†	150	15 to 50	5	1.6	20	10	1.6	0.3
2SC4109	TO3PB	High-speed switching regulator	500	400	7	16	140†	150	15 to 50	5	2	20	10	2	0.3
2SC4110	TO3PB	High-speed switching regulator	500	400	7	25	160†	150	15 to 50	5	3.2	20	10	3.2	0.3
2SC4423	TO3PML	High-speed switching regulator	500	400	7	12	55†	150	15 to 50	5	1.6	20	10	8	0.3
2SC4424	TO3PML	High-speed switching regulator	500	400	7	16	60†	150	15 to 50	5	2	20	10	10	0.3
2SC4425	TO3PML	High-speed switching regulator	500	400	7	25	65†	150	15 to 50	5	3.2	20	10	16	0.3
2SC4426	TO3PML	High-speed switching regulator	1100	800	7	3	45†	150	10 to 40	5	0.2	15	10	0.2	0.3
2SC4427	TO3PML	High-speed switching regulator	1100	800	7	4.5	50†	150	10 to 40	5	0.3	15	10	0.3	0.3
2SC4428	TO3PML	High-speed switching regulator	1100	800	7	6	55†	150	10 to 40	5	0.4	15	10	0.4	0.3
2SC4429	TO3PML	High-speed switching regulator	1100	800	7	8	60†	150	10 to 40	5	0.6	15	10	0.6	0.3
2SC4430	TO3PML	High-speed switching regulator	1100	800	7	12	65†	150	10 to 40	5	0.8	15	10	0.8	0.3
2SC4457	TO3PML	Switching regulator	800	500	7	4	40†	150	15 to 50	5	0.3	18	10	0.3	0.3
2SC4458	TO3PML	Switching regulator	800	500	7	7	45†	150	15 to 50	5	0.6	18	10	0.6	0.3
2SC4459	TO3PML	Switching regulator	800	500	7	10	50†	150	15 to 50	5	0.8	18	10	0.8	0.3
2SC4460	TO3PML	Switching regulator	800	500	7	15	55†	150	15 to 50	5	1.2	18	10	1.2	0.3
2SC4461	TO3PML	Switching regulator	800	500	7	25	65†	150	15 to 50	5	2.4	18	10	2.4	0.3
2SC3989	TO3PBL	High-speed switching regulator	800	500	7	25	200†	150	15 to 50	5	2.4	18	10	2.4	0.3
2SC3990	TO3PBL	High-speed switching regulator	800	500	7	35	250†	150	15 to 50	5	3.2	18	10	3.2	0.3
2SC3991	TO3PBL	High-speed switching regulator	800	500	7	50	300†	150	10 to 50	5	4.8	18	10	4.8	0.3
2SC3992	TO3PBL	Switching regulator	1100	800	7	12	200†	150	10 to 40	5	0.8	15	10	0.8	0.3
2SC3993	TO3PBL	Switching regulator	1100	800	7	16	250†	150	10 to 40	5	1.2	15	10	1.2	0.3
2SC3994	TO3PBL	Switching regulator	1100	800	7	25	300†	150	10 to 40	5	1.6	15	10	1.6	0.3

* Mounted on a ceramic board (250 mm² × 0.8 mm)
† Tc = 25 ℃
‡ toff
§ Typical
|| Base center
Notes: Listed by package and arranged in order of Type Number.
For PNP, the minus sign is omitted due to space limitations.

Power MOSFETs (P channel)

Type No.	Package type	Applications	Absolute maximum ratings					Electrical characteristics (Ta = 25 ℃)						
									RDS(on) @ ID · VGS			|Yfs| @ VDS · ID		
			VDSS (V)	VGSS (V)	ID (A)	PD (W)	Tch (℃)	VGS(off) (V)	RDS (on) max (Ω)	ID (A)	VGS (V)	|Yfs| typ(S)	VDS (V)	ID (A)
2SJ284	CP	Ultrahigh-speed switching	30	±15	0.3	0.25	150	1 to 2	3.3	0.15	4	0.35	10	0.15
2SJ285	CP	Ultrahigh-speed switching	60	±15	0.25	0.25	150	1 to 2	4.0	0.15	4	0.35	10	0.15
2SJ286	CP	Ultrahigh-speed switching	100	±15	0.15	0.25	150	1 to 2	9.0	0.1	4	0.27	10	0.1
2SJ480▽	CP	Ultrahigh-speed switching	12	±15	0.3	0.25	150	1 to 2	1.4	0.15	10	0.2	10	0.15
2SJ187	PCP	Ultrahigh-speed switching	30	±15	1.0	1.5†	150	1 to 2	0.75	0.5	10	1.0	10	0.5
2SJ190	PCP	Ultrahigh-speed switching	60	±15	1.0	1.5†	150	1 to 2	1.2	0.5	10	1.0	10	0.5
2SJ193	PCP	Ultrahigh-speed switching	100	±15	1.0	1.5†	150	1 to 2	2.4	0.5	10	1.0	10	0.5
2SJ287	PCP	Ultrahigh-speed switching	30	±15	0.5	1.3†	150	1 to 2	3.3	0.25	4	0.4	10	0.25
2SJ288	PCP	Ultrahigh-speed switching	60	±15	0.5	1.3†	150	1 to 2	4.0	0.25	4	0.4	10	0.25
2SJ289	PCP	Ultrahigh-speed switching	100	±15	0.5	1.3†	150	1 to 2	9.5	0.25	4	0.4	10	0.25
2SJ316	PCP	Ultrahigh-speed switching	12	±15	1.0	1.5†	150	1 to 2	0.63	0.5	4	1.2	10	0.5
2SJ335	PCP	Ultrahigh-speed switching	12	±15	0.5	1.3†	150	1 to 2	2.5	0.25	4	1.2	10	0.25
2SJ381	PCP	Ultrahigh-speed switching	12	±10	2.0	3.5†	150	0.5 to 1.5	0.7	0.5	2.5	2.4	6	1.0
2SJ416	PCP	Ultrahigh-speed switching	30	±20	2.0	3.5†	150	1 to 2.5	0.65	1.0	4	2.0	10	1.0
2SJ225	NMP	Ultrahigh-speed switching	30	±15	1.0	1.0	150	1 to 2	0.75	0.5	10	1.0	10	0.5
2SJ228	NMP	Ultrahigh-speed switching	60	±15	0.8	1.0	150	1 to 2	1.2	0.4	10	0.9	10	0.4
2SJ231	NMP	Ultrahigh-speed switching	100	±15	0.5	1.0	150	1 to 2	2.4	0.25	10	0.7	10	0.25

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