

General-application Transistors

Type No.	Package type	Applications	Absolute maximum ratings						Electrical characteristics (Ta = 25 °C)							
			VCBO (V)	VCEO (V)	VEBO (V)	IC (A)	PC (W)	TJ (°C)	ICBO max @ VCB		hFE @ VCE · IC			fr @ VCE · IC		
									ICBO max (μA)	VCB (V)	hFE	VCE (V)	IC (mA)	fr (MHz)	VCE (V)	IC (mA)
2SA1683	SPA	Audio amplifier	100	80	5	0.5	0.3	150	0.1	60	100 to 400	5	50	120	10	10
2SC4414	SPA	Audio amplifier	100	80	5	0.5	0.3	150	0.1	60	100 to 400	5	50	120	10	10
2SA1392	NP	Audio amplifier	60	50	6	0.2	0.4	150	0.1	40	100 to 560	6	1	200	6	10
2SA1450	NP	Audio output driver	100	80	5	0.5	0.6	150	0.1	60	100 to 400	5	50	120	10	10
2SC3383	NP	Audio amplifier	60	50	6	0.2	0.4	150	0.1	40	100 to 560	6	1	250	6	10
2SC3708	NP	Audio output driver	100	80	5	0.5	0.6	150	0.1	60	100 to 560	5	50	120	10	10
2SB631	TO126	Audio power amplifier, medium-speed switch	100	100	5	1	8 †	150	1	50	60 to 320	5	50	110	10	50
2SB631K	TO126	Audio power amplifier, medium-speed switch	120	120	5	1	8 †	150	1	50	60 to 320	5	50	110	10	50
2SB632	TO126	Audio power amplifier, medium-speed switch	25	25	5	2	10 †	150	1	20	60 to 320	2	500	45	10	50
2SB632K	TO126	Audio power amplifier, medium-speed switch	35	35	5	2	10 †	150	1	20	60 to 320	2	500	45	10	50
2SD600	TO126	Audio power amplifier, medium-speed switch	100	100	5	1	8 †	150	1	50	60 to 320	5	50	130	10	50
2SD600K	TO126	Audio power amplifier, medium-speed switch	120	120	5	1	8 †	150	1	50	60 to 320	5	50	130	10	50
2SD612	TO126	Audio power amplifier, medium-speed switch	25	25	5	2	10 †	150	1	20	60 to 320	2	500	100	10	50
2SD612K	TO126	Audio power amplifier, medium-speed switch	35	35	5	2	10 †	150	1	20	60 to 320	2	500	100	10	50
2SA1606	TO220ML	High-voltage switch, 100 W audio output driver	180	160	6	1.5	15 †	150	10	120	60 to 200	5	300	100	10	50
2SC4159	TO220ML	High-voltage switch, 100 W audio output driver	180	160	6	1.5	15 †	150	10	120	60 to 200	5	300	100	10	50
2SD1940	TO220ML	High-voltage switch, 25 to 35 W audio power amplifier	100	85	6	6	25 †	150	100	40	60 to 320	5	1000	15	5	1000

† Tc = 25 °C
Notes: Listed by package type and arranged in order of Type Number.
For PNP, the minus sign is omitted due to space limitations.
The standard version of the FLP package is available in radial taping form.

Switching Transistors

Type No.	Package type	Applications	Absolute maximum ratings						Electrical characteristics (Ta = 25 °C)						
			VCBO (V)	VCEO (V)	VEBO (V)	IC (A)	PC (W)	TJ (°C)	hFE @ VCE · IC			ft @ VCE · IC			tf (toff) max (μs)
									hFE	VCE (V)	IC (A)	ft (MHz)	VCE (V)	IC (A)	
2SA1883	SMCP	High-speed switching	15	15	5	0.2	0.15	150	50 to 140	1	0.01	1000	1	0.01	0.019 ‡
2SC4987	SMCP	High-speed switching	40	15	5	0.2	0.15	150	50 to 200	1	0.01	750	10	0.01	0.012 ‡
2SA1685	MCP	High-speed switching	40	20	5	0.15	0.15	150	60 to 270	1	0.01	400	10	0.01	0.025
2SA1763	MCP	High-speed switching	15	15	5	0.2	0.15	150	50 to 140	1	0.01	1000	10	0.01	0.019 ‡
2SC4443	MCP	High-speed switching	40	20	5	0.15	0.15	150	60 to 270	1	0.01	700	10	0.01	0.025
2SC4452	MCP	High-speed switching	40	15	5	0.2	0.15	150	50 to 200	1	0.01	750	10	0.01	0.012 ‡
2SA1257	CP	High-voltage switching	180	160	5	0.08	0.2	125	60 to 270	5	0.01	130	10	0.01	0.15 §
2SA1331	CP	High-speed switching	60	50	5	0.15	0.15	125	90 to 400	6	0.001	100	6	0.001	0.2 §
2SA1338	CP	High-speed switching	60	50	5	0.5	0.2	150	100 to 560	5	0.01	200	10	0.05	0.05 §
2SA1607	CP	High-speed switching	40	20	5	0.15	0.2	150	60 to 270	1	0.01	400	10	0.01	0.025
2SA1728	CP	High-speed switching	50	40	5	0.5	0.2	150	70 to 280	2	0.05	350	2	0.05	0.32 ‡
2SA1764	CP	High-speed switching	15	15	5	0.2	0.2	150	50 to 140	1	0.01	1000	10	0.01	0.019 ‡
2SC3143	CP	High-voltage switching	180	160	5	0.08	0.2	125	60 to 270	5	0.01	150	10	0.01	0.2 §
2SC3361	CP	High-speed switching	60	50	5	0.15	0.15	125	90 to 400	6	0.001	100	6	0.001	0.16 §
2SC3392	CP	High-speed switching	60	50	5	0.5	0.2	150	100 to 560	5	0.01	300	10	0.05	0.07 §
2SC4168	CP	High-speed switching	40	20	5	0.15	0.2	150	60 to 270	1	0.01	700	10	0.01	0.025
2SC4453	CP	High-speed switching	40	15	5	0.2	0.2	150	50 to 200	1	0.01	750	10	0.01	0.012 ‡
2SC4519	CP	High-speed switching	60	45	5	0.5	0.2	150	100 to 400	2	0.05	350	2	0.05	0.35 ‡
FC140	CP6	2SC4452 × 2 in parallel	40	15	5	0.2	0.2	150	90 to 240	1	0.01	750	10	0.01	0.012 ‡
2SA1416	PCP	High-voltage switching	120	100	6	1	1.3*	150	100 to 400	5	0.1	120	10	0.1	0.04 §
2SA1417	PCP	High-voltage switching	120	100	6	2	1.5*	150	100 to 400	5	0.1	120	10	0.1	0.04 §
2SA1729	PCP	High-speed switching	50	40	5	1.5	1.3*	150	70 to 280	2	0.1	300	2	0.1	0.3 ‡
2SA1730	PCP	High-speed switching	50	40	5	3	1.5*	150	70 to 280	2	0.5	300	2	0.5	0.3 ‡
2SA1898	PCP	High-speed switching	15	15	5	3	1.3*	150	100 to 280	2	0.5	300	2	0.3	220
2SA1935	PCP	High-speed switching	15	15	5	1.5	1.3*	150	100 to 280	2	0.1	300	2	0.1	120 §

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