

# Transistors (Selection Guide by Applications and Functions)

## ■ Silicon Small Signal Transistors

### ● General-use Low Frequency Amplifiers and Others

Applica- tion Functions	Package (No.)													V <sub>CE0</sub> V <sub>CEs</sub> <sup>1)</sup> (V)	I <sub>C</sub> (mA)	f <sub>r</sub> (MHz)	
	SS Mini Type (D1)	S Mini Type (D5)	Mini Type (D10)	T Mini Type (D19)	New S Type (D39)	TO-92 (D49)	M Type (D40)	TO-92NL (D51)	TO-92L (D50)	Mini Power Type (D16)	MT1 Type (D42)	MT2 Type (D43)	I <sub>FE</sub> ● NV(mV) * I <sub>C</sub> * V <sub>CE</sub> (V)			I <sub>E</sub> * I <sub>C</sub> (mA)	
General- use low freq. ampli- fier	(2SB1462 2SD2216	(2SB1218A 2SD1819A	(2SB709A 2SD601A	(2SB1627 2SD2496	(2SA1309A 2SC3311A	(2SB642 2SD637	(2SB642 2SD637	(2SA1309A 2SC3311A	(2SB1627 2SD2496	(2SB709A 2SD601A	(2SB1627 2SD2496	(2SB1320A 2SD1991A	50	100	● 160~460 * 2	● I <sub>FE</sub> * I <sub>C</sub> (mA)	
	(2SB1219A 2SD1820A	(2SB710A 2SD602A	(2SB1582 2SD2432	(2SA719720 2SC13171318	(2SB1030A 2SD1423A	(2SB643/644Δ 2SD638/639Δ	(2SA1619A 2SC4208A	(2SA719720 2SC13171318	(2SB1582 2SD2432	(2SB710A 2SD602A	(2SB1321AΔ 2SD1992AΔ	(2SB1377 2SD2071	25/50	500	● 85~340 * 150 Δ * 10	● I <sub>FE</sub> * I <sub>C</sub> (mA)	
	(2SA1791 2SC4656	(2SA1748 2SC4562	(2SB1597 2SD2455	(2SA720A 2SC1318A	(2SA1762 2SC4606	(2SA1533 2SC3939	(2SA1533 2SC3940A	(2SA720A 2SC1318A	(2SB1597 2SD2455	(2SB1597 2SD2455	(2SB767 2SD875	(2SB1322A 2SD1994A	70	500	● 130~330 (e.g.) * 150	● I <sub>FE</sub> * I <sub>C</sub> (mA)	
				(2SB621A 2SD592A	(2SA1534A 2SC3940A	(2SA1534A 2SC3940A	(2SA1534A 2SC3940A	(2SB621A 2SD592A		(2SB766A 2SD874A			25/50	1A	● 85~340 * 500	● I <sub>FE</sub> * I <sub>C</sub> (mA)	
										(2SB1440 2SD2185			50	50	● 200~500 (Fr.250) * 2	● I <sub>FE</sub> * I <sub>C</sub> (mA)	
										(2SB1599 2SD2457			50	5A	● 120~340 * 500	● I <sub>FE</sub> * I <sub>C</sub> (mA)	
										(2SA1890 2SC5026			40	1.5A	● 80~220 * 1A	● I <sub>FE</sub> * I <sub>C</sub> (mA)	
										(2SB1600 2SD2458			80	1A	● 120~340 * 100	● I <sub>FE</sub> * I <sub>C</sub> (mA)	
													100	1A	● 120~340 * 100	● I <sub>FE</sub> * I <sub>C</sub> (mA)	
													100	2A	● 120~340 * 200	● I <sub>FE</sub> * I <sub>C</sub> (mA)	
High -freq. (High V <sub>CEO</sub> )	(2SD2345	(2SD1823	(2SD1030	(2SD2433	(2SD1424 2SD2460	(2SB774 2SD1010	(2SD1030 2SD1424	(2SB774 2SD1010	(2SD2433 2SD2460	(2SD1424 2SD2460	(2SD1995	(2SD2184	25	100	V <sub>CEO</sub> :15V * 0	● I <sub>FE</sub> * I <sub>C</sub> (mA)	
													40	50	● 400~2000 * 2	● I <sub>FE</sub> * I <sub>C</sub> (mA)	
Dating- ton	(2SD1824	(2SD1149	(2SD1478A	(2SD2434	(2SD1512	(2SD892/A 2SD1198/A	(2SD1512	(2SD892/A 2SD1198/A	(2SD1512	(2SD1511	(2SD2259	(2SD2258 2SD2067	20	700	● 1000~2500 * 150	● I <sub>FE</sub> * I <sub>C</sub> (mA)	
													50	700	● 400~1000 * 150	● I <sub>FE</sub> * I <sub>C</sub> (mA)	
Low freq. low noise ampli- fier	(2SB1463 2SD2240A	(2SB1220 2SD1821A	(2SB792A 2SD814A	(2SB1583	(2SA1816 2SC4715	(2SA921 2SC1980	(2SB1036 2SD1449	(2SA921 2SC1980	(2SB1036 2SD1449	(2SB1583			120	20	* 150	—	
													150/ 185	50	* 150	—	
Low V <sub>CE(sat)</sub>													35/55	50	* 150	—	
													10	500	* <0.3	* 400	
													20	500	* <0.4	* 500	
													20	500	* <0.4	* 500	
													20	300	V <sub>CEO</sub> :25V ● 500~2500	* 4	
													10	500	* <0.17	* 250	