

Transistors (Selection Guide by Applications and Functions)

■ Silicon Medium-Power Transistors (continued)

Application Functions	Package (No.)						V _{CEO} (V)	I _C (A)	V _{CE(sat)}			h _{FE} (MHz)	I _C * I _E (A)		
	U Type (D36)	TO-126 (D49*, D50)	MT3 Type (D40)	MT4 Type (D41)	TO-202 (D51)	TO-220(a) (D52)			TO-220F (D55)	typ (V)	I _C (A)			I _B (mA)	
TV	Chroma input		2SC2258					250	0.1	<1.2	0.05	5	●100	* 0.01	
			2SC3063	△ 2SC5340		2SC2923	2SC4714	2SC3942	300	0.1	<1.5	0.03	3	●140	* 0.02
		2SA1375							200	0.07	<1.5	0.05	5	●80	* 0.01
		2SC2924							300	0.1	<1.5	0.03	3	●140	* 0.02
			2SC5121						400	0.07	<1.2	0.05	5	●80	* -0.01
	Horizontal drive	2SD1112			2SC2653/(H)	2SC1905(H)	2SC3946	300	0.2	<1.0	0.05	5	●70	* 0.01	
High h _{FE}			△ 2SB1630	△ 2SB1631				60	3	<1.0	2.0	50	350 to 625	0.5	
	△ 2SD2453		2SD2573	2SD2139			2SD1273	60	3	<1.0	2.0	50	500 to 2500	0.5	
	△ 2SD2443							20	0.7	<0.4	0.5	50	1000 to 2500	0.15	
							△ 2SD2486	60	4	<0.5	2.0	50	300 to 2000	0.8	
				2SD2544				60	7	<0.5	2.0	50	500 to 2000	0.8	

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■ Silicon Power Transistors

Application Functions	V _{CEO} (V)	I _C (A)	V _{CE(sat)}			Package (No.)												
			typ (V)	I _C (A)	I _B (mA)	TO-220(a) (D52)		TO-220F(D55)		TO-220E(D59)		TO-220D(D58)		N Type(D42)		I Type(D44)		
						NPN	PNP	NPN	PNP	NPN	PNP	NPN	PNP	NPN	PNP	NPN	PNP	NPN
General-use	60/80	1	<1	1	125		2SB954/A										2SB1169/A	
	60/80	2	<2	2	200		2SB1052	2SD1480									2SB1170	2SD1751
	60/80	4	<1	2	400			2SD1265/A						2SD1251/A				
			<1	2	200			2SD1475										
			<1.5	4	400	2SD1990	2SD2000											
	60/80	3	<1.2	3	375		2SB941/A	2SD1266/A				2SB1548/A	2SD2374/A	2SB929/A	2SD1252/A	2SB1172/A	2SD1742/A	
			<1.2	3	375		2SB1393/A	2SD1985/A										
	60/80	4	<1.5	4	400		2SB942/A	2SD1267/A						2SB930/A	2SD1253/A	2SB1173/A	2SD1743/A	
	80	2	<0.5	2	100			2SD1517										
	80	3	<0.7	3	375							△ 2SD2549						
	80	10	<0.5	6	300			2SD2157										
	100	5	<2	3	300		2SB1063	2SD1499										
	150/180	1	<1	0.5	50		2SB1192/A	2SD1772/A						2SB1191/A	2SD1771/A	2SB1233/A		
	150/180	2	<1	0.5	50		2SB940/A	2SD1264/A						2SB928/A	2SD1250/A	2SB1171/A	2SD1741/A	
250/300	0.75	<1	1	200			2SD1263/A							2SD1249/A			2SD2215/A	
Low V _{CE(sat)}	20/40	4	0.25	2	100		2SB1071/A	2SD1539/A	2SB1603	2SD2465			2SB1070/A	2SD1538/A				
	20/40	7	0.32	5	160		2SB953/A	2SD1444/A					2SB952/A		2SB1638			
	20/40	10	0.4	10	330		2SB948/A	2SD1445/A	2SB1604	2SD2466			2SB936/A		2SB1148/A	2SD1752/A		
			0.32	7	230		2SB947/A						2SB935/A					
	80	3	0.3	2	100		2SB943	2SD1268	2SB1605	2SD2467			2SB931	2SD1254	2SB1174	2SD1744		
			0.12	2	100	2SD1528	2SD1530						2SD1529					
	80	4	0.25	3	150		2SB944	2SD1269					2SB932	2SD1255	2SB1175	2SD1745		
	80	5	0.3	1	125		2SB945	2SD1270	2SB1606	2SD2468			2SB933	2SD1256	2SB1176	2SD1746		
	80	15	0.5	7	350			2SD1964										
	80/100	7	0.25	5	250		2SB946	2SD1271/A	2SB1607	2SD2469			2SB934	2SD1257/A	2SB1177	2SD1747/A		

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Part Number List

Discrete Devices

[Package Symbol]	Old Part Nos	New Part Nos	Package	Page	Old Part Nos	New Part Nos	Package	Page
	Transistors				2SB621/A	2SB0621/A	TO92	116,125
					2SB642	2SB0642	M	118,125
SS Mini 3P: SS-Mini 3-pin	2SA683	2SA0683	TO92L	117,125	2SB643	2SB0643	M	118,125
S Mini 2P: S-Mini 2-pin	2SA684	2SA0684	TO92L	117,125	2SB644	2SB0644	M	118,125
S Mini 3P: S-Mini 3-pin	2SA699/A	2SA0699/A	TO202	121,128	2SB709A	2SB0709A	Mini 3P	115,125
S Mini 4P: S-Mini 4-pin	2SA719	2SA0719	TO92	116,125	2SB710/A	2SB0710/A	Mini 3P	115,125
S Mini 5P: S-Mini 5-pin	2SA720/A	2SA0720/A	TO92	116,125	2SB726	2SB0726	TO92	116
S Mini 6P: S-Mini 6-pin	2SA748	2SA0748	TO220	121,128	2SB745/A	2SB0745/A	M	118,126
TS Mini 6P: Thin S-Mini 6-pin	2SA777	2SA0777	TO92L	117,125	2SB766/A	2SB0766/A	Mini Power 3P	116,125
Mini 2P: Mini 2-pin	2SA794/A	2SA0794/A	TO126	119,129	2SB767	2SB0767	Mini Power 3P	116,125
Mini 3P: Mini 3-pin	2SA838	2SA0838	TO92	116,127	2SB774	2SB0774	TO92	116,125
Mini 4P: Mini 4-pin	2SA879	2SA0879	TO92L	117,126	2SB779	2SB0779	Mini 3P	115,126
Mini 5P: Mini 5-pin	2SA885	2SA0885	TO126	119,128	2SB788	2SB0788	M	118,125
Mini 6P: Mini 6-pin	2SA886	2SA0886	TO126	119,128	2SB789/A	2SB0789/A	Mini Power 3P	116,126
T Mini 3P: Thin Mini 3-pin	2SA890	2SA0900	TO126	119,129	2SB790	2SB0790	M	118,126
Mini Power 2P: Mini-Power 2-pin	2SA900	2SA0900	TO126	119,129	2SB792/A	2SB0792/A	Mini 3P	115,125
Mini Power 3P: Mini-Power 3-pin	2SA914	2SA0914	TO126	119,129	2SB819	2SB0819	M	118,125
New Mini Power 2P: New Mini-Power 2-pin	2SA921	2SA0921	TO92	116,125	2SB873	2SB0873	TO92L	117,126
HNMP 2P: Half New Mini Power 2-pin	2SA963	2SA0963	TO126	119,128	2SB873	2SB0873	TO92L	117,126
Flat Mini 3P: Flat Mini 3-pin					2SB928/A	2SB0928/A	N	120,130
TO92: TO-92					2SB929/A	2SB0929/A	N	120,130
TO92L: TO-92L					2SB930/A	2SB0930/A	N	120,130
TO92NL: TO-92NL					2SB931	2SB0931	N	120,130
TO92-2P: TO-92-2-pin					2SB932	2SB0932	N	120,130
S: S Type					2SB933	2SB0933	N	120,130
NS: New S Type					2SB934	2SB0934	N	120,131
U: U Type					2SB935/A	2SB0935/A	N	120,130
M: M Type					2SB936/A	2SB0936/A	N	120,130
MT1: MT1 Type					2SB937/A	2SB0937/A	N	120,131
MT2: MT2 Type					2SB938/A	2SB0938/A	N	120,131
MT3: MT3 Type					2SB939/A	2SB0939/A	N	120,131
MT4: MT4 Type					2SB940/A	2SB0940/A	TO220F	122,130
N: N Type					2SB941/A	2SB0941/A	TO220F	122,129,130
I: I Type					2SB942/A	2SB0942/A	TO220F	122,130
TO126: TO-126					2SB943	2SB0943	TO220F	122,130
TO202: TO-202					2SB944	2SB0944	TO220F	122,130
TO220: TO-220					2SB945	2SB0945	TO220F	122,130
TO220F: TO-220 Full Pack					2SB946	2SB0946	TO220F	123,131
TO220D: TO-220D					2SB947/A	2SB0947/A	TO220F	123,130
TO220D 2P: TO-220D 2-pin					2SB948/A	2SB0948/A	TO220F	123,130
TO220E: TO-220E					2SB949/A	2SB0949/A	TO220F	122,129,131
TOP3: TOP-3					2SB950/A	2SB0950/A	TO220F	122,129,131
TOP3E: TOP-3E					2SB951/A	2SB0951/A	TO220F	123,129,131
TOP3F: TOP-3 Full Pack					2SB952/A	2SB0952/A	N	120,130
TOP3L: TOP-3L					2SB953/A	2SB0953/A	TO220F	123,130
SO10/14/16:					2SB954/A	2SB0954/A	TO220F	122,130
SO Package (10/14-pin/16-pin)					2SB956	2SB0956	Mini Power 3P	116,126
SIL8/SIL10/SIL12:					2SB967	2SB0967	U	120,129
8-pin SIP/10-pin SIP/12-pin SIP					2SB968	2SB0968	U	120,128
DO34: DO-34					2SB970	2SB0970	Mini 3P	115,126
DO35: DO-35					2SB976	2SB0976	TO92	116,126
DO41: DO-41							TO126	119,129
HSOP24D: HSOP-24D							NS	117,125
SSOF10D: SSOF-10D							NS	117,125
SSONF10D: SSONF-10D							M	118,125
							TO92	116,126
							SS Mini 3P	115,127
							SS Mini 3P	115,127
							NS	117,125
							TO92NL	117,126
							U	120,133
							Mini Power 3P	116,125
							U	120,129
							U	120,129
							MT2	118,126
							MT2	118,125
							TO220D	130
							S Mini 3P	115,125
							Mini 3P	115,126

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