

POWER TRANSISTORS

HIGH GAIN BIPOLAR DARLINGTONS

I _C (A)	V _{CB0} (V)	V _{CEO} (V)	P _{tot} (W)	Package	Type		h _{FE} min	@ I _C (A)	V _{CE} (V)	V _{CEsat} (V)	I _C (A)	I _B (mA)
					NPN	PNP						
2	60	60	50	SOT 82 (1)	SGS 110	SGS 115	1000	1	4	2.5	2	8
2	80	80	50	SOT 82 (1)	SGS 111	SGS 116	1000	1	4	2.5	2	8
2	100	100	50	SOT 82 (1)	SGS 112	SGS 117	1000	1	4	2.5	2	8
5	60	60	65	SOT 82 (1)	SGS 120	SGS 125	1000	3	3	2	3	12
5	80	80	65	SOT 82 (1)	SGS 121	SGS 126	1000	3	3	2	3	12
5	100	100	65	SOT 82 (1)	SGS 122	SGS 127	1000	3	3	2	3	12
6	60	60	60	SOT 82 (1)	BD 331	BB 332	750	3	3	2	3	12
6	80	80	60	SOT 82 (1)	BD 333	BD 334	750	3	3	2	3	12
6	100	100	60	SOT 82 (1)	BD 335	BD 336	750	3	3	2	3	12
8	40	40	65	SOT 82 (1)	SGS 6386		1000	3	3	2	3	6
8	60	60	65	SOT 82 (1)	SGS 130	SGS 135	1000	4	4	2	4	16
8	80	80	60	TO 220	BDX 53 B	BDX 54 B	750	3	3	2	3	12
8	80	80	65	SOT 82 (1)	SGS 131	SGS 136	1000	4	4	2	4	16
8	80	80	70	TO 220	TIP 131	TIP 136	1000	4	4	2	4	16
8	80	80	80	TO 220	TIP 101	TIP 106	1000	3	4	2	3	16
8	100	100	60	TO 220	BDX 53 C	BDX 54 C	750	3	3	2	3	12
8	100	100	65	SOT 82 (1)	SGS 132	SGS 137	1000	4	4	2	4	16
8	100	100	70	TO 220	TIP 132	TIP 137	1000	4	4	2	4	16
8	100	100	80	TO 220	TIP 102	TIP 107	1000	3	4	2	3	6
10	60	60	65	SOT 82	SGS 6387		1000	5	3	2	5	10
10	60	60	65	TO 220	2N 6387		1000	5	3	2	5	10
10	80	80	65	SOT 82	SGS 6388		1000	5	3	2	5	10
10	80	80	65	TO 220	2N 6388		1000	5	3	2	5	10
10	80	80	125	SOT 93	TIP 141	TIP 146	1000	5	4	3	10	40
10	100	100	125	SOT 93	TIP 142	TIP 147	1000	5	4	3	10	40
12	80	80	80	TO 220	BDW 93 B	BDW 94 B	750	5	3	2	5	20
12	100	100	80	TO 220	BDW 93 C	BDW 94 C	750	5	3	2	5	20
12	160	140	80	TO 220	SGSD 93E		1000	3	3	2	10	20
12	180	160	80	TO 220	SGSD 93F		1000	3	3	2	10	20
12	200	180	80	TO 220	SGSD 93G		1000	3	3	2	10	20
20	80	80	160	TO 3	2N 6283	2N 6286	750	10	3	3	20	200
25	80	80	130	SOT 93	SGSD 100	SGSD 200	300	20	3	1.75	10	400
30	60	60	200	TO 3	MJ 11012	MJ 11011	1000	20	5	4	30	300
30	90	90	200	TO 3	MJ 11014	MJ 11013	1000	20	5	4	30	300

(1) Also available in SOT 194 package for SMD.

MOSFET TRANSISTORS FOR AUTOMOTIVE APPLICATIONS

V _{(BR) DSS} (V)	R _{DS (on)} max (Ω)	@ I _D (A)	Package	Type	I _D max (A)	P _{tot} (W)	g _{fs} min (mho)	C _{iss} max (pF)
50	0.13	5	SOT 194	SGSP222*	10	50	3	550
50	0.10	9	TO 220	BUZ71	14	40	3	650
50	0.10	9	ISOWATT 220	BUZ71 F I	12	30	3	650
50	0.08	13	TO 220	BUZ10	20	70	8	700 §
50	0.04	15	TO 220	BUZ11	30	75	4	2000
50	0.04	15	ISOWATT 220	BUZ11 F I	20	35	4	2000
50	0.033	20	TO 218	SGSP492	40	150	10	2800
60	0.15	6	TO 220	MTP3055A	12	40	4.5	500
60	0.15	6	ISOWATT 220	MTP3055A F I	10	30	4.5	500
60	0.08	22	TO 218	IRFP153	34	150	13	3000
60	0.08	22	ISOWATT 218	IRFP153 F I	21	65	13	3000
60	0.055	22	TO 218	IRFP151	40	150	13	3000
60	0.055	22	ISOWATT 218	IRFP151 F I	26	65	13	3000
60	0.04	15	TO 220	BUZ11S2	30	75	4	2000
60	0.04	15	ISOWATT 220	BUZ11S2 F I	20	35	4	2000
60	0.028	20	TO 218	MTH40N06	40	150	10	5000
60	0.028	20	ISOWATT 218	MTH40N06 F I	26	65	10	5000

§ : Typical value.

NOTE : For internal schematic diagrams see following page.

(1) Also available in SOT 194 package for SMD.

POWER BIPOLAR

EPITAXIAL BASE HIGH GAIN DARLINGTONS (Continued)

I _C (A)	V _{CB0} (V)	V _{CEO} (V)	P _{tot} (W)	Package	Type		h _{FE} @ I _C / V _{CE}		V _{CEsat} @ I _C / I _B			
					NPN	PNP	min	(A)	(V)	(V)	(A)	(mA)
8	60	60	90	TO 3	MJ 1000	MJ 900	1000	3	3	2	3	12
8	80	80	60	TO 220	BDX 53 B	BDX 54 B	750	3	3	2	3	12
8	80	80	65	SOT 82 (1)	SGS 131	SGS 136	1000	4	4	2	4	16
8	80	80	70	TO 220	TIP 131	TIP 136	1000	4	4	2	4	16
8	80	80	75	TO 220	2N 6044	2N 6041	1000	4	4	2	4	16
8	80	80	80	TO 220	TIP 101	TIP 106	1000	3	4	2	3	6
8	80	80	90	TO 3	MJ 1001	MJ 901	1000	3	3	2	3	12
8	100	100	60	TO 220	BDX 53 C	BDX 54 C	750	3	3	2	3	12
8	100	100	65	SOT 82 (1)	SGS 132	SGS 137	1000	4	4	2	4	16
8	100	100	70	TO 220	TIP 132	TIP 137	1000	4	4	2	4	16
8	100	100	75	TO 220	2N 6045	2N 6042	1000	3	4	2	3	12
8	100	100	80	TO 220	TIP 102	TIP 107	1000	3	4	2	3	6
10	45	45	70	TO 220	BDX 33	BDX 34	750	4	3	2.5	4	8
10	45	45	100	TO 3	BDX 85	BDX 86	1000	3	3	2	4	16
10	60	60	65	TO 220	2N 6387		1000	5	3	2	5	10
10	60	60	65	SOT 82 (1)	SGS 6387		1000	5	3	2	5	10
10	60	60	70	TO 220	BDX 33 A	BDX 34 A	750	4	3	2.5	4	8
10	60	60	100	TO 3	BDX 85 A	BDX 86 A	1000	3	3	2	4	16
10	60	60	125	SOT 93	TIP 140	TIP 145	1000	5	4	3	10	40
10	60	60	150	TO 3	MJ 3000	MJ 2500	1000	5	3	2	5	20
10	80	80	100	TO 3	BDX 85 B	BDX 86 B	1000	3	3	2	4	16
10	80	80	65	TO 220	2N 6388		1000	5	3	2	5	10
10	80	80	65	SOT 82 (1)	SGS 6388		1000	5	3	2	5	10
10	80	80	70	TO 220	BDX 33 B	BDX 34 B	750	3	3	2.5	3	6
10	80	80	125	SOT 93	TIP 141	TIP 146	1000	5	4	3	10	40
10	80	80	150	TO 3	MJ 3001	MJ 2501	1000	5	3	2	5	20
10	100	100	70	TO 220	BDX 33 C	BDX 34 C	750	3	3	2.5	3	6
10	100	100	100	TO 3	BDX 85 C	BDX 86 C	1000	3	3	2	4	16
10	100	100	125	SOT 93	TIP 142	TIP 147	1000	5	4	3	10	40
12	45	45	80	TO 220	BDW 93	BDW 94	750	5	3	2	5	20
12	45	45	120	TO 3	BDX 87	BDX 88	1000	5	3	2	6	24
12	60	60	80	TO 220	BDW 93 A	BDW 94 A	750	5	3	2	5	20
12	60	60	120	TO 3	BDX 87 A	BDX 88 A	1000	5	3	2	6	24
12	60	60	125	SOT 93	BDV 65	BDV 64	1000	5	4	2	5	20
12	80	80	80	TO 220	BDW 93 B	BDW 94 B	750	5	3	2	5	20
12	80	80	120	TO 3	BDX 87 B	BDX 88 B	1000	5	3	2	6	24
12	80	80	125	SOT 93	BDV 65 A	BDV 64 A	1000	5	4	2	5	20
12	100	100	40	ISOWATT 220	BDW 93 CFI	BDW 94 CFI	750	5	3	2	5	20
12	100	100	80	TO 220	BDW 93 C	BDW 94 C	750	5	3	2	5	20
12	100	100	120	TO 3	BDX 87 C	BDX 88 C	1000	5	3	2	6	24
12	100	100	125	SOT 93	BDV 65 B	BDV 64 B	1000	5	4	2	5	20
12	180	160	40	ISOWATT 220	SGSD 93 FFI		1000	3	3	2	10	20
16	60	60	150	TO 3	MJ 4033	MJ 4030	1000	10	3	4	16	80
16	80	80	150	TO 3	MJ 4034	MJ 4031	1000	10	3	4	16	80
16	100	100	150	TO 3	MJ 4035	MJ 4032	1000	10	3	4	16	80
20	60	60	160	TO 3	2N 6282	2N 6285	750	10	3	3	20	200
20	80	80	160	TO 3	2N 6283	2N 6286	750	10	3	3	20	200
20	100	100	160	TO 3	2N 6284	2N 6287	750	10	3	3	20	200
25	80	80	130	SOT 93	SGSD 100	SGSD 200	300	20	3	1.75	10	40
30	60	60	200	TO 3	MJ 11012	MJ 11011	1000	20	5	4	30	300
30	90	90	200	TO 3	MJ 11014	MJ 11013	1000	20	5	4	30	300
30	120	120	200	TO 3	MJ 11016	MJ 11015	1000	20	5	4	30	300

(1) Also available in SOT 194 package for SMD.