

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

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

MOSFET TRANSISTORS FOR AUTOMOTIVE APPLICATIONS

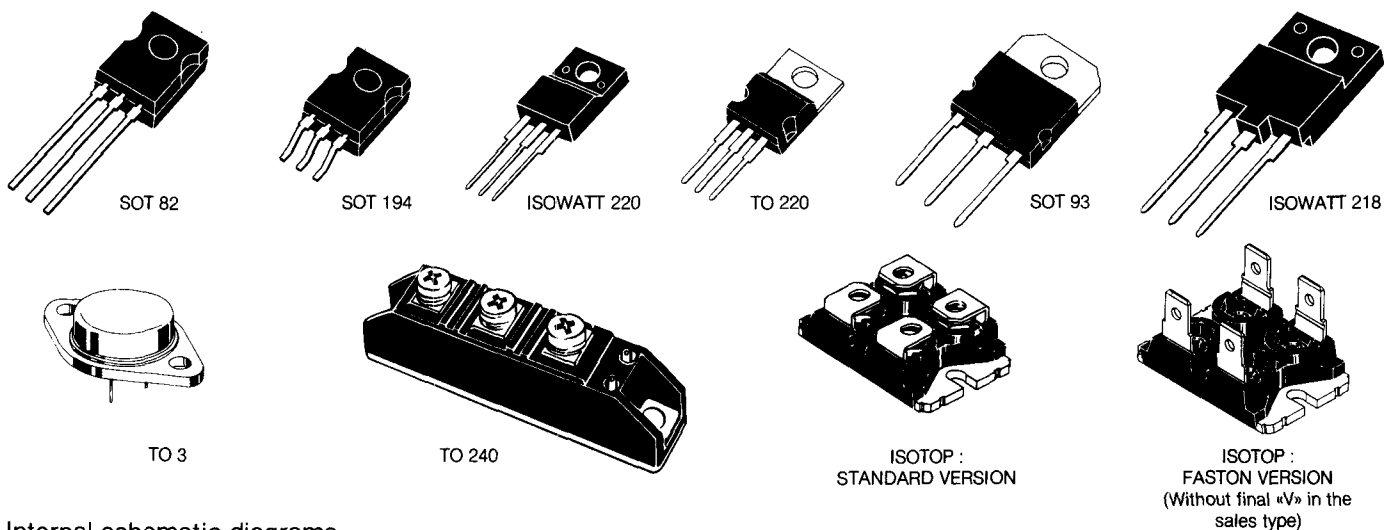
V _(BR) DSS (V)	R _{DS} (on) max (Ω)	@ I _D (A)	Package	Type	I _D max (A)	P _{tot} (W)	g _{fs} min (mho)	C _{iss} max (pF)
50	0.13	5	SOT 194	SGSP222*	10	50	3	550
50	0.10	9	TO 220	BUZ71	14	40	3	650
50	0.10	9	ISOWATT 220	BUZ71 F I	12	30	3	650
50	0.08	13	TO 220	BUZ10	20	70	8	700 §
50	0.04	15	TO 220	BUZ11	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.

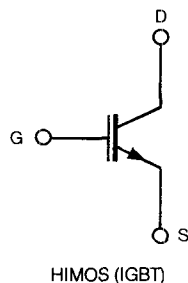
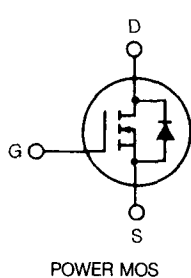
NOTE : For internal schematic diagrams see following page.

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

POWER MOS



Internal schematic diagrams



$V_{(BR) DSS}$ (V)	$R_{DS(on)}$ max (Ω)	@ I_D (A)	Package	Type	I_D max (A)	P_{tot} (W)	θ_{fs} min (mho)	C_{iss} max (pF)
50	0.3	3.5	TO 220	SGSP358	7	50	1.5	270
50	0.15	7.5	TO 220	MTP15N05L	15	75	5	900
50	0.15	7.5	ISOWATT 220	MTP15N05LFI	10	30	5	900
50	0.15	7.5	TO 220	STLT19**	15	75	5	480
50	0.15	7.5	ISOWATT 220	STLT19FI**	10	30	5	480
50	0.13	5	SOT 82	SGSP222*	10	50	3	550
50	0.13	8	TO 220	SGSP322	16	75	3	550
50	0.12	10	TO 220	BUZ10A	17	75	3	2000
50	0.12	9	TO 220	BUZ71A	13	40	3	650
50	0.12	9	TO 220	IRFZ22	14	40	5	850
50	0.12	9	ISOWATT 220	IRFZ22FI	12	30	5	850
50	0.1	9	TO 220	BUZ71	14	40	3	650
50	0.1	9	ISOWATT 220	BUZ71FI	12	30	3	650
50	0.1	9	TO 220	IRFZ20	15	40	5	850
50	0.1	9	ISOWATT 220	IRFZ20FI	12.5	30	5	850
50	0.08	13	TO 220	BUZ10	20	70	8	700 typ
50	0.08	12.5	TO 220	STLT29**	25	100	9	1200
50	0.06	15	TO 220	BUZ11A	25	75	4	2000
50	0.06	14	TO 220	SGSP382	28	100	5	1400
50	0.06	15	TO 218	SGSP482	30	125	5	1400
50	0.04	15	TO 220	BUZ11	30	75	4	2000
50	0.04	15	ISOWATT 220	BUZ11FI	20	35	4	2000
50	0.035	29	TO 220	IRFZ42	35	125	17	3000
50	0.033	20	TO 218	SGSP492	40	150	10	2800
50	0.033	20	TO 3	SGSP592	40	150	10	2800
50	0.028	29	TO 220	IRFZ40	35	125	17	3000
50	0.023	30	TO 220	STVHD90	52	125	30	3000
60	0.15	7.5	TO 220	MTP15N06L	15	75	5	900
60	0.15	7.5	ISOWATT 220	MTP15N06LFI	10	30	5	900
60	0.15	6	TO 220	MTP3055A	12	40	4.5	500

* Also available in SOT 194 package for SMD.

** Logic level V_{GS} threshold.