

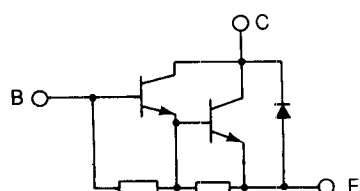
POWER TRANSISTORS

MOSFET TRANSISTORS FOR AUTOMOTIVE APPLICATIONS (Continued)

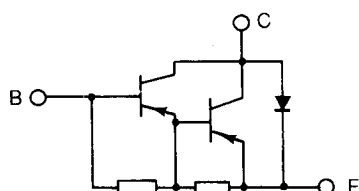
$V_{(BR) DSS}$ (V)	$R_{DS(on)}$ max (Ω)	@ I_D (A)	Package	Type	I_D max (A)	P_{tot} (W)	g_{fs} min (mho)	C_{iss} max (pF)
80	0.36	5.6	TO 220	IRF523	8	60	2.7	600
80	0.36	5.6	ISOWATT 220	IRF523FI	6	30	2.7	600
80	0.27	5.6	TO 220	IRF521	9.2	60	2.7	600
80	0.27	5.6	ISOWATT 220	IRF521FI	7	30	2.7	600
80	0.23	8.3	TO 220	IRF533	12	79	5.1	800
80	0.23	8.3	ISOWATT 220	IRF533FI	8	35	5.1	800
80	0.16	8.3	TO 220	IRF531	14	79	5.1	800
80	0.16	8.3	ISOWATT 220	IRF531FI	9	35	5.1	800
80	0.10	17	TO 220	IRF543	25	125	8.7	1600
80	0.10	17	ISOWATT 220	IRF543FI	14	40	8.7	1600
80	0.077	17	TO 220	IRF541	28	125	8.7	1600
80	0.077	17	ISOWATT 220	IRF541FI	15	40	8.7	1600
100	1.40	1.2	SOT 82	SGSP201*	2	18	0.5	125
100	0.36	5.6	TO 220	IRF522	8	60	2.7	600
100	0.36	5.6	ISOWATT 220	IRF522FI	6	30	2.7	600
100	0.27	5.6	TO 220	IRF520	9	60	2.7	600
100	0.27	5.6	ISOWATT 220	IRF520FI	7	30	2.7	600
100	0.25	5	TO 220	BUZ72A	9	40	2.7	600
100	0.23	8.3	TO 220	IRF532	12	79	5.1	800
100	0.23	8.3	ISOWATT 220	IRF532FI	8	35	5.1	800
100	0.16	8.3	TO 220	IRF530	14	79	5.1	800
100	0.16	8.3	ISOWATT 220	IRF530FI	9	35	5.1	800
100	0.15	9	TO 220	SGSP361	18	100	4.5	1200
100	0.15	10	TO 218	SGSP461	20	125	4.5	1200
100	0.10	17	TO 220	IRF542	25	125	8.7	1600
100	0.10	17	ISOWATT 220	IRF542FI	14	40	8.7	1600
100	0.08	22	TO 218	IRFP152	34	150	13	3000
100	0.08	22	ISOWATT 218	IRFP152FI	21	65	13	3000
100	0.077	17	TO 220	IRF540	28	125	8.7	1600
100	0.077	17	ISOWATT 220	IRF540FI	15	40	8.7	1600
100	0.055	22	TO 218	IRFP150	40	150	13	3000
100	0.055	22	ISOWATT 218	IRFP150FI	26	65	13	3000

* Also available in SOT 194 package for SMD.

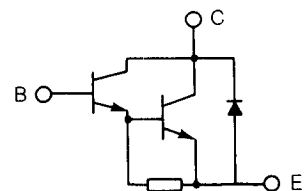
Internal schematic diagrams



NPN



PNP



For SGSD 93E / 93F / 93G only

POWER MOS

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)
60	0.15	6	ISOWATT 220	MTP3055AFI	10	30	4.5	500
60	0.15	7.5	TO 220	STLT20**	15	75	5	480
60	0.15	7.5	ISOWATT 220	STLT20FI**	10	30	5	480
60	0.13	8	TO 220	SGSP321	16	75	3	550
60	0.08	20	TO 3	IRF153	33	150	9	3000
60	0.08	22	TO 218	IRFP153	34	150	13	3000
60	0.08	22	ISOWATT 218	IRFP153FI	21	65	13	3000
60	0.08	12.5	TO 220	STLT30**	25	100	9	1200
60	0.06	14	TO 220	SGSP381	28	100	5	1400
60	0.05	15	TO 218	SGSP481	30	125	5	1400
60	0.055	20	TO 3	IRF151	40	150	9	3000
60	0.055	22	TO 218	IRFP151	40	150	13	3000
60	0.055	22	ISOWATT 218	IRFP151FI	26	65	13	3000
60	0.04	15	TO 220	BUZ11S2	30	75	4	2000
60	0.04	15	ISOWATT 220	BUZ11S2FI	20	35	4	2000
60	0.033	20	TO 218	SGSP491	40	150	10	2800
60	0.033	20	TO 3	SGSP591	40	150	10	2800
60	0.028	20	TO 218	MTH40N06	40	150	10	5000
60	0.028	20	ISOWATT218	MTH40N06FI	26	65	10	5000
80	0.36	5.6	TO 220	IRF523	8	60	2.7	600
80	0.36	5.6	ISOWATT 220	IRF523FI	6	30	2.7	600
80	0.27	5.6	TO 220	IRF521	9.2	60	2.7	600
80	0.27	5.6	ISOWATT 220	IRF521FI	7	30	2.7	600
80	0.23	8.3	TO 220	IRF533	12	79	5.1	800
80	0.23	8.3	ISOWATT 220	IRF533FI	8	35	5.1	800
80	0.16	8.3	TO 220	IRF531	14	79	5.1	800
80	0.16	8.3	ISOWATT220	IRF531FI	9	35	5.1	800
80	0.1	17	TO 3	IRF143	25	125	8.7	1600
80	0.1	17	TO 220	IRF543	25	125	8.7	1600
80	0.1	17	ISOWATT 220	IRF543FI	14	40	8.7	1600
80	0.1	11	TO 220	SGSP362	22	100	4.5	1200
80	0.1	12.5	TO 218	SGSP462	25	125	4.5	1200
80	0.077	17	TO 3	IRF141	28	125	8.7	1600
80	0.077	17	TO 220	IRF541	28	125	8.7	1600
80	0.077	17	ISOWATT 220	IRF541FI	15	40	8.7	1600
80	0.05	17.5	TO 218	SGSP472	35	150	9	2200
100	1.4	1.2	SOT 82	SGSP201*	2	18	0.5	125
100	1.4	1.2	TO 220	SGSP301	2	18	0.5	125
100	0.6	3	TO 220	SGSP351	6	50	1	250
100	0.36	5.6	TO 220	IRF522	8	60	2.7	600
100	0.36	5.6	ISOWATT 220	IRF522FI	6	30	2.7	600
100	0.3	5.5	TO 220	SGSP311	11	75	2	480
100	0.27	5.6	TO 220	IRF520	9.2	60	2.7	600
100	0.27	5.6	ISOWATT 220	IRF520FI	7	30	2.7	600
100	0.25	5	TO 220	BUZ72A	9	40	2.7	600
100	0.23	8.3	TO 220	IRF532	12	79	5.1	800
100	0.23	8.3	ISOWATT 220	IRF532FI	8	35	5.1	800
100	0.2	6	TO 220	BUZ20	12	75	2.7	2000
100	0.16	8.3	TO 220	IRF530	14	79	5.1	800
100	0.16	8.3	ISOWATT 220	IRF530FI	9	35	5.1	800
100	0.15	9	TO 220	SGSP361	18	100	4.5	1200
100	0.15	10	TO 218	SGSP461	20	125	4.5	1200
100	0.1	9	TO 220	BUZ21	19	75	4	2000
100	0.1	9	TO 3	BUZ25	19	78	4	2000
100	0.1	17	TO 3	IRF142	25	125	8.7	1600
100	0.1	17	TO 220	IRF542	25	125	8.7	1600
100	0.1	17	ISOWATT 220	IRF542FI	14	40	8.7	1600
100	0.08	20	TO 3	IRF152	33	150	9	3000
100	0.08	22	TO 218	IRFP152	34	150	13	3000
100	0.08	22	ISOWATT 218	IRFP152FI	21	65	13	3000
100	0.077	17	TO 3	IRF140	28	125	8.7	1600
100	0.077	17	TO 220	IRF540	28	125	8.7	1600
100	0.077	17	ISOWATT 220	IRF540FI	15	40	8.7	1600
100	0.075	15	TO 218	SGSP471	30	150	9	2200
100	0.055	20	TO 3	IRF150	40	150	9	3000

* Also available in SOT 194 package for SMD.

 ** Logic level V_{GS} threshold.