

# SELECTION GUIDE BY VOLTAGE

$V_{(BR)DSS}$ (V)	$R_{DS(on)}$ <sup>①</sup> (max) ( $\Omega$ )	$I_D$ (A)	Package	Type	$I_{D(max)}$ (A)	$P_{tot}$ (W)	$g_{fs}$ min (mho)	$C_{iss}$ max (pF)	Page
50	0.30	3.50	TO-220	SGSP358	7.00	50	1.50	270	505
50	0.15	7.50	TO-220	MTP15N05L	15.00	75	5.00	900	397
50	0.15	7.50	ISOWATT220	MTP15N05LFI	10.00	30	5.00	900	397
50	0.15	7.50	TO-220	STLT19	15.00	75	5.00	480	611
50	0.15	7.50	ISOWATT220	STLT19FI	10.00	30	5.00	480	611
50	0.13	5.00	SOT-82	SGSP222	10.00	50	3.00	550	439
50	0.13	8.00	TO-220	SGSP322	16.00	75	3.00	550	481
50	0.12	10.00	TO-220	BUZ10A	17.00	75	3.00	2000	163
50	0.12	9.00	TO-220	BUZ71A	13.00	40	3.00	650	229
50	0.12	9.00	TO-220	IRFZ22	14.00	40	5.00	850	361
50	0.12	9.00	ISOWATT220	IRFZ22FI	12.00	30	5.00	850	361
50	0.10	9.00	TO-220	BUZ71	14.00	40	3.00	650	223
50	0.10	9.00	ISOWATT220	BUZ71FI	12.00	30	3.00	650	223
50	0.10	9.00	TO-220	IRFZ20	15.00	40	5.00	850	361
50	0.10	9.00	ISOWATT220	IRFZ20FI	12.50	30	5.00	850	361
50	0.08	13.00	TO-220	BUZ10	20.00	70	8.00	700 typ	159
50	0.08	12.50	TO-220	STLT29	25.00	100	9.00	1200	617
50	0.06	15.00	TO-220	BUZ11A	25.00	75	4.00	2000	173
50	0.06	14.00	TO-220	SGSP382	28.00	100	5.00	1400	529
50	0.06	15.00	TO-218	SGSP482	30.00	125	5.00	1400	565
50	0.04	15.00	TO-220	BUZ11	30.00	75	4.00	2000	167
50	0.04	15.00	ISOWATT220	BUZ11FI	20.00	35	4.00	2000	167
50	0.035	29.00	TO-220	IRFZ42	35.00	125	17.00	3000	367
50	0.033	20.00	TO-218	SGSP492	40.00	150	10.00	2800	571
50	0.033	20.00	TO-3	SGSP592	40.00	150	10.00	2800	595
50	0.028	29.00	TO-220	IRFZ40	35.00	125	17.00	3000	367
50	0.023	30.00	TO-220	STVHD90	52.00	125	30.00	3000	621
60	0.15	7.50	TO-220	MTP15N06L	15.00	75	5.00	900	397
60	0.15	7.50	ISOWATT220	MTP15N06LFI	10.00	30	5.00	900	397
60	0.15	6.00	TO-220	MTP3055A	12.00	40	4.50	500	403
60	0.15	6.00	ISOWATT220	MTP3055AFI	10.00	30	4.50	500	403
60	0.15	7.50	TO-220	STLT20	15.00	75	5.00	480	611
60	0.15	7.50	ISOWATT220	STLT20FI	10.00	30	5.00	480	611
60	0.13	8.00	TO-220	SGSP321	16.00	75	3.00	550	481
60	0.08	20.00	TO-3	IRF153	33.00	150	9.00	3000	267
60	0.08	22.00	TO-218	IRFP153	34.00	150	13.00	3000	343
60	0.08	22.00	ISOWATT218	IRFP153FI	21.00	65	13.00	3000	343
60	0.08	12.50	TO-220	STLT30	25.00	100	9.00	1200	617
60	0.06	14.00	TO-220	SGSP381	28.00	100	5.00	1400	529
60	0.06	15.00	TO-218	SGSP481	30.00	125	5.00	1400	565
60	0.055	20.00	TO-3	IRF151	40.00	150	9.00	3000	267
60	0.055	22.00	TO-218	IRFP151	40.00	150	13.00	3000	343
60	0.055	22.00	ISOWATT218	IRFP151FI	26.00	65	13.00	3000	343
60	0.04	15.00	TO-220	BUZ11S2	30.00	75	4.00	2000	177
60	0.04	15.00	ISOWATT220	BUZ11S2FI	20.00	35	4.00	2000	177

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$V_{(BR)DSS}$ (V)	$R_{DS(on)}$ <sup>①</sup> (max) ( $\Omega$ )	$I_D$ (A)	Package	Type	$I_{D(max)}$ (A)	$P_{tot}$ (W)	$g_{fs}$ min (mho)	$C_{iss}$ max (pF)	Page
60	0.033	20.00	TO-218	SGSP491	40.00	150	10.00	2800	571
60	0.033	20.00	TO-3	SGSP591	40.00	150	10.00	2800	595
60	0.028	20.00	TO-218	MTH40N06	40.00	150	10.00	5000	379
60	0.028	20.00	ISOWATT218	MTH40N06FI	26.00	65	10.00	5000	379
80	0.36	5.60	TO-220	IRF523	8.00	60	2.70	600	285
80	0.36	5.60	ISOWATT220	IRF523FI	6.00	30	2.70	600	285
80	0.27	5.60	TO-220	IRF521	9.20	60	2.70	600	285
80	0.27	5.60	ISOWATT220	IRF521FI	7.00	30	2.70	600	285
80	0.23	8.30	TO-220	IRF533	12.00	79	5.10	800	291
80	0.23	8.30	ISOWATT220	IRF533FI	8.00	35	5.10	800	291
80	0.16	8.30	TO-220	IRF531	14.00	79	5.10	800	291
80	0.16	8.30	ISOWATT220	IRF531FI	9.00	35	5.10	800	291
80	0.10	17.00	TO-3	IRF143	25.00	125	8.70	1600	261
80	0.10	17.00	TO-220	IRF543	25.00	125	8.70	1600	295
80	0.10	17.00	ISOWATT220	IRF543FI	14.00	40	8.70	1600	295
80	0.10	11.00	TO-220	SGSP362	22.00	100	4.50	1200	511
80	0.10	12.50	TO-218	SGSP462	25.00	125	4.50	1200	535
80	0.077	17.00	TO-3	IRF141	28.00	125	8.70	1600	261
80	0.077	17.00	TO-220	IRF541	28.00	125	8.70	1600	295
80	0.077	17.00	ISOWATT220	IRF541FI	15.00	40	8.70	1600	295
80	0.05	17.50	TO-218	SGSP472	35.00	150	9.00	2200	541
100	1.40	1.20	SOT-82	SGSP201	2.50	18	0.50	125	433
100	1.40	1.20	TO-220	SGSP301	2.50	18	0.50	125	457
100	0.60	3.00	TO-220	SGSP351	6.00	50	1.00	250	499
100	0.36	5.60	TO-220	IRF522	8.00	60	2.70	600	285
100	0.36	5.60	ISOWATT220	IRF522FI	6.00	30	2.70	600	285
100	0.30	5.50	TO-220	SGSP311	11.00	75	2.00	480	463
100	0.27	5.60	TO-220	IRF520	9.20	60	2.70	600	285
100	0.27	5.60	ISOWATT220	IRF520FI	7.00	30	2.70	600	285
100	0.25	5.00	TO-220	BUZ72A	9.00	40	2.70	600	233
100	0.23	8.30	TO-220	IRF532	12.00	79	5.10	800	291
100	0.23	8.30	ISOWATT220	IRF532FI	8.00	35	5.10	800	291
100	0.20	6.00	TO-220	BUZ20	12.00	75	2.70	2000	183
100	0.16	8.30	TO-220	IRF530	14.00	79	5.10	800	291
100	0.16	8.30	ISOWATT220	IRF530FI	9.00	35	5.10	800	291
100	0.15	9.00	TO-220	SGSP361	18.00	100	4.50	1200	511
100	0.15	10.00	TO-218	SGSP461	20.00	125	4.50	1200	535
100	0.10	9.00	TO-220	BUZ21	19.00	75	4.00	2000	187
100	0.10	9.00	TO-3	BUZ25	19.00	78	4.00	2000	191
100	0.10	17.00	TO-3	IRF142	25.00	125	8.70	1600	261
100	0.10	17.00	TO-220	IRF542	25.00	125	8.70	1600	295
100	0.10	17.00	ISOWATT220	IRF542FI	14.00	40	8.70	1600	295
10Q	0.08	20.00	TO-3	IRF152	33.00	150	9.00	3000	267
100	0.08	22.00	TO-218	IRFP152	34.00	150	13.00	3000	343
100	0.08	22.00	ISOWATT218	IRFP152FI	21.00	65	13.00	3000	343

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100	0.077	17.00	TO-3	IRF140	28.00	125	8.70	1600	261
100	0.077	17.00	TO-220	IRF540	28.00	125	8.70	1600	295
100	0.077	17.00	ISOWATT220	IRF540FI	15.00	40	8.70	1600	295
100	0.075	15.00	TO-218	SGSP471	30.00	150	9.00	2200	541
100	0.055	20.00	TO-3	IRF150	40.00	150	9.00	3000	267
100	0.055	22.00	TO-218	IRFP150	40.00	150	13.00	3000	343
100	0.055	22.00	ISOWATT218	IRFP150FI	26.00	65	13.00	3000	343
100	0.014	50.00	TO-240	SGS100MA010D1	120.00	400	20.00	11200	421
100	0.009	75.00	TO-240	SGS150MA010D1	150.00	400	20.00	14000	427
150	1.20	2.50	TO-220	IRF623	4.00	40	1.30	600	301
150	1.20	2.50	ISOWATT220	IRF623FI	3.50	30	1.30	600	301
150	0.80	2.50	TO-220	IRF621	5.00	40	1.30	600	301
150	0.80	2.50	ISOWATT220	IRF621FI	4.00	30	1.30	600	301
200	1.20	2.50	TO-220	IRF622	4.00	40	1.30	600	301
200	1.20	2.50	ISOWATT220	IRF622FI	3.50	30	1.30	600	301
200	0.80	2.50	TO-220	IRF620	5.00	40	1.30	600	301
200	0.80	2.50	ISOWATT220	IRF620FI	4.00	30	1.30	600	301
200	0.75	3.00	TO-220	SGSP317	6.00	75	1.50	500	469
200	0.40	4.50	TO-220	BUZ32	9.50	75	2.20	2000	195
200	0.33	6.00	TO-220	SGSP367	12.00	100	3.00	1200	517
200	0.17	10.00	TO-218	SGSP477	20.00	150	8.00	2200	553
200	0.17	10.00	TO-3	SGSP577	20.00	150	8.00	2200	583
250	1.20	2.50	TO-220	SGSP316	5.00	75	1.50	500	469
250	0.45	5.00	TO-220	SGSP363	10.00	100	3.00	1200	517
350	2.50	1.80	TO-220	IRF723	2.80	50	1.00	600	307
350	2.50	1.80	ISOWATT220	IRF723FI	2.00	30	1.00	600	307
350	1.80	1.80	TO-220	IRF721	3.30	50	1.00	600	307
350	1.80	1.80	ISOWATT220	IRF721FI	2.50	30	1.00	600	307
350	1.50	3.00	TO-220	IRF733	4.50	74	2.90	800	313
350	1.50	3.00	ISOWATT220	IRF733FI	3.00	35	2.90	800	313
350	1.00	3.00	TO-220	IRF731	5.50	74	2.90	800	313
350	1.00	3.00	ISOWATT220	IRF731FI	3.50	35	2.90	800	313
350	0.80	5.20	TO-220	IRF743	8.30	125	4.00	1600	319
350	0.80	5.20	ISOWATT220	IRF743FI	4.50	40	4.00	1600	319
350	0.55	5.20	TO-220	IRF741	10.00	125	4.00	1600	319
350	0.55	5.20	ISOWATT220	IRF741FI	5.50	40	4.00	1600	319
400	20.00	0.30	TO-220	SGSP341	0.60	18	0.10	105	493
400	2.50	1.50	TO-220	BUZ76A	2.60	40	0.80	500	249
400	2.50	1.80	TO-220	IRF722	2.80	50	1.00	600	307
400	2.50	1.80	ISOWATT220	IRF722FI	2.00	30	1.00	600	307
400	1.80	1.50	TO-220	BUZ76	3.00	40	0.80	500	245
400	1.80	1.80	TO-220	IRF720	3.30	50	1.00	600	307
400	1.80	1.80	ISOWATT220	IRF720FI	2.50	30	1.00	600	307
400	1.50	2.50	TO-220	BUZ60B	4.50	75	1.70	2000	219
400	1.50	3.00	TO-220	IRF732	4.50	74	2.90	800	313

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400	1.50	3.00	ISOWATT220	IRF732FI	3.00	35	2.90	800	313
400	1.00	2.50	TO-220	BUZ60	5.50	75	1.70	2000	215
400	1.00	3.00	TO-220	IRF730	5.50	74	2.90	800	313
400	1.00	3.00	ISOWATT220	IRF730FI	3.50	35	2.90	800	313
400	0.80	5.20	TO-220	IRF742	8.30	125	4.00	1600	319
400	0.80	5.20	ISOWATT220	IRF742FI	4.50	40	4.00	1600	319
400	0.55	5.20	TO-220	IRF740	10.00	125	4.00	1600	319
400	0.55	5.20	ISOWATT220	IRF740FI	5.50	40	4.00	1600	319
400	0.55	5.00	TO-218	SGSP475	10.00	150	6.00	2100	547
400	0.55	5.00	TO-3	SGSP575	10.00	150	6.00	2100	577
400	0.30	8.00	TO-3	IRF350	15.00	150	8.00	3000	273
400	0.30	8.00	ISOWATT218	IRFP350FI	10.00	70	8.00	3000	349
450	4.00	1.40	TO-220	IRF823	2.20	50	1.00	400	331
450	4.00	1.40	ISOWATT220	IRF823FI	1.50	30	1.00	400	331
450	3.00	1.40	TO-220	IRF821	2.50	50	1.00	400	331
450	3.00	1.40	ISOWATT220	IRF821FI	2.00	30	1.00	400	331
450	3.00	1.20	SOT-82	SGSP230	2.50	50	0.80	450	445
450	3.00	1.50	TO-220	SGSP330	3.00	75	0.80	450	487
450	2.00	2.50	TO-220	IRF833	4.00	74	2.70	800	331
450	2.00	2.50	ISOWATT220	IRF833FI	2.50	35	2.70	800	331
450	1.50	2.50	TO-220	IRF831	4.50	74	2.70	800	331
450	1.50	2.50	ISOWATT220	IRF831FI	3.00	35	2.70	800	331
450	1.50	2.50	TO-220	SGSP364	5.00	100	3.00	1000	523
450	1.10	4.40	TO-220	IRF843	7.00	125	4.90	1600	337
450	1.10	4.40	ISOWATT220	IRF843FI	4.00	40	4.90	1600	337
450	0.85	4.40	TO-220	IRF841	8.00	125	4.90	1600	337
450	0.85	4.40	ISOWATT220	IRF841FI	4.50	40	4.90	1600	337
450	0.70	4.50	TO-218	SGSP474	9.00	150	6.00	2100	547
450	0.70	4.50	TO-3	SGSP574	9.00	150	6.00	2100	577
450	0.50	7.00	TO-3	IRF453	11.00	150	8.70	3000	279
450	0.50	7.20	TO-218	IRFP453	12.00	150	8.70	3000	355
450	0.50	7.20	ISOWATT218	IRFP453FI	8.00	70	8.70	3000	355
450	0.40	7.20	TO-3	IRF451	13.00	150	8.70	3000	279
450	0.40	7.20	TO-218	IRFP451	14.00	150	8.70	3000	355
450	0.40	7.20	ISOWATT218	IRFP451FI	9.00	70	8.70	3000	355
500	8.50	0.60	SOT-82	SGSP239	1.20	40	0.65	300	451
500	4.00	1.20	TO-220	BUZ74A	2.00	40	0.80	500	241
500	4.00	1.40	TO-220	IRF822	2.20	50	1.00	400	325
500	4.00	1.40	ISOWATT220	IRF822FI	1.50	30	1.00	400	325
500	3.80	1.40	TO-220	SGSP319	2.80	75	0.80	380	475
500	3.00	1.20	TO-220	BUZ74	2.40	40	0.80	500	237
500	3.00	1.40	TO-220	IRF820	2.50	50	1.00	400	325
500	3.00	1.40	ISOWATT220	IRF820FI	2.00	30	1.00	400	325
500	2.00	2.50	TO-220	BUZ42	4.00	75	1.50	2000	203
500	2.00	2.50	TO-220	IRF832	4.00	74	2.70	800	325

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500	2.00	2.50	ISOWATT220	IRF832FI	2.50	35	2.70	800	325
500	1.50	2.50	TO-220	BUZ41A	4.50	75	1.50	2000	199
500	1.50	2.50	TO-220	IRF830	4.50	74	2.70	800	331
500	1.50	2.50	ISOWATT220	IRF830FI	3.00	35	2.70	800	331
500	1.50	2.50	TO-220	SGSP369	5.00	100	3.00	1000	523
500	1.10	4.40	TO-220	IRF842	7.00	125	4.90	1600	337
500	1.10	4.40	ISOWATT220	IRF842FI	4.00	40	4.90	1600	337
500	0.85	4.40	TO-220	IRF840	8.00	125	4.90	1600	337
500	0.85	4.40	ISOWATT220	IRF840FI	4.50	40	4.90	1600	337
500	0.80	5.50	TO-218	BUZ354	8.00	125	2.70	4900	249
500	0.80	5.00	TO-3	BUZ45A	8.30	125	2.70	4900	211
500	0.70	4.50	TO-218	SGSP479	9.00	150	5.00	1900	559
500	0.70	4.50	TO-3	SGSP579	9.00	150	5.00	1900	589
500	0.60	5.50	TO-218	BUZ353	9.50	125	2.70	4900	253
500	0.60	5.00	TO-3	BUZ45	9.60	125	2.70	4900	207
500	0.50	7.20	TO-3	IRF452	11.00	150	8.70	3000	279
500	0.50	7.20	TO-218	IRFP452	12.00	150	8.70	3000	355
500	0.50	7.20	ISOWATT218	IRFP452FI	8.00	70	8.70	3000	355
500	0.40	7.20	TO-3	IRF450	13.00	150	8.70	3000	279
500	0.40	7.20	TO-218	IRFP450	14.00	150	8.70	3000	355
500	0.40	7.20	ISOWATT218	IRFP450FI	9.00	70	8.70	3000	355
500	0.20	15.00	TO-240	SGS30MA050D1	30.00	400	15.00	9100	409
500	0.16	17.50	TO-240	SGS35MA050D1	35.00	400	15.00	12000	415
600	2.50	1.50	TO-220	MTP3N60	3.00	75	1.50	1000	385
600	2.50	1.50	ISOWATT220	MTP3N60FI	2.50	35	1.50	1000	385
600	1.20	3.00	ISOWATT218	MTH6N60FI	3.50	40	2.00	1800	367
600	1.20	3.00	TO-220	MTP6N60	6.00	125	2.00	1800	391
800	2.00	2.00	TO-218	STHV82	5.50	125	2.00	1000	601
1000	3.50	2.00	TO-218	STHV102	4.20	125	2.00	1200	607

## HIMOS (IGBT)

$V_{(BR)DSS}$ (V)	$V_{DS(on)}$ (max) (V)	$I_D$ (A)	Package	Type	$I_{D(max)}$ (A)	$P_{tot}$ (W)	$g_{fs}$ min (mho)	$C_{iss}$ max (pF)	Page
500	2.70	7.00	TO-220	STH107N50	7.00	100	2.50	950	627
500	2.70	7.00	ISOWATT220	STH10N50	7.00	35	2.50	950	627
500	2.70	10.00	TO-220	STH10N50	10.00	100	2.50	950	633
500	2.70	10.00	ISOWATT220	STH10N50FI	10.00	35	2.50	950	633