MOSFETs & IGBTs

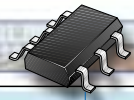
Progress in Power Switching

Selection Guide

STMicroelectronics

More Intelligent Solutions

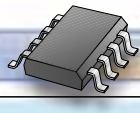
SOT23-6L



V_{DSS} (V)	$R_{DS(on)}$ @ 10V (Ω)	P / N	$I_{D(cont)}$ (A)	$R_{DS(on)}$@4.5V (Ω)	Q_g @ 10V(Typ) (nC)
-60	0.27	STT2PF60L	-2	0.3	44
-30	0.165	STT3PF30L	-3	0.2	5.5
-20	0.155	STT3PF20L	-3	0.19	10
30	0.065	STT4NF30L	4	0.09	12
100	0.8	STT1NF100	1		4.5

V_{DSS} (V)	$R_{DS(on)}$ @ 4.5V (Ω)	P / N	$I_{D(cont)}$ (A)	$R_{DS(on)}$@2.7V (Ω)	Q_g @ 10V(Typ) (nC)
-20	0.09	STT5PF20V	5	0.11 @ 2.5V	-
	0.19	STT3PF20V	-3	0.250	3.8
20	0.04	STT5NF20V	5	0.045	8.5

SO-8

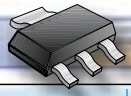


V_{DSS} (V)	$R_{DS(on)}$ @ 10V (Ω)	P / N	$I_{D(cont)}$ (A)	$R_{DS(on)}$@4.5V (Ω)	Q_g @ 10V(Typ) (nC)
-45	0.1	STS3DPFS45	-3		23
-30	0.04	STS6PF30L	-6	0.05	35
	0.06	STS5PF30L	-5	0.075	12.5
	0.08	STS4DPF30L	-4	0.1	16
	0.09	STS3DPFS30	-3		23
	0.16	STS3DPF30L	-3	0.19	5.5
	0.16	STS3DPFS30L	-3	0.19	5.5
-20	0.07	STS4DPFS20L	-4	0.085	12.5
	0.07	STS4DPF20L	-4	0.085	12.5
30	0.01	STS12NF30L	12	0.012	35
	0.011	STSJ25NF3LL	25	0.013	21
	0.011	STS11NF3LL	11	0.013	25
	0.012	STS11NF30L	11	0.0185	19
	0.019	STS9NF3LL	9	0.022	22
	0.023	STS9NF30L	9	0.035	30
	0.05	STS4DNFS30L	4	0.06	6.5
	0.065	STS3DNF30L	3.5	0.09	8
	0.11	STS2DNFS30L	3	0.15	4.5
	0.11	STS2DNF30L	3	0.15	4.5
30/-30	0.022 / 0.08	STS7C4F30L	7/-4	0.026 / 0.1	17.5 / 12.5
	0.065 / 0.165	STS3C3F30L	3 / -3	0.090 / 0.20	16 / 11
60	0.022	STS7NF60L	7	0.028	14
	0.055	STS5NF60L	5	0.065	15
	0.055	STS4DNF60L	4	0.065	15
	0.08	STS3DNE60L	3	0.1	18
	0.23	STS2DNE60	2		12
100	0.077	STS4NF100	4		30
	0.25	STS2NF100	2		12
200	1.5	STS1NS20	1		11
250	1.5 / 3.2	STS1C1S250	0.8 / 0.56		15 /16
450	4.5	STS1DNC45	1.5		8
600	15	STS1NC60	1		4

V_{DSS} (V)	$R_{DS(on)}$ @ 4.5V (Ω)	P / N	$I_{D(cont)}$ (A)	$R_{DS(on)}$@2.7V (Ω)	Q_g @ 10V(Typ) (nC)
-20	0.2	STS2DPF20V	2	0.25	3.8
	0.2	STS2DPFS20V	-2	0.25	3.8
20	0.035	STS6NF20V	6	0.04	8
	0.04	STS5DNF20V	5	0.04	8

D = Dual; DPFS = PChannel + Schottky Diode; LL = 4.5V Drive Optimization; C = Complementary Pair
STSJ = PowerSO-8; V = Super Logic Level

SOT-223



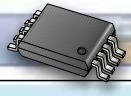
V_{DSS} (V)	$R_{DS(on)}$ @ 10V (Ω)	P / N	$I_{D(cont)}$ (A)	$R_{DS(on)}$@4.5V (Ω)	Q_g @ 10V(Typ) (nC)
-60	0.2	STN3PF06	-2.5		16
30	0.05	STN4NF03L	4	0.06	6.5
60	0.1	STN3NF06L	3	0.12	7
	0.1	STN3NF06	2		13
100	0.18	STN3NF10	3		15.3
	0.25	STN2NF10	2		12
	0.4	STN2NE10L	1.8	0.45	10
	0.4	STN2NE10	1.8		10
	0.8	STN1NF10	1		4.5
200	1.5	STN1N20	1		13
600	8	STN1HNC60	0.4		8.5
	15	STN1NC60	0.3		4
800	20	STN1NB80	0.2		10

PowerFLAT

V_{DSS} (V)	$R_{DS(on)}$ @ 4.5V (Ω)	P / N	$I_{D(cont)}$ (A)	$R_{DS(on)}$@4.5V (Ω)	Q_g @ 10V(Typ) (nC)
30	0.0065	STL28NF3LL	28	0.0095	70
	0.01	STL30NF3LL	30	0.011	60
100	0.03	STL35NF10	35		60
	0.065	STL22NF10	22		40
650	1.8	STL5NK65Z	5		31

LL = 4.5V Drive Optimization;

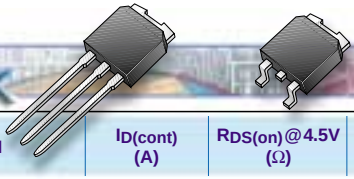
TSSOP8



V_{DSS} (V)	$R_{DS(on)}$ @ 4.5V (Ω)	P / N	$I_{D(cont)}$ (A)	$R_{DS(on)}$@2.5V (Ω)	Q_g @ 10V(Typ) (nC)
20	0.035	STC5NF20V	5	0.045	11
30	0.025	STC6NF30V	6	0.03	22

V = Super Logic Level

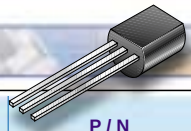
IPAK-DPAK



V_{DSS} (V)	$R_{DS(on)}$ @ 10V (Ω)	P / N	$I_{D(cont)}$ (A)	$R_{DS(on)}$ @4.5V (Ω)	Q_g @ 10V(Typ) (nC)
-250	3.2	STD3PS25	2.5		
-60	0.2	STD10PF06	10		16
20	0.013	STD40NF02L	40		36
30	0.0095	STD60NF3LL	60	0.011	60
	0.0115	STD40NF3LL	40	0.0135	43
	0.013	STD45NF03L	45	0.018	43
	0.016	STD38NF03L	38	0.019	27
	0.02	STD35NF3LL/-1	35	0.023*	22
	0.023	STD29NF03L	29	0.038	18
	0.05	STD17NF03L/-1	16	0.06	6.5
55	0.015	STD60NF55L/-1	60	0.017	40
60	0.02	STD35NF06L	35	0.022	25
	0.024	STD35NF06	35		44.5
	0.028	STD30NF06L/-1	28	0.03	43
	0.028	STD30NF06/-1	28		58
	0.04	STD20NE06	20		50
	0.05	STD19NE06/-1	19		40
	0.05	STD19NE06L/-1	19	0.06	40
	0.1	STD12NF06L/-1	12	0.12	7
	0.1	STD12NF06/-1	12		10
100	0.038	STD25NF10	25		55
	0.045	STD20NF10/-1	20		40
	0.065	STD15NF10	15		30
	0.13	STD10NF10	10		15.3
	0.25	STD6NF10	6		12
	0.4	STD5NE10/-1	5		10
	0.4	STD5NE10L/-1	5	0.45	10
200	0.4	STD7NS20	7		31
	0.8	STD5N20/-1	5		19
	1.5	STD4N20/-1	4		15
250	0.45	STD8NS25/-1	8		37
	1.1	STD4NS25/-1	4		27
	2	STD2NB25/-1	2.5		10
400	1	STD6NC40/-1	5		18
	1.8	STD4NB40	3.7		20
450	4.5	STD2NC45/-1	1.5		8
500	0.8	STD5NM50/-1	5		13
	1.5	STD4NC50/-1	3.7		18
	2.5	STD3NM50/-1	3		5
	2.7	STD3NC50/-1	3		15
	4	STD2NC50/-1	2		13.5
600	1	STD5NM60/-1	5		13
	1.4	STD3NM60/-1	2		10
	2.2	STD3NC60/-1	3.2		18
	3	STD2NM60/-1	2		5
	3.6	STD2NC60/-1	2		15
	5	STD1HNC60-1	1		11.3
	8	STD1NC60-1	1		8.5
	15	STD1LNC60-1	1		9.5
700	4.5	STD2NC70Z/-1	1.7		17
800	5.5	STD2NB80/-1	1.9		17
	20	STD1NB80/-1	1		10

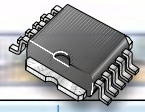
LL = 4.5V Drive Optimization;

TO-92



V_{DSS} (V)	$R_{DS(on)}$ @ 10V (Ω)	P / N	$I_{D(cont)}$ (A)	$R_{DS(on)}$@4.5V (Ω)	Q_g @ 10V(Typ) (nC)
450	4.5	STQ1NC45	0.5		8
600	8	STQ1HNC60	0.4		11
	15	STQ1NC60	0.3		10

PowerSO-10



V_{DSS} (V)	$R_{DS(on)}$ @ 10V (Ω)	P / N	$I_{D(cont)}$ (A)	$R_{DS(on)}$@4.5V (Ω)	Q_g @ 10V(Typ) (nC)
20	0.0025	STV160NF02L	160	0.0035	115
	0.0027	STV160NF02LA	160	0.0064	130
30	0.0028	STV160NF03L	160	0.0067	103
	0.003	STV160NF03LA	160	0.007	123

I²PAK-D²PAK

V_{DSS} (V)	$R_{DS(on)}$ @ 10V (Ω)	P / N	$I_{D(cont)}$ (A)	$R_{DS(on)}$ @ 4.5V (Ω)	Q_g @ 10V(Typ) (nC)
-55	0.02	STB80PF55	-80		180
20	0.0027	STB160NF02L	160	0.0064	130
	0.009	STB70NF02L	70	0.015	36
30	0.003	STB160NF3LL	160	0.0043	160
	0.0032	STB100NF03L-03	100	0.0045	88
	0.004	STB80NF03L-04/-1	80	0.005	160
	0.0065	STB90NF03L	90	0.012	75
	0.008	STB85NF3LL	85	0.0095	30
	0.01	STB70NF3LL	70	0.012	43
	0.01	STB70NF03L	70	0.018	35
	0.013	STB55NF03L	55	0.021	25
	0.018	STB45NF3LL/-1	45	0.02	12.5
40	0.004	STB160NF4LL	100	0.0068	160
	0.0042	STB100NF04L	160	0.007	160
55	0.0065	STB80NF55-06/-1	80		190
	0.0065	STB80NF55L-06/-1	80	0.008	97
	0.008	STB80NF55L-08	80	0.01	110
	0.008	STB80NF55-08/-1	80		108
60	0.014	STB60NF06/-1	60		66
	0.014	STB60NF06L/-1	60	0.016	45
	0.022	STB55NF06	55		60
	0.018	STB55NF06L	45	0.02	50
	0.028	STB45NF06	38		43
	0.028	STB45NF06L	38	0.03	43
75	0.01	STB80NF75L/-1	80	0.013	110
	0.013	STB75NF75	75		150
	0.013	STB75NF75L	75	0.015	120
100	0.015	STB80NF10	80		140
	0.025	STB50NE10L	50	0.03	82
	0.03	STB40NF10	40		60
	0.032	STB40NF10L	40	0.036	80
	0.035	STB35NF10	35		55
	0.045	STB30NF10	30		80
	0.06	STB24NF10	24		30
	0.085	STB22NE10L	22	0.1	31
	0.13	STB14NF10	14		15.5

LL = 4.5V Drive Optimization;

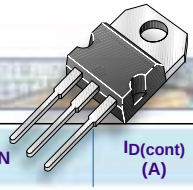
I²PAK-D²PAK

Contd.

V_{DSS} (V)	$R_{DS(on)}$ @ 10V (Ω)	P / N	$I_{D(cont)}$ (A)	$R_{DS(on)}$ @4.5V (Ω)	Q_g @ 10V(Typ) (nC)
200	0.18	STB19NB20	19		29
	0.4	STB10NB20	10		17
250	0.15	STB22NS25Z	20		120
	0.28	STB16NS25	13		58
	0.45	STB8NS25	8		37
400	0.55	STB11NC40/-1	10		42
500	0.23	STB20NM50/-1	20		40
	0.25	STB20NM50FD	20		40
	0.35	STB12NM50/-1	12		28
	0.38	STB14NK50Z/-1	14		92
	0.52	STB10NC50/-1	10		41
	0.85	STB8NC50/-1	8		36
	1.5	STB5NC50/-1	5.5		18
600	0.29	STB20NM60	20		55
	0.45	STB11NM60/-1	11		30
	0.55	STB13NK60Z/-1	13		66
	0.75	STB10NK60Z/-1	10		30
	1.2	STB6NC60			35
	2	STB5NB60/-1	5		21
	2.2	STB4NC60/-1	4.2		16.5
	3.6	STB3NC60/-1	3		13
700	1.2	STB8NC70Z/-1	6.8		60
	1.38	STB7NC70Z/-1	6		47
	2	STB5NC70Z	4.6		27
800	1.5	STB7NC80Z/-1	6		57
	1.8	STB6NC80Z/-1	5.4		45
	2.8	STB4NC80Z/-1	4		23
900	2	STB6NC90Z/-1	5.3		51
	2.5	STB5NC90Z/-1	4.6		40
	3.5	STB3NC90Z/-1	3.5		40

LL = 4.5V Drive Optimization;

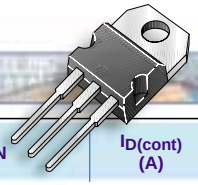
TO-220



V_{DSS} (V)	$R_{DS(on)}$ @ 10V (Ω)	P / N	$I_{D(cont)}$ (A)	$R_{DS(on)}$ @ 5V (Ω)	Q_g @ 10V(Typ) (nC)
-60	0.2	STP12PF06	-12		21
-55	0.02	STP80PF55	-80		180
30	0.0032	STP100NF03L-03	100	0.0045	88
	0.004	STP80NF03L-04	80	0.005	100
	0.006	STP80NE03L-06	80		95
	0.0065	STP90NF03L	90	0.012	47
	0.008	STP85NF3LL	85	0.009	40
	0.01	STP70NF3LL	70	0.012	43
	0.01	STP60NF03L	60	0.015	43
	0.0135	STP55NF03L	55		58
	0.018	STP45NF3LL	45	0.02	22
	0.022	STP40NF03L	40	0.035	18
	0.05	STP22NF03L	22	0.06	9
34	0.008	STP80NS04Z	80		60
	0.015	STP60NS04Z	60		70
40	0.0042	STP100NF04L	100	0.005	160
50	0.04	BUZ11	30		70
	0.055	BUZ11A	26		50
55	0.0065	STP80NF55-06	80		190
	0.0065	STP80NF55L-06	80	0.008	97
	0.008	STP80NF55L-08	80	0.01	110
	0.008	STP80NF55-08	80		108

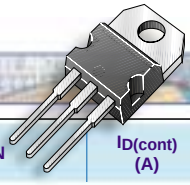
LL = 4.5V Drive Optimization;

TO-220



V_{DSS} (V)	$R_{DS(on)}$ @ 10V (Ω)	P / N	$I_{D(cont)}$ (A)	$R_{DS(on)}$ @ 5V (Ω)	Q_g @ 10V$_{(Typ)}$ (nC)
	0.01	STP80NE06-10	80		140
60	0.014	STP60NF06L	60	0.016	45
	0.014	STP60NF06	60		66
	0.018	STP55NF06	55		40
	0.018	STP55NF06L	55	0.028	55
	0.028	STP45NF06L	38	0.03	43
	0.028	STP45NF06	45		43
	0.04	STP36NE06	36		50
	0.05	STP30NE06	30		35
	0.05	STP30NE06L	30	0.06	40
	0.07	STP20NE06L	20	0.085	28
	0.08	STP20NE06	20		25
	0.1	STP16NF06	16		13
	0.1	STP16NF06L	16	0.12	10
	0.01	STP80NF75L	80	0.013	110
75	0.013	STP75NF75	75		110
	0.013	STP75NF75L	75	0.016	110
	0.015	STP80NF10	80		140
100	0.025	STP50NE10L	50	0.03	82
	0.028	STP50NE10	50		82
	0.03	STP40NF10	40		60
	0.032	STP40NF10L	40	0.036	46
	0.035	STP35NF10	35		55
	0.045	STP30NF10	30		80
	0.06	STP24NF10	14		30
	0.077	IRF540	30		80
	0.085	STP22NE10L	22	0.1	48
	0.1	STP20NE10	20		38
	0.13	STP14NF10	14		15.5
	0.16	IRF530	16		32
	0.27	IRF520	10		15
	0.18	STP19NB20	19		29
200	0.18	IRF640	18		55
	0.4	STP10NB20	10		17
	0.4	IRF630	9		31
	0.28	STP16NS25	13		59
250	0.45	STP8NS25	8		37
	1.1	STP6NB25	6		12
	2	STP4NB30	4		12
	0.55	IRF740	10		35
400	0.55	STP11NC40	10		35
	1	STP7NC40	6		18
	1	IRF730	5.5		30
	1.8	STP5NB40	4.7		14.5
	0.25	STP20NM50	20		40
500	0.25	STP20NM50FD	20		40
	0.35	STP12NM50	12		28
	0.38	STP14NK50Z	14		92
	0.52	STP10NC50	10		41
	0.75	IRF840	8		39
	0.8	STP8NM50	8		13
	0.85	STP8NC50	8		36
	1.5	STP5NC50	5.5		18
	1.5	IRF830	4.5		22
	2.7	STP4NC50	4		12.5
	3	IRF820	2.5		12
	0.29	STP20NM60	20		55
600	0.45	STP11NM60	11		30
	0.5	STP11NM60FD	11		30
	0.55	STP13NK60Z	13		66
	0.75	STP10NK60Z	10		30
	1	STP8NM60	8		13

TO-220



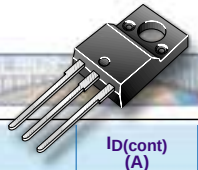
V_{DSS} (V)	$R_{DS(on)}$ @ 10V (Ω)	P / N	$I_{D(cont)}$ (A)	$R_{DS(on)}$ @ 5V (Ω)	Q_g @ 10V(Typ) (nC)
600	1	STP8NC60	7		34
	1.2	STP6NK60Z	5		25
	1.2	STP6NC60	6		35
	1.25	STP6LNC60	5.8		32
	1.4	STP4NM60	4		10
	1.6	STP5NK60Z	6		34
	2.2	STP4NC60	4.2		16.5
	3.6	STP3NC60	3		13
	8	STP2NC60	1.9		11.5
700	1.2	STP8NC70Z	6.8		60
	1.38	STP7NC70Z	6		47
	2	STP5NC70Z	4.6		27
	4.7	STP3NC70Z	2.5		17
800	1.5	STP7NC80Z	6		57
	1.8	STP6NC80Z	5.4		45
	2.8	STP4NC80Z	4		27
	5.5	STP3NB80	2.6		17
900	2	STP6NC90Z	5.3		52
	2.5	STP5NC90Z	4.6		40
	2.9	STP4NB90	4.4		30
	3.5	STP3NC90Z	3.5		40
1000	2.7	STP5NB100	5		39
	4.4	STP4NB100	4.4		32
	6	STP3NB100	3		22

TO-220FP

V_{DSS} (V)	$R_{DS(on)}$ @ 10V (Ω)	P / N	$I_{D(cont)}$ (A)	$R_{DS(on)}$@4.5V (Ω)	Q_g @ 10V(Typ) (nC)
	0.0018	STP45NF3LLFP	45	0.002	22
30	0.038	STP22NF03LFP	20	0.05	6.5
55	0.0065	STP80NF55-06FP	60		190
	0.0065	STP80NF55L-06FP	60	0.008	97
60	0.014	STP60NF06LFP	60	0.016	35
	0.014	STP60NF06FP	60		49
	0.018	STP55NF06FP	55		40
	0.018	STP55NF06LFP	55	0.02	60
	0.04	STP36NE06FP	20		50
	0.05	STP30NE06LFP	17	0.06	40
	0.05	STP30NE06FP	30		40
	0.07	STP20NE06LFP	13	0.085	28
	0.085	STP20NE06FP	13		28
	0.12	STP14NF06FP	14		11.2
	0.1	STP16NF06FP	11		20
100	0.045	STP30NF10FP	30		80
200	0.1	STP16NF06LFP	10	0.12	7.3
	0.18	STP19NB20FP	10		29
	0.18	IRF640FP	18		55
	0.4	STP10NB20FP	6		17
	0.4	IRF630FP	9		31
250	0.45	STP8NS25FP	8		37
	0.8	STP16NS25FP	16		29
	1.1	STP6NB25FP	3.7		12
400	0.55	STP11NC40FP	6		29
	0.55	STP11NB40FP	6		29
	1	STP7NC40FP	7		18

LL = 4.5V Drive Optimization;

TO-220FP



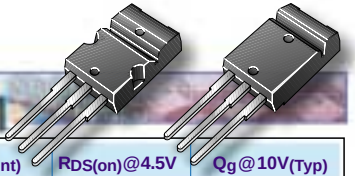
Contd.

V_{DSS} (V)	$R_{DS(on)}$ @ 10V (Ω)	P / N	$I_{D(cont)}$ (A)	$R_{DS(on)}$@4.5V (Ω)	Q_g @ 10V(Typ) (nC)
400	1.8	STP5NB40FP	3.1		14.5
500	0.23	STP20NM50FP	20		40
	0.35	STP12NM50FP	12		28
	0.38	STP14NK50ZFP	14		92
	0.52	STP10NC50FP	10		41
	0.85	STP8NC50FP	8		36
	1.5	STP5NC50FP	5.5		18
	2.7	STP4NC50FP	4		12.5
600	0.29	STP20NM60FP	20		55
	0.45	STP11NM60FP	11		30
	0.55	STP13NK60ZFP	13		66
	0.75	STP10NK60ZFP	10		30
	0.75	STP9NC60FP	9		44
	1	STP8NM60FP	8		13
	1	STP8NC60FP	7		34
	1.2	STP5NK60ZFP	5		25
	1.2	STP6NC60FP	6		35
	1.25	STP6LNC60FP	5.8		32
	1.6	STP6NK60ZFP	6		34
	2.2	STP4NC60FP	4.2		16.5
	3.6	STP3NC60FP	3		13
	4	STP2HNC60FP	2.2		15.5
	8	STP2NC60FP	1.9		11.5
650	0.75	STP9NC65FP	8		62
700	1.2	STP8NC70ZFP	6.8		60
	1.38	STP7NC70ZFP	6		47
	2	STP5NC70ZFP	4.6		78
	4.7	STP3NC70ZFP	2.5		17
800	1.5	STP7NC80ZFP	6		57
	1.8	STP6NC80ZFP	5.4		45
	2.8	STP4NC80ZFP	4		36
	5.5	STP3NB80FP	1.6		17
900	2	STP6NC90ZFP	5.3		52
	2.5	STP5NC90ZFP	4.6		40
	2.9	STP4NB90FP	2.5		30
	3.5	STP3NC90ZFP	3.5		40
1000	2.7	STP5NB100FP	5		39
	4.4	STP4NB100FP	4.4		32
	6	STP3NB100FP	1.8		22

ISOWATT218

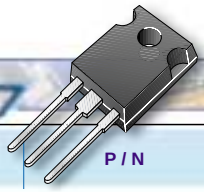
AVAILABLE UPON REQUEST

MAX220-MAX220I



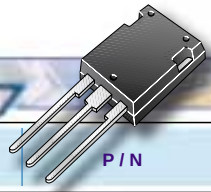
V_{DSS} (V)	$R_{DS(on)}$ @ 10V (Ω)	P / N	$I_{D(cont)}$ (A)	$R_{DS(on)}$@4.5V (Ω)	Q_g@10V(Typ) (nC)
500	0.12	STU26NM50	26		90
	0.27	STU16NC50	16		95
	0.4	STU13NC50	13		75
	0.4	STU13NC50I	13		75
600	0.14	STU26NM60	26		65
	0.14	STU26NM60I	26		65
	0.55	STU11NC60	11		65
700	0.75	STU10NC70Z	9.4		72
	0.75	STU10NC70ZI	9.4		72
800	0.9	STU9NC80ZI	8.6		72.2
900	1.38	STU8NC90Z	7		70
	1.38	STU8NC90ZI	7		102

TO-247



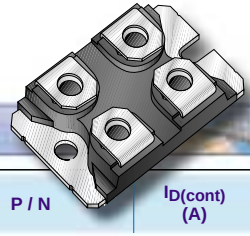
V_{DSS} (V)	$R_{DS(on)}$ @ 10V (Ω)	P / N	$I_{D(cont)}$ (A)	$R_{DS(on)}$@4.5V (Ω)	Q_g @ 10V(Typ) (nC)
55	0.008	STW80NF55-08	80		115
60	0.01	STW80NE06-10	80		140
100	0.022	STW60NE10	60		142
200	0.055	STW50NB20	50		84
	0.075	STW34NB20	34		60
	0.085	IRFP250	33		117
500	0.1	STW45NM50	45		95
	0.11	STW45NM50FD	45		90
	0.12	STW26NM50	30		90
	0.23	STW20NM50	20		40
	0.25	STW20NM50FD	20		40
	0.27	IRFP460	18		100
	0.27	STW20NC50	18.4		95
	0.35	STW14NM50	14		28
	0.38	STW14NK50Z	14		92
	0.38	STW14NC50	14		65
	0.38	IRFP450	14		75
600	0.11	STW45NM60	44		120
	0.29	STW20NM60	20		55
	0.55	STW13NK60Z	13		66
	0.75	STW10NK60Z	10		30
700	0.75	STW10NC70Z	10.6		72
	1.2	STW9NC70Z	7.5		60
	1.38	STW8NC70Z	7		47
800	0.8	STW11NB80	11		70
	0.9	STW9NC80Z	9.4		71
	1.5	STW8NC80Z	6.7		57
	1.8	STW7NC80Z	6		45
900	1	STW9NB90	9.7		64
	1.38	STW8NC90Z	7.6		70
	2	STW7NC90Z	5.8		52
	2.5	STW6NC90Z	5.2		40
1000	1.8	STW8NB100	7.3		68
	2.8	STW6NB100	5.4		39
	4.4	STW5NB100	4.3		32

MAX247



V_{DSS} (V)	$R_{DS(on)}$ @ 10V (Ω)	P / N	$I_{D(cont)}$ (A)	$R_{DS(on)}$ @ 4.5V (Ω)	Q_g @ 10V(Typ) (nC)
100	0.01	STY140NS10	140		200
200	0.022	STY100NS20FD	100		380
500	0.05	STY60NM50	60		240
	0.13	STY34NB50	34		159

ISOTOP



V_{DSS} (V)	$R_{DS(on)}$ @ 10V (Ω)	P / N	$I_{D(cont)}$ (A)	$R_{DS(on)}$@ 4.5V (Ω)	Q_g @ 10V(Typ) (nC)
100	0.006	STE180NE10	180		142
	0.07	STE250NS10	250		200
200	0.024	STE110NS20FD	110		380
500	0.085	STE53NA50	53		470
	0.1	STE48NM50	48		95
	0.14	STE38NB50F	38		140

Product Guidelines

In a highly dynamic, and competitive enviroment, ST continues to propose cost effective and high performance products, while supporting ongoing projects using previous generations.
To make sure that our customers are fully benefitting from the innovation that ST provides, we would like to make these suggestions:

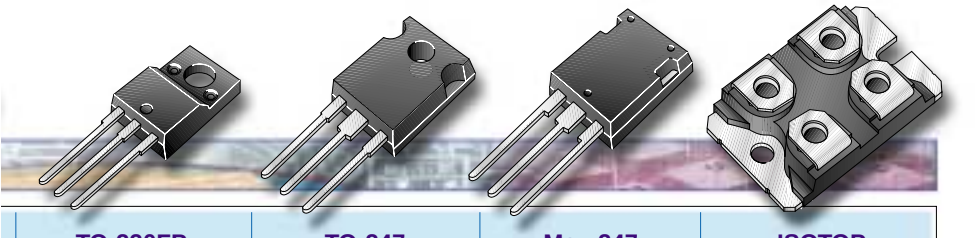
- For the DESIGN-IN of Low Voltage products:
  It is suggested to use the NF series rather than the NE where similar performance are guaranteed.
- For the DESIGN-IN of the High Voltage products:
  It is suggested to use the NKZ, NC & NCZ rather than the NB series where similar performance are guaranteed.
- The NM series, or better known as "MDmesh", makes a quantum leap in performances in the High Voltage range for innovative applications.
- For the availability of other MOSFETs refer to your local Sales and Marketing Organization.

IGBTs
Product Matrix



B_{VCE} (V)	FEATURE	I_{CN} (A) 100°C	DPAK +Diode	D^2PAK +Diode	TO-220 +Diode
320 375	Logic Level Fully Clamped 0-10 KHz	30 20 30		STGB20NB32LZ STGB10NB37LZ STGB20NB37LZ	STGP10NB37LZ
600	Standard Speed low drop 0-1 KHz	3 7 10 50 100	STGD3NB60S (D) STGD7NB60S	STGB3NB60S (D) STGB7NB60S (D)	STGP3NB60S (D) STGP7NB60S (D) STGP10NB60S
600	Medium Speed 1-20 KHz	3 7 10	STGD3NB60F STGD7NB60F	STGB3NB60F (D) STGB7NB60F (D) STGB10NB60F (D)	STGP3NB60F (D) STGP7NB60F (D) STGP10NB60F (D)
600	Fast Switching 20-60 KHz	3 7 10 12 20 30 50	STGD3NB60H STGD7NB60H	STGB3NB60H (D) STGB7NB60H (D) STGB10NB60H(D)	STGP3NB60H (D) STGP7NB60H (D) STGP10NB60H(D) STGP12NB60H STGP20NB60H
600	Short Circuit Rugged Fast Switching 20-60 KHz	3 7 20	STGD3NB60K STGD7NB60K	STGB3NB60K (D) STGB7NB60K (D)	STGP3NB60K (D) STGP7NB60K (D) STGP20NB60K
600	Hyper Fast Switching 60-120 KHz	50			
1200	Low Speed 0-10 KHz	7	STGD7NB120Z-1		

In development



TO-220FP Full Pak+Diode	TO-247 +Diode	Max-247 +Diode	ISOTOP +Diode
STGP3NB60S(D)FP STGP7NB60S(D)FP	STGW50NB60S	STGY50NB60S (D)	STGE100NB60S
STGP3NB60F(D)FP STGP7NB60F(D)FP STGP10NB60F(D)FP			
STGP3NB60H(D)FP STGP7NB60H(D)FP STGP10NB60H(D)FP STGP12NB60HD	STGW12NB60H (D) STGW20NB60H (D) STGW30NB60H (D) STGW50NB60H	STGY50NB60H (D)	STGE50NB60H (D)
STGP3NB60H(D)FP STGP7NB60H(D)FP	STGW20NB60K (D)		
	STGW50NB60V		

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