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Content

Schottky barrier diodes

SIGNAL SCHOTTKY DIODES

Part number	Package	Number of diodes	Repetitive peak reverse voltage (V_{RRM})	Average rectified current (I_o)	Forward voltage (V_F)	V_F measure condition (@ I_F) spec	Reverse current (I_R)	Junction capacitance (C_j)	Reverse recovery time (t_{rr})
			max (V)	max (A)	max (V)	(A)	max (mA)	max (pF)	max (ns)
10 V and 20 V									
BAT60	SOD-323	1	10	3	0.4	0.1	0.006	60	0
BAT20J	SOD-323	1	23	1	0.62	1	0.012	35	0
30 V									
BAR42	SOT-23	1	30	0.1	1	0.1	0.1	10	5
BAR43	SOT-23	1, 2	30	0.1	1	0.1	0.1	10	5
BAT42	DO-35	1	30	0.2	0.65	0.05	0.0005	15	5
BAT43	DO-35	1	30	0.2	0.45	0.015	0.0005	15	5
TMMBAT42	MiniMELF	1	30	0.2	0.65	0.05	0.0005	15	5
TMMBAT43	MiniMELF	1	30	0.2	0.45	0.015	0.0005	15	5
BAT30	SOD-523, SOT-323	1, 2	30	0.3	0.58	0.2	0.005	35	0
BAT30F3	Flip-Chip 400µ	1	30	0.3	0.545	0.2	0.006	-	0
BAT30F4	FLAT CSPS	1	30	-	0.205	0.005	0.05	-	-
40 V									
BAT54	SOD-123, SOD-323, SOD-523, SOT-23, SOT-323	1, 2	40	0.3	0.9	0.1	0.001	10	5
BAT48	SOD-123, SOD-323	1	40	0.35	0.9	0.5	0.05	40	10
BAT48RL	DO-35	1	40	0.35	0.9	0.5	0.05	40	10
TMMBAT48	MiniMELF	1	40	0.35	0.9	0.5	0.05	40	10
TMBYV10-40	MELF	1	40	1	0.55	1	0.5	400	0
60 V, 70 V and 80 V									
1N6263	DO-35	1	60	0.015	1	0.015	0.2	2.2	0.1
TMM6263	MiniMELF	1	60	0.015	1	0.015	0.2	2.2	0.1
TMBYV10-60	MELF	1	60	1	0.7	1	0.5	300	0
1N5711	DO-35	1	70	0.015	1	0.015	0.02	2	0.1
BAR18	SOT-23	1	70	0.07	0.41	0.001	0.0002	2	0.1
BAS70	SOD-323, SOD-523, SOT-23, SOT-323	1, 2	70	0.07	1	0.015	0.01	2	0

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			max (V)	max (A)	max (V)	(A)	max (mA)	max (pF)	max (ns)
TMBAT49	MELF	1	80	0.5	1	1	0.2	200	0
100 V									
BAR46	SOT-23	1, 2	100	0.15	0.45	0.01	0.005	20	0
BAT46	DO-35, SOD-123, SOD-323, SOT-323,	1, 2	100	0.15	1	0.25	20	20	0
TMMBAT46	MiniMELF	1	100	0.15	1	0.25	20	20	0
BAT41	DO-35, SOD-123, SOD-523	1	100	0.2	1	0.2	0.1	10	0
TMMBAT41	MiniMELF	1	100	0.2	1	0.2	0.1	10	0

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			max (V)	(A)	max (V)	(A)	max (mA)	max (A)	max (°C)
15 V									
STPS20L15	D²PAK, TO-220AC	1	15	20	0.33	19	6	310	125
STPS40L15C	TO-220AB, TO-247	2	15	2 x 20	0.33	19	6	310	125
STPS120L15	ISOTOP	2	15	2 x 60	0.31	60	22	1200	125
20 V									
STPS0520Z	SOD-123	1	20	0.5	0.385	0.5	0.15	5.5	125
1N5817	DO-35	1	20	1	0.45	1	0.5	25	150
STPS120M	STmite	1	20	1	0.49	1	0.004	50	150
STPS120MF	STmiteFlat	1	20	1	0.49	1	0.004	50	150
STPS1L20MF	STmiteFlat	1	20	1	0.43	1	0.075	50	150
1N5822	DO-201AD	1	20	3	0.525	3	2	80	150
25 V									
STPS2L25	SMB	1	25	2	0.375	2	0.09	75	150
STPS3L25S	SMC	1	25	3	0.44	3	0.09	75	150
STPS5L25	DPAK	1	25	5	0.35	5	0.35	75	150
STPS10L25	D²PAK, TO-220AC	1	25	10	0.35	10	0.8	200	150
STPS15L25	TO-220AC	1	25	15	0.35	15	1.3	250	150
STPS20L25C	D²PAK, TO-220AB	2	25	2 x 10	0.35	10	0.8	220	150
30 V									
STPS0530Z	SOD-123	1	30	0.5	0.33	0.5	0.012	5.5	150
1N5818	DO-35	1	30	1	0.5	1	0.5	25	150
STPS130	SMA, SMB	1	30	1	0.46	1	0.01	45	150
STPS1L30	SMA, SMB, Stmite	1	30	1	0.3	1	0.2	75	150
STPS1L30MF	STmiteFlat	1	30	1	0.34	1	0.39	50	150
STPS2L30	SMA, SMAflat, SMBflat	1	30	2	0.375	2	0.2	75	150
STPS8L30B-TR	DPAK	1	30	8	0.4	8	1	75	150
STPS8L30DEE	PowerFLAT™ 3.3 x 3.3	1	30	8	0.39	8	1	100	150
STPS15L30C	DPAK	2	30	2 x 7.5	0.39	7.5	1	75	150
STPS15L30CDJF	PowerFLAT™ 5 x 6	2	30	2 x 7.5	0.39	7.5	1	75	150
STPS2030C	TO-220AB	2	30	2 x 10	0.4	10	1	180	150

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			max (V)	(A)	max (V)	(A)	max (mA)	max (A)	max (°C)
STPS3030C	D²PAK, I²PAK, TO-220AB	2	30	2 x 15	0.4	15	1	250	150
STPS30L30C	D²PAK, I²PAK, TO-220AB	2	30	2 x 15	0.37	15	1.5	220	150
STPS30L30DJF	PowerFLAT™ 5 x 6	1	30	30	0.45	30	0.75	250	150
STPS4030C	TO-220AB	2	30	2 x 15	0.4	20	1	220	150
STPS41L30C	D²PAK	2	30	2 x 20	0.38	20	1.5	220	150
STPS60L30C	TO-247	2	30	2 x 30	0.38	30	4	600	150
40 V									
STPS0540Z	SOD-123	1	40	0.5	0.4	0.5	0.04	5.5	150
1N5819	DO-35	1	40	1	0.5	1	0.5	25	150
STPS140	SMA, SMB	1	40	1	0.45	1	0.012	60	150
STPS140Z	SOD-123	1	40	1	0.51	1	0.04	5.5	150
STPS1L40	SMA, SMB	1	40	1	0.42	1	0.035	60	150
STPS1L40M	STmite	1	40	1	0.4	1	0.063	50	150
STPS2L40	SMAflat, SMB, SMBflat	1	40	2	0.34	2	0.22	75	150
STPS340	DPAK, SMBflat, SMB, SMC	1	40	3	0.57	3	0.02	75	150
STPS3L40	SMBflat, SMC	1	40	3	0.44	3	0.1	75	150
STPS5L40	DO-201AD	1	40	5	0.44	5	0.2	150	150
STPS640C	DPAK	2	40	2 x 3	0.57	3	0.1	75	150
STPS10L40C	D²PAK, TO-220AB	2	40	2 x 5	0.46	5	0.2	150	150
45 V									
STPS3L45AF	SMAflat	1	45	3	0.51	3	0.3	75	150
STPS745	D²PAK, TO-220AC, TO-220FPAC	1	45	7	0.57	7.5	0.1	150	175
STPS1045	TO-220AC, TO-220FPAC	1	45	10	0.6	10	0.1	180	175
STPS1045B	DPAK	1	45	10	0.57	10	0.1	75	175
STPS1045DEE	PowerFLAT™ 3.3 x 3.3	1	45	10	0.53	10	0.2	100	175
STPS1545	TO-220AC, TO-220FPAC	1	45	15	0.57	15	0.2	220	175
STPS1545C	D²PAK, I²PAK, TO-220AB	2	45	2 x 7.5	0.72	15	0.1	150	175
STPS15L45C	DPAK	2	45	2 x 7.5	0.63	15	1	75	150
STPS2045C	D²PAK, TO-220AB, TO-220FPAC	2	45	2 x 10	0.72	20	0.1	180	175
STPS2045CH	IPAK	2	45	2 x 10	0.72	20	0.1	150	175
STPS20L45C	D²PAK, TO-220AB, TO-220FPAC	2	45	2 x 10	0.5	10	0.2	180	150

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			max (V)	(A)	max (V)	(A)	max (mA)	max (A)	max (°C)
STPS2545C	D²PAK, TO-220AB	2	45	2 x 12.5	0.72	25	0.125	200	175
STPS3045C	D²PAK,TO-220AB, TO-247, TOP3 Ins	2	45	2 x 15	0.72	30	0.2	220	175
STPS3045DJF	PowerFLAT™ 5 x 6	1	45	30	0.56	30	0.3	200	175
STPS30L45C	D²PAK, I²PAK, TO-220AB, TO-220FPAC, TO-247	2	45	2 x 15	0.5	15	0.4	220	150
STPS30S45C	TO-247, TO-220AB	2	45	2 x 15	0.6	15	0.2	180	150
STPS4045C	TO-247	2	45	2 x 20	0.63	20	0.2	220	175
STPS40L45C	D²PAK, TO-220AB, TO-247	2	45	2 x 20	0.49	20	0.6	220	150
STPS41L45C	D²PAK	2	45	2 x 20	0.47	20	1.2	220	150
STPS5045S	D²PAK	1	45	50	0.56	50	0.36	600	200
STPS6045C	TO-247	2	45	2 x 30	0.78	60	0.5	400	175
STPS60L45C	TO-247	2	45	2 x 30	0.72	60	1.5	220	150
STPS61L45C	TO-220AB, TO-247	2	45	2 x 30	0.51	30	1.5	500	150
STPS16045	ISOTOP	2	45	2 x 80	0.9	160	1	900	150
STPS24045	ISOTOP	2	45	2 x 120	0.87	240	2	1500	150
				60 V					
STPS0560Z	SOD-123	1	60	0.5	0.5	0.5	0.05	5.5	150
STPS160	SMA, SMB	1	60	1	0.57	1	0.004	75	150
STPS1L60	DO-41, SMA, Stmite flat	1	60	1	0.54	1	0.05	40	150
STPS2L60	DO-41, SMA, SMBflat	1	60	2	0.55	2	0.1	75	150
STPS3L60	DO-15, DO-201AD, SMB, SMBflat	1	60	3	0.59	3	0.15	100	150
STPS3L60S	SMC	1	60	3	0.65	3	0.055	75	150
STPS5L60	DO-201AD, SMC, SMB	1	60	5	0.48	5	0.22	150	150
STPS660CB	DPAK	2	60	2 x 3	0.59	3	0.03	50	125
STPS10L60	TO-220AC	1	60	10	0.56	10	0.35	220	150
STPS10L60C	TO-220FPAC	2	60	2 x 5	0.52	5	0.22	180	150
STPS15L60C	DPAK	2	60	2 x 7.5	0.57	7.5	0.2	75	150
STPS20L60C	D²PAK, TO-220AB, TO-220NL	2	60	2 x 10	0.56	10	0.35	220	150
STPS20M60	TO-220AC	1	60	20	0.585	20	0.13	400	150
STPS20M60C	D²PAK, I²PAK, TO-220AB	2	60	2 x 10	0.57	10	0.065	300	150
STPS20M60S	D²PAK, I²PAK, TO-220AB	1	60	20	0.505	20	0.125	600	150

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			max (V)	(A)	max (V)	(A)	max (mA)	max (A)	max (°C)
STPS20SM60	TO-220AC	1	60	20	0.6	20	0.085	400	150
STPS20SM60C	TO-220AC	2	60	2 x 10	0.6	10	0.04	220	150
STPS20SM60S	D²PAK, I²PAK, TO-220AB	1	60	20	0.58	20	0.085	400	150
STPS3060C	TO-247	2	60	2 x 15	0.75	15	0.15	200	150
STPS30H60C	D²PAK, TO-220AB, TO-220FPAC	2	60	2 x 15	0.57	15	0.06	230	175
STPS30L60C	D²PAK, TO-220AB, TO-220AB narrow leads, TO-247	2	60	2 x 15	0.56	15	0.48	230	150
STPS30M60	TO-220AC, D²PAK	1	60	30	0.52	30	0.165	450	150
STPS30M60C	TO-220AC	2	60	2 x 15	0.53	15	0.08	400	150
STPS30M60DJF	PowerFLAT™ 5 x 6	1	60	30	0.67	30	0.09	250	150
STPS30M60S	D²PAK, I²PAK, TO-220AB	1	60	30	0.535	30	0.165	600	150
STPS30SM60	TO-220AC	1	60	30	0.635	30	0.135	400	150
STPS30SM60C	D²PAK, I²PAK, TO-220AB	2	60	2 x 15	0.62	15	0.065	300	150
STPS30SM60S	D²PAK, I²PAK, TO-220AB	1	60	30	0.57	30	0.135	600	150
STPS40M60C	TO-220AB	2	60	2 x 20	0.535	20	0.11	220	150
STPS40SM60C	TO-220AB	2	60	2 x 20	0.575	20	0.09	400	150
STPS41L60C	D²PAK, TO-220AB	2	60	2 x 20	0.58	20	0.6	220	150
STPS61L60C	TO-220AB, TO-247	2	60	2 x 30	0.62	30	0.8	400	150
STPS80L60C	Max247	2	60	2 x 40	0.56	40	1.8	400	150
80 V									
STPS10SM80C	TO-220FPAC	2	80	2 x 5	0.745	5	0.015	150	175
STPS20SM80C	TO-220AB, TO-220FPAC	2	80	2 x 10	0.78	20	0.025	220	175
STPS30M80C	TO-220AB	2	80	2 x 15	0.795	30	0.04	150	175
STPS30SM80C	TO-220FPAC	2	80	2 x 15	0.83	30	0.04	220	175
STPS40M80C	D²PAK, TO-220AB	2	80	2 x 20	0.795	40	0.065	200	175
100 V									
STPS1H100	SMA, SMAflat, SMB	1	100	1	0.62	1	0.004	50	175
STPS1H100MF	STmiteFlat	1	100	1	0.62	1	0.004	50	175
STPS2H100	SMA, SMAflat, SMB, SMBflat	1	100	2	0.65	2	0.001	75	175
STPS2H100RL	DO-35	1	100	2	0.7	2	0.001	50	175
STPS3H100	SMB, SMBflat	1	100	3	0.68	3	0.001	75	175

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			max (V)	(A)	max (V)	(A)	max (mA)	max (A)	max (°C)
STPS5H100	DPAK, IPAK	1	100	5	0.61	5	0.0035	75	175
STPS6M100DEE	PowerFLAT™ 3.3 x 3.3	1	100	6	0.64	6	0.003	100	150
STPS8H100	D²PAK, TO-220AC, TO-220FPAC	1	100	8	0.58	8	0.0045	250	175
STPS8H100DEE	PowerFLAT™ 3.3 x 3.3	1	100	8	0.68	8	0.0045	100	175
STPS10H100C	D²PAK, TO-220AB, TO-220FPAC, TO-220AB narrow leads	2	100	2 x 5	0.71	10	0.0035	180	175
STPS15H100C	DPAK	2	100	2 x 7.5	0.67	7.5	0.003	75	175
STPS16H100C	D²PAK	2	100	2 x 8	0.64	8	0.0036	200	175
STPS20100	TO-220AB	2	100	2 x 10	0.95	20	0.15	200	175
STPS20H100C	D²PAK, I²PAK, TO-220AB, TO-220FPAC, TO-220AB narrow leads	2	100	2 x 10	0.77	10	0.0045	250	175
STPS20M100S	D²PAK, I²PAK, TO-220AB, TO-220FPAC	1	100	20	0.69	20	0.04	530	150
STPS20S100C	TO-220AB, TO-220FPAC	2	100	2 x 10	0.71	10	0.0035	180	175
STPS20SM100S	I²PAK, TO-220AB	1	100	20	0.7	20	0.03	350	150
STPS30100ST	TO-220AB	1	100	30	0.655	30	0.175	300	150
STPS30H100C	TO-220AB, TO-220AB narrow leads, TO-247	2	100	2 x 15	0.8	15	0.005	250	175
STPS30H100DJF	PowerFLAT™ 5 x 6	1	100	30	0.71	30	0.006	250	150
STPS30M100DJF	PowerFLAT™ 5 x 6	1	100	30	0.73	30	0.1	200	150
STPS30M100S	I²PAK, TO-220AB, TO-220FPAC	1	100	30	0.655	30	0.175	300	150
STPS30SM100S	D²PAK, I²PAK, TO-220AB, TO-220FPAC	1	100	30	0.69	30	0.045	530	150
STPS40H100CW	TO-247	2	100	2 x 20	0.61	20	0.01	300	175
STPS40M100C	I²PAK, TO-220AB	2	100	2 x 20	0.64	20	0.07	530	150
STPS40SM100C	D²PAK, TO-220AB	2	100	2 x 20	0.665	20	0.045	530	150
STPS41H100C	D²PAK, I²PAK, TO-220AB	2	100	2 x 20	0.67	20	0.01	220	175
STPS60H100C	TO-220AB	2	100	2 x 30	0.72	30	0.01	300	175
STPS61H100C	TO-247	2	100	2 x 30	0.67	30	0.016	450	175
STPS80H100	ISOTOP	2	100	2 x 40	0.65	40	0.02	700	150
STPS80H100C	Max247	2	100	2 x 40	0.7	40	0.02	400	175
STPS160H100	ISOTOP	2	100	2 x 80	0.68	80	0.04	1000	150

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			max (V)	(A)	max (V)	(A)	max (mA)	max (A)	max (°C)
120 V									
STPS10120C	TO-220AB	2	120	2 x 5	0.85	5	0.006	120	175
STPS20120C	DPAK, I²PAK, TO-220AB, TO-220AB narrow leads	2	120	2 x 10	0.74	10	0.01	150	175
STPS20120D	TO-220AC	1	120	20	0.66	10	0.02	200	175
STPS20M120S	I²PAK, TO-220AB narrow leads	1	120	20	0.57	10	0.275	240	150
STPS20SM120S	I²PAK, TO-220AB narrow leads, TO-220FP	1	120	20	0.62	10	0.21	220	150
STPS40M120C	I²PAK, TO-220AB, TO-220AB narrow leads	2	120	2 x 10	0.67	20	0.37	220	150
STPS30120C	TO-220AB, TO-220AB narrow leads	2	120	2 x 15	0.74	15	0.015	180	175
STPS30120DJF	PowerFLAT™ 5 x 6	1	120	30	0.75	30	0.035	200	150
STPS30L120C	I²PAK, TO-220AB, TO-220FPAC	2	120	2 x 15	0.71	15	0.2	220	150
STPS30M120S	I²PAK, TO-220AB narrow leads	1	120	30	0.73	30	0.345	260	150
STPS30SM120S	I²PAK, TO-220AB narrow leads, TO-220FP	1	120	30	0.76	30	0.275	240	150
STPS40120C	TO-220AB	2	120	2 x 20	0.73	20	0.025	200	175
STPS40SM120C	I²PAK, TO-220AB, TO-220AB narrow leads	2	120	2 x 20	0.69	20	0.275	210	150
150 V									
STPS1150	DO-35, SMA, Stmite	1	150	1	0.67	1	0.001	50	175
STPS2150	DO-15, SMA	1	150	2	0.67	2	0.0015	75	175
STPS3150	DO-201AD, SMB, SMBflat	1	150	3	0.67	3	0.002	80	175
STPS10150C	D²PAK, TO-220AB, TO-220FPAC	2	150	2 x 5	0.75	5	0.002	120	175
STPS16150C	TO-220AB	2	150	2 x 8	0.75	8	0.003	150	175
STPS20150C	D²PAK, I²PAK, TO-220AB, TO-220FPAC	2	150	2 x 10	0.75	10	0.005	180	175
STPS30150C	D²PAK, TO-220AB, TO-220FPAC, TO-247	2	150	2 x 15	0.75	15	0.0065	220	175
STPS40150C	D²PAK, TO-220AB, TO-247	2	150	2 x 20	0.75	20	0.008	250	175
STPS60150C	TO-220AB	2	150	2 x 30	0.76	30	0.015	270	175
STPS61150C	TO-247	2	150	2 x 30	0.67	30	0.02	500	175
STPS80150C	TO-247	2	150	2 x 40	0.74	40	0.03	500	175

POWER SCHOTTKY DIODES

Part number	Package	Number of diodes	Repetitive peak reverse voltage (V_{RRM})	Average forward current (I_F)	Forward voltage (V_F)	V_F measure condition (@ I_F)	Reverse current (I_R)	Non-repetitive peak forward surge current (I_{FSM})	Junction temperature (T_j)
			max (V)	(A)	max (V)	(A)	max (mA)	max (A)	max (°C)
170 V									
STPS2170AF	SMA Flat	1	170	2	0.67	2	0.028	70	175
STPS3170	SMA Flat, SMB Flat	1	170	3	0.67	3	0.04	75	175
STPS8170DEE	PowerFLAT™ 3.3 x 3.3	1	170	8	0.72	8	0.015	100	175
STPS10170C	D²PAK, DPAK	2	170	2 x 5	0.75	5	0.01	75	175
STPS1170AF	SMA Flat	1	170	1	0.67	1	0.015	45	175
STPS16170C	D²PAK, DPAK, I²PAK	2	170	2 x 8	0.75	8	0.015	150	175
STPS20170C	D²PAK, TO-220AB, TO-220FPAC	2	170	2 x 10	0.86	20	0.015	180	175
STPS30170C	D²PAK, TO-247	2	170	2 x 15	0.86	30	0.02	220	175
STPS30170DJF	PowerFLAT™ 5 x 6	1	170	30	0.79	30	0.015	200	150
STPS40170C	D²PAK, TO-220AB, TO-247	2	170	2 x 20	0.75	20	0.03	250	175
STPS60170C	TO-220AB	2	170	2 x 30	0.76	30	0.035	270	175
STPS61170C	TO-247	2	170	2 x 30	0.67	30	0.06	500	175
STPS80170C	TO-247	2	170	2 x 40	0.74	40	0.08	500	175
STPS200170TV1	ISOTOP	2	170	2 x 100	0.68	100	0.2	700	150
200 V									
STPS2200	SMB, SMBflat	1	200	2	0.64	2	0.005	180	175
STPS20200C	D²PAK, TO-220AB, TO-220AB narrow leads, TO-220FPAB	2	200	20	0.7	10	0.015	180	175
STPS60SM200C	TO-247	2	200	2 x 30	0.69	30	0.05	500	175
STPS4S200	DPAK,SMC, SMB Flat	1	200	4	0.71	4	0.025	130	175

Silicon-carbide diodes

Part number	Package	Number of diodes	Repetitive peak reverse voltage (V_{RRM})	Average rectified current (I_o)	Forward voltage (V_F)	V_F measure condition (@ I_F)	Reverse current (I_R)	Total capacitive charge (Qc)	Non-repetitive peak forward surge current (I_{FSM})	Junction temperature (T_j)
			max (V)	max (A)	max (V)	(A)	max (mA)	(nC)	max (A)	max (°C)
Low V_F 600 V SiC diodes										
STPSC406	TO-220AC, DPAK	1	600	4	1.9	4	0.05	3	14	175
STPSC606	D²PAK, TO-220AC	1	600	6	1.7	6	0.075	6	27	175
STPSC806	D²PAK, TO-220AC	1	600	8	1.7	8	0.1	10	30	175
STPSC1006	TO-220AC	1	600	10	1.7	10	0.15	12	40	175
STPSC1206	TO-220AC	1	600	12	1.7	12	0.15	12	50	175
STPSC2006C	TO-247	2	600	2 x 10	1.7	10	0.15	12	40	175
STPSC40065C	TO-247	2	650	2 x 20	1.7	20	0.3	42	70	175
High surge 650 V SiC diodes										
STPSC4H065	DPAK, TO-220AC, TO-220AC Ins	1	650	4	1.75	4	0.04	12.5	38	175
STPSC6H065	D²PAK; TO-220AC; DPAK, TO-220AC Ins	1	650	6	1.75	6	0.06	18	60	175
STPSC8H065	D²PAK, DPAK, TO-220AC, TO-220AC Ins	1	650	8	1.75	8	0.08	23.5	75	175
STPSC8H065C	DPAK; D2PAK; TO-220AC	2	650	2 x 4	1.75	4	0.04	12.5	38	175
STPSC10H065	D²PAK, TO-220AC, DPAK, TO-220AC Ins, Power Flat 5x6	1	650	10	1.75	10	0.10	28.5	100	175
STPSC12H065	TO-220AC, D²PAK	1	650	12	1.75	12	0.12	36	100	175
STPSC12H065C	D²PAK, TO-220AC	2	650	12	1.75	6	0.06	18	60	175
STPSC12065	TO-220	1	650	12	1.45	12	0.15	36	50	175
STPSC16H065C	TO-220AB, D2PAK	2	650	16	1.75	8	0.08	23.5	75	175
STPSC8H065C	TO-220AB	2	650	8	1.75	4	0.04	12.5	38	175
STPSC20H065C	TO-220AB; TO-247; D²PAK	2	650	10	1.75	10	0.1	28.5	100	175
STPSC20065	TO-247, TO-220AC, TO-220AC Ins	1	650	20	1.45	20	0.3	62	90	175
Dual in series High surge 650 V SiC diode										
STPSC10TH13TI	TO-220AB Ins	2	650	10	1.75	10	0.1	28.5	90	175
STPSC6TH13TI	TO-220AB Ins	2	650	6	1.75	6	0.06	18	60	175
STPSC8TH13TI	TO-220AB Ins	2	650	8	1.75	8	0.08	23.5	75	175

Silicon-carbide diodes

Part number	Package	Number of diodes	Repetitive peak reverse voltage (V_{RRM})	Average rectified current (I_o)	Forward voltage (V_F)	V_F measure condition (@ I_F)	Reverse current (I_R)	Total capacitive charge (Qc)	Non-repetitive peak forward surge current (I_{FSM})	Junction temperature (T_j)
			max (V)	max (A)	max (V)	(A)	max (mA)	(nC)	max (A)	max (°C)
1200 V										
STPSC6H12B-TR1	DPAK-2L	1	1200	6	1.86	6	0.40	28	36	175
STPSC10H12	TO-220AC; D²PAK	1	1200	10	1.5	10	0.06	57	71	175
STPSC15H12	TO-220AC	1	1200	15	1.5	15	0.09	94	105	175
STPSC20H12	TO-220AC; D²PAK; TO-247	1	1200	20	1.5	20	0.12	130	140	175

Ultrafast rectifiers

ULTRAFAST RECTIFIERS 200 V, 300 V AND 400 V

Part number	Package	Number of diodes	Repetitive peak reverse voltage (V_{RRM})	Average rectified current (I_{o})	Forward Voltage (V_{F})	V_{F} measure condition (@ I_{F})	Reverse current (I_{R})	Reverse recovery time (t_{rr})	Non-repetitive peak forward surge current (I_{FSM})	Junction temperature (T_{j})
			max (V)	max (A)	max (V)	(A)	max (mA)	max (ns)	max (A)	max (°C)
200 V										
STTH102	DO-35, SMA	1	200	1	0.97	1	0.001	20	40	175
STTH1R02	DO-15, DO-41, SMA, SMB	1	200	1	0.8	1.5	0.003	20	60	175
STTH2R02	SMA, SMB	1	200	2	0.8	2	0.003	20	75	175
STTH3R02	DO-15, DO-247, SMC	1	200	3	0.8	3	0.003	20	75	175
STTH4R02	DPAK, SMB, SMC	1	200	4	0.83	4	0.003	20	70	175
STTH602C	TO-220AB	2	200	2 x 3	1.05	6	0.003	20	60	175
STTH802	D²PAK, TO-220AC, DPAK, TO-220FPAC	1	200	8	0.9	8	0.006	30	100	175
STTH802C	DPAK	2	200	2 x 4	1.1	8	0.004	20	50	175
STTH1002C	D²PAK, DPAK, I²PAK, TO-220AB, TO-220FPAC	2	200	2 x 5	1.05	10	0.005	25	50	175
STTH1202	TO-220AC, TO-220AC Ins	1	200	12	0.95	12	0.01	24	100	175
STTH1302C	D2PAK	2	200	2 x 6.5	1.1	13	0.006	25	70	175
STTH1502	TO-220AC, TO-220AC Ins, TO-220FPAC	1	200	15	0.95	15	0.001	25	150	175
STTH1602C	D²PAK, TO-220AB, TO-220FPAC	2	200	2 x 8	1.05	16	0.006	26	80	175
STTH2002	D²PAK, TO-220AC, TO-220AC Ins	1	200	20	0.95	20	0.01	20	175	175
STTH2002C	D²PAK, I²PAK, TO-220AB, TO-220FPAC	2	200	2 x 10	1.05	20	0.01	27	90	175
STTH20W02C	TO-247	2	200	2 x 10	1.3	20	0.005	25	80	175
STTH3002	D²PAK, DO-247, DOP3 Ins	1	200	30	0.88	30	0.02	27	300	175
STTH3002C	D²PAK, TO-220AB, TO-247	2	200	2 x 15	0.99	30	0.02	22	180	175
STTH30R02DJF	PowerFLAT™ 5 x 6	1	200	30	0.95	30	0.01	35	300	175
STTH30W02C	TO-247	2	200	2 x 15	1.3	30	0.01	25	140	175
STTH6002C	TO-247, TOP3 Ins	2	200	2 x 30	0.99	60	0.03	27	330	175
STTH60W02C	TO-247	2	200	2 x 30	1.25	60	0.01	30	250	175
STTH10002	ISOTOP	2	200	2 x 50	0.97	100	0.05	37	750	150
STTH20002TV	ISOTOP	2	200	2 x 100	1.05	200	0.1	50	1000	150

ULTRAFAST RECTIFIERS 200 V, 300 V AND 400 V

Part number	Package	Number of diodes	Repetitive peak reverse voltage (V_{RRM})	Average rectified current (I_D)	Forward Voltage (V_F)	V_F measure condition (@ I_F)	Reverse current (I_R)	Reverse recovery time (t_{rr})	Non-repetitive peak forward surge current (I_{FSM})	Junction temperature (T_j)
			max (V)	max (A)	max (V)	(A)	max (mA)	max (ns)	max (A)	max (°C)
300 V										
STTH803	D²PAK, TO-220AC	1	300	8	1	8	0.02	25	100	175
STTH8R03	TO-220AC	1	300	8	1.3	8	0.01	30	80	175
STTH8R03DJF	PowerFLAT™ 5 x 6	1	300	8	1	8	0.04	35	280	175
STTH1003S	DPAK	1	300	10	1.1	10	0.01	13	100	175
STTH20L03C	D²PAK, TO-220AB	2	300	2 x 10	0.95	10	0.01	35	150	175
STTH30W03C	TO-247	2	300	2 x 15	1.35	30	0.01	25	150	175
STTH2003	D²PAK, I²PAK, TO-220AB, TO-220FPAC	2	300	2 x 10	1	10	0.02	25	110	175
STTH3003	TO-247	2	300	2 x 15	1	15	0.04	30	140	175
STTH30R03	D²PAK, TO-247	2	300	2 x 15	1.4	15	0.02	35	120	175
STTH50W03C	TO-247	2	300	2 x 25	1.2	25	0.015	27	200	175
STTH6003C	TO-247	2	300	2 x 30	1	30	0.06	40	300	175
STTH60W03C	TO-247	2	300	2 x 30	1.15	30	0.02	35	280	175
STTH60SW03C	TO-247	2	300	2 x 30	1.25	30	0.015	27	200	175
STTH60P03S	TO-247	1	300	60	1.5	30	0.1	50	250	175
STTH8003	Max247	2	300	2 x 40	1	40	0.08	50	400	175
STTH12003	ISOTOP	2	300	2 x 60	1	60	0.12	55	600	150
STTH16003	ISOTOP	2	300	2 x 80	0.95	80	0.2	60	800	150
STTH20003	ISOTOP	2	300	2 x 100	0.95	100	0.2	90	1000	150
STTH200W03T	ISOTOP	2	300	3 x 100	1.15	100	0.1	50	800	150
400 V										
STTH1R04	DO-15, DO-35, SMA, SMB	1	400	1	1.15	1	0.005	20	30	175
STTH3R04	DO-15, DO-201AD, SMB, SMC	1	400	3	1.15	3	0.005	25	60	175
STTH5L04DEE	PowerFLAT™ 3.3 x 3.3	1	400	5	1.05	5	0.0025	60	60	150
STTH8R04	D²PAK, TO-220AC, TO-220AC Ins	1	400	8	1.1	8	0.01	35	120	175
STTH10R04	D²PAK	1	400	10	1.35	10	0.001	20	100	175
STTH16R04C	D²PAK, TO-220AB	2	400	2 x 8	1.37	16	0.01	35	120	175
STTH20R04	D²PAK, TO-220AC, TO-220FPAC	1	400	20	1.35	20	0.02	25	150	175
STTH30R04	D²PAK, TO-220AC, DO-247	1	400	30	1.2	30	0.015	35	300	175
STTH6004W	DO-247	1	400	60	1	60	0.05	50	600	175
STTH60R04	DO-247	1	400	60	1.2	60	0.06	45	650	175

ULTRAFAST RECTIFIERS 200 V, 300 V AND 400 V

Part number	Package	Number of diodes	Repetitive peak reverse voltage (V_{RRM})	Average rectified current (I_D)	Forward Voltage (V_F)	V_F measure condition (@ I_F)	Reverse current (I_R)	Reverse recovery time (t_{rr})	Non-repetitive peak forward surge current (I_{FSM})	Junction temperature (T_j)
			max (V)	max (A)	max (V)	(A)	max (mA)	max (ns)	max (A)	max (°C)
STTH61R04TV	ISOTOP	2	400	2 x 30	1.2	30	0.015	35	350	150
STTH61W04S	TO-247	1	400	60	1.15	60	0.02	55	500	175
STTH100W04C	TO-247	2	400	2 x 50	1.2	50	0.025	50	350	175
STTH120R04TV	ISOTOP	2	400	2 x 60	1.2	60	0.06	45	700	150
STTH20004TV1	ISOTOP	2	400	2 x 100	1	100	0.1	60	900	150
STTH200L04TV1	ISOTOP	2	400	2 x 100	1	100	0.1	60	900	150
STTH200R04TV	ISOTOP	2	400	2 x 100	1.1	100	0.08	55	1000	150
STTH200W04T	ISOTOP	2	400	2 x 100	1.3	100	0.04	55	800	150
STTH240F04TV1	ISOTOP	2	400	2 x 120	1.2	120	0.085	70	1000	150

ULTRAFAST RECTIFIERS 600 V

Part number	Package	Number of diodes	Repetitive peak reverse voltage (V_{RRM})	Average rectified current (I_{o})	Forward voltage (V_{F})	V_{F} measure condition (@ I_{F}) spec	Reverse current (I_{R})	Reverse recovery time (t_{rr})	Non-repetitive peak forward surge current (I_{FSM})	Junction temperature (T_{j})
			max (V)	max (A)	max (V)	(A)	max (mA)	max (ns)	max (A)	max (°C)
STTH1L06	DO-41, SMA, SMB	1	600	1	1.05	1	0.001	80	20	175
STTH1R06	DO-41, SMA, SMB	1	600	1	1.25	1	0.001	25	20	175
STTH2L06	DO-41, SMA, SMB	1	600	2	1.05	2	0.002	85	35	175
STTH2R06	DO-41, SMA, SMB, SMC	1	600	2	1.25	2	0.002	30	30	175
STTH3L06	DO-201AD, SMB, SMC	1	600	3	1.05	3	0.003	85	60	175
STTH3R06	DO-201AD, SMB, SMC	1	600	3	1.25	3	0.003	30	45	175
STTH4L06	DO-201AD	1	600	4	1.05	3	0.003	55	80	175
STTH4R06DEE	PowerFLAT™ 3.3 x 3.3	1	600	4	1.25	4	0.003	40	60	150
STTH506	DPAK	1	600	5	1.4	5	0.005	30	55	175
STTH5L06	TO-220AC, DO-201AD, DPAK, TO-220FPAC	1	600	5	1.05	5	0.005	95	60	175
STTH5R06	D²PAK, TO-220AC, DPAK, TO-220FPAC	1	600	5	1.8	5	0.02	25	50	175
STTH5R06DJF	PowerFLAT™ 5 x 6	1	600	5	1.2	5	0.06	40	190	175
STTH806	D²PAK, TO-220AC Ins, TO-220AC	1	600	8	1.4	8	0.008	35	90	175
STTH8L06	D²PAK, TO-220AC, TO-220FPAC, TO-220 Ins	1	600	8	1.05	8	0.008	105	120	175
STTH8R06	D²PAK, TO-220AC, TO-220AC Ins, TO-220FPAC	1	600	8	1.8	8	0.03	25	80	175
STTH8S06	TO-220AC, TO-220FPAC, DPAK	1	600	8	1.9	8	0.02	18	60	175
STTH12R06	D²PAK, TO-220AC, TO-220AC Ins, TO-220FP	1	600	12	1.8	12	0.045	25	100	175
STTH12S06	TO-220FPAC	1	600	12	1.9	12	0.03	21	100	175
STTH15L06	D²PAK, TO-220AC, TO-220FPAC	1	600	15	1.2	15	0.015	55	150	175
STTH15R06	TO-220AC, TO-220FPAC	1	600	15	1.8	15	0.06	30	150	175
STTH16L06C	D²PAK, TO-220AB, TO-220FPAC	2	600	2 x 8	1.64	8	0.008	35	120	175
STTH3006	TO-247, DOP3 Ins	1	600	30	1.4	30	0.025	50	300	175
STTH30L06	D²PAK, TO-247	1	600	30	1.25	30	0.025	65	300	175
STTH30L06C	D²PAK, TO-247	2	600	2 x 15	1.45	15	0.015	55	130	175
STTH30R06	DO-247, DOP3 Ins	1	600	30	1.4	30	0.025	50	300	175
STTH30AC06C	TO-247 long leads, TO-3P, TO-3PF	2	600	2 x 15	1.8	15	0.01	30	140	175
STTH30ACS06W	TO-247	1	600	30	1.9	30	0.005	30	190	175
STTH30R06C	TO-247	2	600	2 x 15	1.8	15	0.06	30	120	175

ULTRAFAST RECTIFIERS 600 V

Part number	Package	Number of diodes	Repetitive peak reverse voltage (V_{RRM})	Average rectified current ($I_{F(AV)}$)	Forward voltage (V_F)	V_F measure condition (@ I_F) spec	Reverse current (I_R)	Reverse recovery time (t_{rr})	Non-repetitive peak forward surge current (I_{FSM})	Junction temperature (T_j)
			max (V)	max (A)	max (V)	(A)	max (mA)	max (ns)	max (A)	max (°C)
STTH30S06	DO-247	1	600	30	2.2	30	0.05	30	180	175
STTH31AC06	TO-3PF, TP-247LL	1	600	30	1.75	30	0.01	65	150	175
STTH50W06S	TO-247	1	600	50	1.6	50	0.05	45	390	175
STTH6006TV	ISOTOP	2	600	2 x 30	1.4	30	0.025	50	210	150
STTH6006W	TO-247	1	600	60	1.4	60	0.05	60	400	175
STTH60L06	TO-247	1	600	60	1.2	60	0.05	70	600	175
STTH60AC06C	TO-247, TO-247LL	2	600	2 x 30	1.7	60	0.01	40	280	175
STTH60L06C	TO-247	2	600	2 x 30	1.55	60	0.025	65	210	175
STTH60L06TV	ISOTOP	2	600	2 x 30	1.25	60	0.025	65	210	150
STTH8006	DO-247	1	600	80	1.3	80	0.05	70	500	150
STTH80S06W	TO-247	1	600	80	2.15	80	0.05	45	400	175
STTH100W06C	TO-247	1	600	80	2.15	80	0.05	45	400	175
STTH120L06TV	ISOTOP	2	600	2 x 60	1.2	60	0.05	70	500	150
STTH200L06TV	ISOTOP	2	600	2 x 100	1.2	100	0.08	80	800	150
STTH200W06T	ISOTOP	2	600	2 x 100	1.3	100	0.03	75	800	150

HYPERFAST TANDEM RECTIFIERS 600 V

Generic part number	Package	Number of diodes	Repetitive peak reverse voltage (V_{RRM})	Average rectified current (I_o)	Forward voltage (V_F)	V_F measure condition (@ I_F) spec	Reverse current (I_R)	Reverse recovery time (t_{rr})	Non-repetitive peak forward surge current (I_{FSM})	Junction temperature (T_j)
			max (V)	max (A)	max (V)	(A)	max (mA)	max (ns)	max (A)	max (°C)
STTH506D	TO-220AC Ins	1	600	5	2.4	5	0.006	15	60	150
STTH806DTI	TO-220AC Ins	1	600	8	2.4	8	0.01	30	180	150
STTH806TTI	TO-220AB Ins	1	600	8	2.6	8	0.01	30	80	150
STTH8ST06	TO-220AC Ins	1	600	8	3.1	8	0.006	26	55	175
STTH8T06	TO-220AC Ins	1	600	8	2.55	8	0.01	30	80	175
STTH1008DTI	TO-220AC AC ISOL.	1	800	10	2.05	10	0.02	55	120	150
STTH12T06DI	TO-220AC Ins	1	600	12	2.55	12	0.02	33	90	175
STTH1506D	DOP3 Ins	1	600	15	2.4	15	0.02	35	130	150
STTH1506TPI	TOP3 Ins	1	600	15	2.6	15	0.02	35	130	150
STTH3006D	DOP3 Ins	1	600	30	2.4	30	0.04	45	180	150

ULTRAFAST RECTIFIERS 800 V, 1000 V AND 1200 V

Part number	Package	Number of diodes	Repetitive peak reverse voltage (V_{RRM})	Average rectified current (I_o)	Forward voltage (V_F)	V_F measure condition (@ I_F)	Reverse current (I_R)	Reverse recovery time (t_{rr})	Non-repetitive peak forward surge current (I_{FSM})	Junction temperature (T_j)
			max (V)	max (A)	max (V)	spec (A)	max (mA)	max (ns)	max (A)	max (°C)
800 V										
STTH108	DO-35, SMA	1	800	1	1.25	1	0.005	75	20	175
STTH208	DO-15, SMB	1	800	2	1.25	2	0.005	75	35	175
1000 V										
STTH110	DO-35, SMA	1	1000	1	1.42	1	0.01	75	18	175
STTH310	DO-201AD bent, DO-201AD, SMC	1	1000	3	1.42	3	0.01	75	45	175
STTH810	D²PAK, TO-220AC, TO-220AC Ins, TO-220FPAC	1	1000	8	1.7	8	0.005	65	60	175
STTH1210	TO-220AC, TO-220AC Ins	1	1000	12	1.7	12	0.01	65	80	175
STTH3010	TO-220AC, DO-247, DOP3 Ins	1	1000	30	1.7	30	0.015	55	180	175
STTH6010	DO-247	1	1000	60	1.7	60	0.02	65	400	175
STTH6110TV	ISOTOP	2	1000	2 x 30	1.7	30	0.015	55	240	150
STTH12010TV	ISOTOP	2	1000	2 x 60	1.7	60	0.02	65	400	150
1200 V										
STTH112	DO-35, SMA, SMB	1	1200	1	1.55	1	0.005	75	18	175
STTH212	SMB, SMC	1	1200	2	1.5	2	0.01	75	40	175
STTH312	DPAK	1	1200	3	1.65	3	0.01	80	35	175
STTH512	TO-220AC, DPAK, TO-220FPAC	1	1200	5	1.9	5	0.005	70	55	175
STTH812	D²PAK, TO-220AC, TO-220AC Ins, TO-220FPAC	1	1200	8	1.9	8	0.008	70	80	175
STTH8S12	TO-220AC	1	1200	8	2.5	8	0.005	45	70	175
STTH1212	TO-220AC	1	1200	12	1.9	12	0.01	70	100	175
STTH1512	D²PAK, DO-247, DOP3 Ins	1	1200	15	1.8	15	0.015	75	200	175
STTH15S12	TO-220AC, DO-247	1	1200	15	2.7	15	0.01	40	130	175
STTH3012	TO-220AC, DO-247, TO-247LL	1	1200	30	1.95	30	0.02	80	210	175
STTH30S12	DO-247	1	1200	30	2.7	30	0.015	50	180	175
STTH6012	DO-247	1	1200	60	1.95	60	0.03	70	400	175
STTH6112TV	ISOTOP	2	1200	2 x 30	1.95	30	0.02	65	250	150
STTH75S12	DO-247	1	1200	75	2.7	75	0.05	55	370	175
STTH9012TV	ISOTOP	2	1200	2 x 45	1.8	45	0.03	85	420	150
STTH12012TV	ISOTOP	2	1000	2 x 60	1.95	60	0.02	70	420	150

Automotive-grade diodes

AUTOMOTIVE-GRADE SCHOTTKY DIODES

Part number	Package	Number of diodes	Repetitive peak reverse voltage (V_{RRM})	Average rectified current (I_O)	Forward voltage (V_F)	V_F measure condition (@ I_F)	Reverse current (I_R)	Non-repetitive peak forward surge current (I_{FSM})	Junction temperature (T_j)
			max (V)	max (A)	max (V)	(A)	max (mA)	max (A)	max (°C)
30 V									
STPS8L30BY-TR	DPAK	1	30	8	0.4	0.4	1	75	150
STPS60L30CKY-TR	PowerSO-20	2	30	2 x 30	0.49	30	2	250	150
40 V									
STPS0540ZY	SOD-123	1	40	0.5	0.5	0.5	0.04	5.5	150
STPS140	SMA, SMB	1	40	1	0.55	1	0.012	60	150
STPS140ZY	SOD-123	1	40	1	0.55	1	0.012	5.5	150
STPS1L40	SMA, SMB	1	40	1	0.42	1	0.035	60	150
STPS340	SMB, SMC	1	40	3	0.63	3	0.02	75	150
STPS3L40SY	SMC	1	40	3	0.5	3	0.1	75	150
STPS640CBY-TR	DPAK	2	40	3	0.57	3	0.01	75	150
45 V									
STPS1045BY	DPAK	1	45	10	0.63	10	0.1	75	175
STPS1545DY	TO-220AC	1	45	15	0.57	15	0.2	220	175
STPS1545CGY-TR	D2PAK	2	45	2 x 7.5	0.84	15	0.1	150	175
STPS15L45CBY-TR	DPAK	2	45	2 x 7.5	0.64	15	1	75	150
STPS2045CGY-TR	D2PAK	2	45	2 x 10	0.84	20	0.1	180	175
STPS2545CGY-TR	D2PAK	2	45	2 x 12.5	0.84	25	0.125	200	175
STPS2545CTY	TO-220AB	2	45	2 x 12.5	0.84	25	0.125	200	175
STPS3045CGY-TR	D2PAK	2	45	2 x 15	0.84	30	0.2	220	175
STPS3045DJFY-TR	PowerFLAT™ 5 x 6	1	45	30	0.56	30	0.3	200	175
STPS4045CWY	TO-247	2	45	2 x 20	0.76	20	0.2	220	175
STPS40L45CGY-TR	D²PAK	2	45	2 x 20	0.49	20	0.6	230	150
STPS6045CWY	TO-247	2	45	2 x 30	0.63	30	0.5	400	175
60 V									
STPS160	SMA, SMB	1	60	1	0.57	1	4	75	150
STPS360AFY	SOD128Flat	1	60	3	0.58	3	0.15	60	175
STPS2L60AY	SMA	1	60	2	0.6	2	0.1	75	150

AUTOMOTIVE-GRADE SCHOTTKY DIODES

Part number	Package	Number of diodes	Repetitive peak reverse voltage (V_{RRM})	Average rectified current (I_O)	Forward voltage (V_F)	V_F measure condition (@ I_F)	Reverse current (I_R)	Non-repetitive peak forward surge current (I_{FSM})	Junction temperature (T_j)
			max (V)	max (A)	max (V)	(A)	max (mA)	max (A)	max (°C)
STPS30H60CGY-TR	D²PAK	2	60	2 x 15	0.57	15	0.06	230	175
STPS3L60SY	SMC	1	60	3	0.65	3	0.055	75	150
STPS3L60UY	SMB	1	60	3	0.62	3	0.15	100	150
STPS5L60SY	SMC	1	60	5	0.48	5	0.22	150	150
STPS20L60CGY-TR	D²PAK	2	60	2 x 10	0.6	10	0.35	220	150
				100 V					
STPS1H100	SMA, SMB	1	100	1	0.77	1	0.004	50	175
STPS2H100	SMA, SMB	1	100	2	0.79	2	0.001	75	175
STPS3H100AFY	SOD128Flat	1	100	3	0.68	3	0.001	25	175
STPS5H100BY-TR	DPAK	1	100	5	0.79	5	0.0035	75	175
STPS15H100CBY-TR	DPAK	2	100	2 x 7.5	0.8	7.5	0.003	75	175
STPS20H100CGY-TR	D²PAK	2	100	2 x 10	0.73	10	0.0045	250	175
STPS41H100CGY-TR	D²PAK	2	100	2 x 20	0.8	20	0.01	220	175
STPS41H100CTY	TO-220AB	2	100	3 x 20	0.8	20	0.01	220	175
				140 V					
STPS41140CGY-TR	D²PAK	2	140	2 x 20	0.68	20	0.03	240	175
				150 V					
STPS1150AY	SMA	1	150	1	0.67	1	0.001	50	175
STPS3150UY	SMB	1	150	3	0.82	3	0.002	80	175
				170 V					
STPS40170CGY-TR	D²PAK	2	170	2 x 20	0.92	20	0.03	250	175
STPS200170TV1Y	ISOTOP	2	170	200	0.85	100	0.2	700	150

AUTOMOTIVE-GRADE ULTRAFAST DIODES

Part number	Package	Number of diodes	Repetitive peak reverse voltage (V_{RRM})	Average rectified current (I_D)	Forward voltage (V_F)	V_F measure condition (@ I_F)	Reverse current (I_R)	Reverse recovery time (t_{rr})	Non-repetitive peak forward surge current (I_{FSM})	Junction temperature (T_j)
			max (V)	max (A)	max (V)	(A)	max (mA)	max (ns)	max (A)	max (°C)
200 V and 300 V										
STTH102AY	SMA	1	200	1	0.97	1	0.001	20	40	175
STTH2R02UY	SMB	1	200	2	1	2	0.003	20	75	175
STTH2R02AFY	SOD128Flat	1	200	2	0.83	2	0.008	20	50	175
STTH3R02AFY	SOD128Flat	1	200	3	0.83	3	0.0016	21	80	175
STTH4R02BY-TR	DPAK	1	200	4	1.05	4	0.003	20	70	175
STTH4R02SY	SMC	1	200	4	0.83	4	0.003	20	70	175
STTH4R02UY	SMB	1	200	4	0.83	4	0.003	20	70	175
STTH602CBY-TR	DPAK	2	200	2 x 3	0.95	3	0.003	20	60	175
STTH802BY-TR	DPAK	1	200	8	1.05	8	0.006	30	100	175
STTH1002C-Y	D²PAK, DPAK	2	200	2 x 5	1.1	5	0.005	20	50	175
STTH1003SBY-TR	DPAK	1	300	10	1.3	10	0.1	35	100	175
STTH2003CGY-TR	D²PAK	2	300	2 x 10	1.25	10	0.02	40	110	175
400 V										
STTH1R04AY	SMA	1	400	1	0.9	1	0.05	20	30	175
STTH1R04UY	SMB	1	400	1	0.9	1	0.05	20	30	175
STTH30R04DY	TO-220AC	1	400	30	1	30	0.03	45	280	175
STTH30R04WY	DO-247	1	400	30	1	30	0.03	45	280	175
600 V										
STTH1L06UFY	SMBflat	1	600	1	1.4	1	0.001	60	20	175
STTH1R06UFY	SMBflat	1	600	1	1.9	1	0.001	45	17	175
STTH2L06UFY	SMBflat	1	600	2	1.4	2	0.002	70	30	175
STTH2R06UFY	SMBflat	1	600	2	1.9	2	0.002	50	28	175
STTH3L06UFY	SMBflat	1	600	3	1.4	3	0.003	70	30	175
STTH3R06UFY	SMBflat	1	600	3	1.9	3	0.003	50	30	175
STTH5R06BY-TR	DPAK	1	600	5	3.2	5	0.03	35	50	175
STTH5R06GY-TR	D²PAK	1	600	5	3.2	5	0.03	35	50	175
STTH8R06GY-TR	D²PAK	1	600	8	3.2	8	0.03	45	90	175
STTH16L06CTY	TO-220AB	2	600	2 x 8	1.35	8	0.008	55	120	175
STTH30L06WY	DO-247	1	600	30	1.55	30	0.025	65	300	175

AUTOMOTIVE-GRADE ULTRAFAST DIODES

Part number	Package	Number of diodes	Repetitive peak reverse voltage (V_{RRM})	Average rectified current ($I_{F(AV)}$)	Forward voltage (V_F)	V_F measure condition (@ I_F)	Reverse current (I_R)	Reverse recovery time (t_{rr})	Non-repetitive peak forward surge current (I_{FSM})	Junction temperature (T_j)
			max (V)	max (A)	max (V)	(A)	max (mA)	max (ns)	max (A)	max (°C)
STTH30ST06GY-TR	D²PAK	1	600	30	2.2	30	0.05	50	160	175
STTH30ST06WY	DO-247	1	600	30	2.2	30	0.05	50	160	175
800 V										
STTH208FY	SMBflat	1	800	2	1.25	2	0.005	75	30	175
1000 V										
STTH110UFY	SMBflat	1	1000	1	1.7	1	0.005	75	20	175
STTH310UFY	SMBflat	1	1000	3	1.42	3	0.01	75	30	175
STTH810GY-TR	D²PAK	1	1000	8	2	8	0.005	85	60	175
STTH1210DY	TO-220AC	1	1000	12	2	12	0.01	90	80	175
STTH3010GY-TR	D²PAK	1	1000	30	2	30	0.015	100	300	175
STTH3010WY	DO-247	1	1000	30	2	30	0.015	100	300	175
STTH6010WY	DO-247	1	1000	60	1.7	60	0.02	65	400	175
1200 V										
STTH112UFY	SMBflat	1	1200	1	1.9	1	0.005	75	18	175
STTH1512GY-TR	D²PAK	1	1200	15	2.1	15	0.015	75	200	175

AUTOMOTIVE-GRADE ULTRAFAST SILICON-CARBIDE DIODES

Part number	Package	Number of diodes	Repetitive peak reverse voltage (V_{RRM})	Average rectified current (I_F)	Forward voltage (V_F)	V_F measure condition (@ I_F)	Reverse current (I_R)	Total capacitive charge (Qc)	Non-repetitive peak forward surge current (I_{FSM})	Junction temperature (T_j)
			max (V)	max (A)	max (V)	(A)	max (mA)	(nC)	max (A)	max (°C)
STPSC10H065DY	TO-220AC	1	650	10	2.5	10	0.1	28.5	90	175
STPSC10H065GY-TR	D²PAK	1	650	10	2.5	10	0.1	28.5	90	175
STPSC12C065DY	TO-220AC	1	650	12	2.5	12	0.12	29.3	92	175
STPSC12H065DY	TO-220AC	1	650	12	2.5	12	0.12	36	100	175
STPSC12H065GY-TR	D²PAK	1	650	12	2.5	12	0.12	36	100	175
STPSC12065DY	TO-220AC	1	650	12	1.45	12	0.15	36	50	175
STPSC20065DY	TO-220AC	1	650	20	1.45	20	0.3	30	90	175
STPSC20065WY	TO-247	1	650	20	1.45	20	0.3	30	90	175
STPSC20H065CTY	TO-220AB	2	650	2 x 10	2.5	10	0.1	28.5	90	175
STPSC20H065CWY	TO-247	2	650	2 x 10	2.5	10	0.1	28.5	90	175
STPSC40065CWY	TO-247	2	650	2 x 20	1.45	20	0.35	30	90	175

AUTOMOTIVE-GRADE SIGNAL SCHOTTKY DIODES

Part number	Package	Number of diodes	Repetitive peak reverse voltage (V_{RRM})	Average rectified current (I_F)	Forward voltage (V_F)	V_F measure condition (@ I_F)	Reverse current (I_R)	Total capacitance	Non-repetitive peak forward surge current (I_{FSM})	Junction temperature (T_j)
			max (V)	max (A)	max (V)	(A)	max (mA)	max (pF)	max (A)	max (°C)
BAT54AWFILMY	SOT-323	2	40	0.3	0.24	0.0001	0.001	10	1	150
BAT54CWFILMY	SOT-323	2	40	0.3	0.24	0.0001	0.001	10	1	150
BAT54FILMY	SOT-23	1	40	0.3	0.24	0.0001	0.001	10	1	150
BAT54SFILMY	SOT-23	2	40	0.3	0.24	0.0001	0.001	10	1	150
BAT54WFILMY	SOT-323	1	40	0.3	0.24	0.0001	0.001	10	1	150

Field effect rectifiers

Part number	Package	Number of diodes	Repetitive peak reverse voltage (V_{RRM})	Average rectified current (I_O)	Forward voltage (V_F)	V_F measure condition (@ I_F)	Reverse current (I_R)	Non-repetitive peak forward surge current (I_{FSM})	Junction temperature (T_j)
			max (V)	max (A)	max (V)	(A)	max (mA)	max (A)	max (°C)
FERD15S50	PowerFLAT 5x6	1	50	15	0.48	10	0.65	80	150
FERD20H100	DPAK, TO-220FPAB, IPAK, TO-220AB	1	100	20	0.51	5	0.14	150	175
FERD20M60	I²PAK, TO-220AB	1	60	20	0.35	5	0.23	275	175
FERD20U50	PowerFLAT 5x6, Power SMC	1	50	20	0.51	20	0.8	180	150
FERD20U60	PowerFLAT 5x6, Power SMC	1	60	20	0.51	20	0.8	180	150
FERD30SM100DJFTR	PowerFLAT 5x6	1	100	30	0.555	10	0.15	180	175
FERD30SM100ST	TO-220AB	1	100	30	0.545	10	0.15	250	175
FERD30M45C	D²PAK, TO-220AB, I²PAK	2	45	30	0.47	15	0.6	250	175
FERD30S50	PowerFLAT 5x6	1	50	30	0.44	15	1.2	180	150
FERD30H100S	TO-220AB, IPAK, DPAK	1	100	30	0.47	5	0.13	150	175
FERD40U50CFP	TO-220FPAB	2	50	40	0.43	15	0.8	250	175
FERD40M45C	D²PAK, TO-220AB	2	45	40	0.5	20	0.65	275	175
FERD40U45C	D²PAK, TO-220AB	2	45	40	0.385	20	1.8	275	175
FERD40H100S	TO-220AB, D²PAK	1	100	40	0.51	10	0.19	440	175
FERD60M45C	TO-220AB	2	45	60	0.55	30	0.55	275	175
FERD60U45C	TO-220AB	2	45	60	0.5	20	1.5	300	175

Ordering information

STaa	bb	c	ddd	e	f	g	h

Technology

STPS	Power Schottky
STPSC	SiC
STTH	Ultrafast
FERD	Field effect rectifier

Current rating

Current: 0.5 A to 240 A

Code: 0.5 to 240

Series

For Schottky diodes (STPS)

Void	medium V_F/I_R
H	high temperature (<120 V only)
L	low V_F from $I_0/2$ to I_0 (<120 V only)
M	low V_F from $I_0/4$ to $I_0/2$
S	low leakage current
SM	low V_F up to $I_0/4$

For ultrafast diodes (STTH)

Void	medium V_F and Qrr
L	low V_F (600 V mainly)
R	low Qrr recovery

Nota: R trade-off mainly used for 400 V and 600 V

FERD

M	Low IR
SM	Medium V_F/IR
U	Ultra low V_F

Breakdown voltage

STPS (power Schottky)

code: V_{RRM} = 15 V to 600 V

STPSC (SiC)

code:	V_{RRM} = 600 V / 1200 V
H	High surge
Blank serie	Low V_F

STTH (ultrafast)

code: V_{RRM} divided by 100

200 V to 1200 V

02 to 12

FERD

Code V_{RRM} = 45 V to 100 V

Connection type

Void	two-lead configuration
C	dual common cathode
S	single in three-lead package

Packing type

Through-hole packages

Void	Axial: DO-41, DO-15, DO-201
D	TO-220AC
DI	TO-220I
T	TO-220AB
FP	TO-220FPAB
PI	DOP3I
R	I²PAK
H	IPAK
W	TO-247, DO-247

SMD packages

A	SMA
U	SMB
S	SMC
B	DPAK
G	D²PAK
TV1	ISOTOP (longitudinal)
TV2	ISOTOP (lateral)
DJF	Powerflat 5x6
DEE	Powerflat 3.3x3.3

Automotive grade

Void	standard diode
-Y	automotive-grade diode

Packing option

Void	for axial:bulk
Void	for SMA/B/C: tape and reel
Void	for other packages: tube
RL	tape and reel, for axial packages
TR	tape and reel, for other packages

life.augmented

Order code: SGDIODRECT0516

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