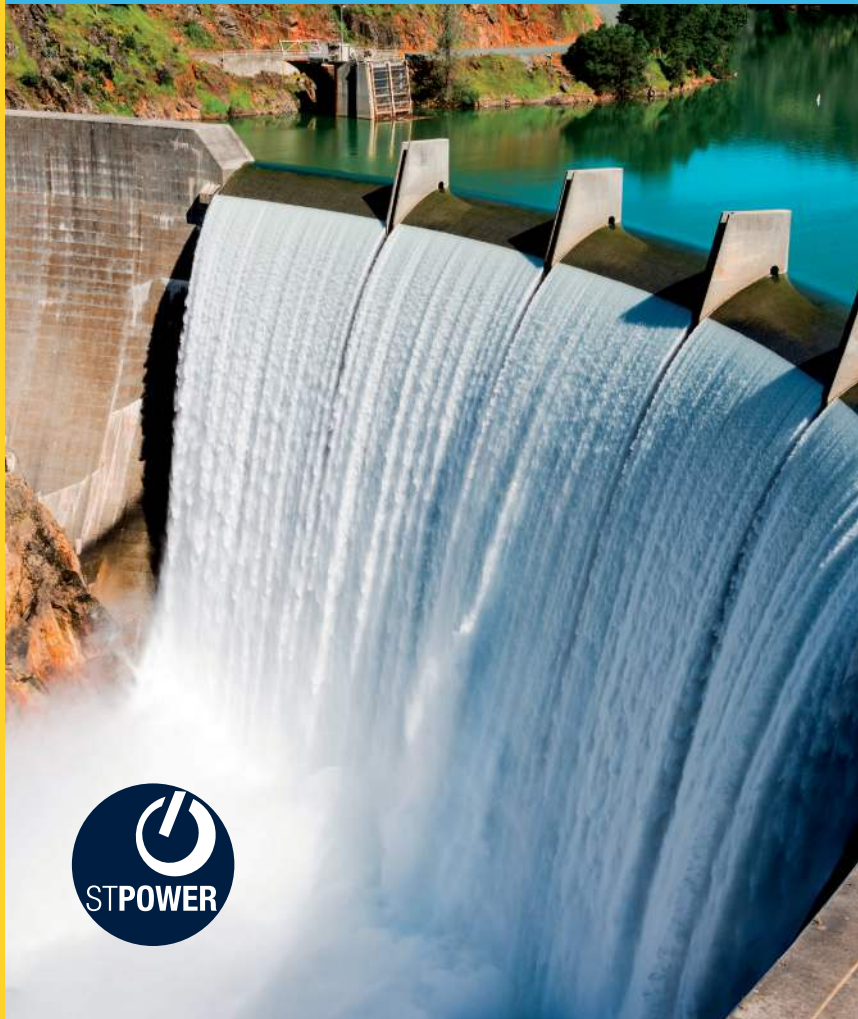


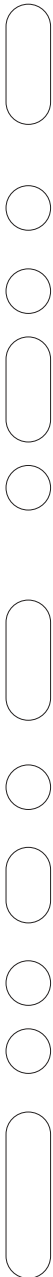
Diodes, and Rectifiers



life.augmented



Order code: SGDIODRECT1120



Contents

02	Automotive-grade diodes
02	Automotive-grade Bridge Rectifier diodes
02	Automotive-grade Schottky diodes
06	Automotive-grade Silicon Carbide diodes
07	Automotive-grade ultrafast diodes
09	Bridge Rectifier diodes
10	Field effect rectifiers
12	Schottky barrier diodes
12	Power Schottky High Temperature
15	Power Schottky Low VF
18	Power Schottky medium VF and IR
21	Signal Schottky diodes
23	Silicon-carbide diodes
25	Ultrafast rectifiers
25	200 V to 400 V Ultrafast Rectifier
28	600 V Ultrafast Rectifier
31	800 V to 1200 V Ultrafast Rectifier
33	Ordering information

Notes

Automotive-grade diodes

AUTOMOTIVE-GRADE BRIDGE RECTIFIER DIODES

Part number	Package	Number of Diodes spec	Repetitive Peak Reverse Voltage	Average Rectified Current	V_F	Reverse Current	Non-Repet Peak Forward Surge Current	Junction Temperature
			max (V)	max (A)	max (V)	max (mA)	max (A)	max (°C)
800 V								
STBR3008-Y	DO-247, H ² PAK-2	1	800	30	1.1	0.002	350	175
STBR6008-Y	DO-247	1	800	60	1.1	0.005	500	175
1200 V								
STBR3012-Y	DO-247, H ² PAK-2	1	1200	30	1.3	0.002	300	175
STBR6012-Y	DO-247	1	1200	60	1.3	0.005	500	175

AUTOMOTIVE-GRADE SCHOTTKY 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)	Non-Repet 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									
STPS8L30-Y	DPAK	1	30	8	0.4	0.4	1	75	150
STPS6L30C-Y	PowerSO-20	2	30	2 x 30	0.49	30	2	250	150
40 V									
BAT54-Y	SOT-323, SOT23	2	40	0.3	0.24	1	0.001	1	150
STPS0540-Y	SOD-123	1	40	0.5	0.5	0.5	0.04	5.5	150
STPS140-Y	SMA, SMB	1	40	1	0.55	1	0.012	60	150
STPS140Z-Y	SOD-123	1	40	1	0.55	1	0.04	5.5	150
STPS1L40-Y	SMA, SMB, SOD123Flat	1	40	1	0.42	1	0.035	60	150

AUTOMOTIVE-GRADE SCHOTTKY 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)	Non-Repet Peak Forward Surge Current (I_{FSM})	Junction Temperature (T_j)
			max (V)	max (A)	max (V)	(A)	max (mA)	max (A)	max (°C)
STPS2L40ZFY	SOD123Flat	1	40	2	0.61	2	0.01	50	175
STPS340-Y	SMB, SMC	1	40	3	0.63	3	0.02	75	150
STPS3L40-Y	SMC	1	40	3	0.5	3	0.1	75	150
STPS640C-Y	DPAK	2	40	2 x 3	0.57	3	0.1	75	150
45 V									
STPS1045B-Y	DPAK	1	45	10	0.63	10	0.1	75	175
STPS1045SFY	PSMC-3L-EP	1	45	10	0.62	10	0.05	210	175
STPS1545-Y	TO-220AC	1	45	15	0.57	15	0.2	220	175
STPS1545C-Y	D ² PAK	2	45	2 x 7.5	0.84	15	0.1	150	175
STPS15L45C-Y	DPAK	2	45	2 x 7.5	0.64	15	1	75	150
STPS2045C-Y	D ² PAK	2	45	2 x 10	0.84	20	0.1	180	175
STPS2545C-Y	D ² PAK	2	45	2 x 12.5	0.84	25	0.125	200	175
STPS3045C-Y	D ² PAK	2	45	2 x 15	0.84	30	0.2	220	175
STPS3045DJF-Y	PowerFLAT 5x6 WF	1	45	30	0.56	30	0.3	380	175
STPS4045C-Y	TO-247	2	45	2 x 20	0.76	20	0.2	220	175
STPS40L45C-Y	D ² PAK	2	45	2 x 20	0.49	20	0.6	230	150
60 V									
STPS160-Y	SMA,SMB	1	60	1	0.57	1	0.004	75	150
STPS1L60-Y	SOD123Flat	1	60	1	0.54	1	0.05	50	175
STPS2L60-Y	SMA	1	60	2	0.55	2	0.1	75	150
STPS2L60ZFY	SOD123Flat	1	60	2	0.66	2	0.05	50	175
STPS360-Y	SOD128Flat	1	60	3	0.58	3	0.15	60	175
STPS3L60-Y	SMC	1	60	3	0.65	3	0.055	75	150
STPS3L60U-Y	SMB	1	60	3	0.62	3	0.15	100	150

AUTOMOTIVE-GRADE SCHOTTKY 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)	Non-Repet Peak Forward Surge Current (I_{FSM})	Junction Temperature (T_j)
			max (V)	max (A)	max (V)	(A)	max (mA)	max (A)	max (°C)
STPS560SFY	PSMC-3L-EP	1	60	5	0.43	5	0.05	230	175
STPS5L60-Y	SMC	1	60	5	0.48	5	0.22	150	150
STPS5L60SFY	PSMC-3L-EP	1	60	5	0.51	5	0.47	220	150
STPS10H60SFY	PSMC-3L-EP	1	60	10	0.79	10	0.02	210	175
STPS10M60SFY	PSMC-3L-EP	1	60	10	0.6	10	0.05	230	175
STPS20L60C-Y	D2PAK	2	60	2 x 10	0.7	20	0.35	220	150
STPS30H60-Y	D2PAK	2	60	30	0.57	15	0.06	230	175
100 V									
STPS1H100-Y	SMA,SMB	1	100	1	0.77	1	0.004	50	175
STPS2H100-Y	SMA,SMB	1	100	2	0.79	2	0.001	75	175
STPS2H100ZFY	SOD123Flat	1	100	2	0.7	2	0.5	50	175
STPS3H100-Y	SMB Flat	1	100	3	0.61	3	0.0015	79	175
STPS3H100AFY	SOD128Flat	1	100	3	0.61	3	0.0015	79	175
STPS3H100UFNY	SMB Flat	1	100	3	0.76	3	0.0015	135	175
STPS5H100-Y	DPAK	1	100	5	0.79	5	0.035	75	175
STPS5H100AFY	SOD128Flat	1	100	5	0.61	5	0.0035	130	175
STPS5H100SFY	PSMC-3L-EP	1	100	5	0.61	5	5	230	175
STPS10H100SFY	PSMC-3L-EP	1	100	10	0.69	10	0.008	230	175
STPS15H100C-Y	DPAK	2	100	2 x 7.5	0.8	7.5	0.003	75	175
STPS20H100C-Y	D2PAK	2	100	2 x 10	0.77	10	0.0045	3	175
STPS41H100C-Y	D2PAK,TO-220AB	2	100	2 x 20	0.8	20	0.01	220	175
STPS61H100-Y	TO-247	2	100	60	0.81	30	0.16	450	175
STPS240H100TV1Y	ISOTOP	2	100	2 x 60	0.825	120	0.09	1150	175

AUTOMOTIVE-GRADE SCHOTTKY 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)	Non-Repet Peak Forward Surge Current (I_{FSM})	Junction Temperature (T _j)
			max (V)	max (A)	max (V)	(A)	max (mA)	max (A)	max (°C)
150 V									
STPS1150-Y	SMA	1	150	1	0.67	1	0.001	50	175
STPS3150-Y	SMB	1	150	3	0.67	3	0.002	100	175
170 V									
STPS40170C-Y	D ² PAK	2	170	2 x 20	0.92	20	0.03	250	175
STPS61170C-Y	TO-247 long leads	2	170	2 x 30	0.84	30	0.06	500	175
STPS80170C-Y	TO-247 long leads	2	170	2 x 40	0.74	40	0.08	500	175
STPS200170TV1Y	ISOTOP	2	170	2 x 100	0.85	100	0.2	700	150

AUTOMOTIVE-GRADE 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-Repet Peak Forward Surge Current (I_{FSM})	Junction Temperature (T _j)
			max (V)	max (A)	max (V)	(A)	max (mA)	(nC)	max (A)	max (°C)
650 V second generation silicon-carbide diodes										
STPSC2H065-Y	DPAK	1	650	2	1.55	2	0.02	28.5	20	175
STPSC6C065-Y	TO-220AC	1	650	6	1.75	6	0.06	15.2	49	175
STPSC6H065BY-TR	DPAK	1	650	6	1.65	8	0.06	18	60	175
STPSC8065-Y	TO-220AC	1	650	8	1.45	8	0.105	28	46	175
STPSC8H065-Y	D ² PAK HV, DPAK	1	650	8	1.65	8	0.08	23.5	75	175
STPSC10065-Y	D ² PAK, TO-220AC	1	650	10	1.45	10	0.13	34	48	175
STPSC10C065-Y	I ² PAK	1	650	10	1.75	10	0.1	26.4	85	175
STPSC10H065-Y	D ² PAK, TO-220AC	1	650	10	1.75	10	0.1	28.5	90	175
STPSC10H065BY-TR	DPAK	1	650	10	1.65	10	0.1	28.5	90	175
STPSC12065-Y	D ² PAK, D ² PAK HV, TO-220AC	1	650	12	1.45	12	0.15	36	50	175
STPSC12C065-Y	TO-220AC	1	650	12	1.75	12	0.12	29.3	92	175
STPSC12H065-Y	TO-220AC	1	650	12	1.75	12	0.12	36	100	175
STPSC20065-Y	D ² PAK, DO-247, TO-220AC	1	650	20	1.45	20	0.3	62	90	175
STPSC20H065C-Y	TO-220AB, TO-247	2	650	2 x 10	1.75	10	0.1	28.5	90	175
STPSC40065C-Y	TO-247	2	650	2 x 20	1.45	20	0.3	62	90	175
1200 V second generation silicon-carbide diodes										
STPSC2H12-Y	DPAK HV 2L	1	1200	2	1.5	2	0.012	15.6	15	175
STPSC10H12-Y	D ² PAK, TO-220AC	1	1200	10	1.5	10	0.06	57	71	175
STPSC15H12-Y	TO-220AC	1	1200	15	1.5	15	0.09	94	105	175
STPSC20H12-Y	D ² PAK, D ² PAK HV, TO-220AC	1	1200	20	1.5	20	0.12	129	140	175
STPSC31H12C-Y	TO-247	2	1200	2 x 15	1.5	15	0.09	94	105	175

AUTOMOTIVE-GRADE ULTRAFAST DIODES

Part number	Package	Number of Diodes spec	Repetitive Peak Reverse Voltage	Average Rectified Current	V _F	Reverse Current	Reverse Recovery Time	Non-Repet Peak Forward Surge Current	Junction Temperature
			max (V)	max (A)	max (V)	max (mA)	max (ns)	max (A)	max (°C)
200 V and 300 V									
STTH1R02-Y	SOD123Flat	1	200	1	0.85	0.005	32	25	175
STTH102-Y	SMA	1	200	1	0.97	0.001	20	40	175
STTH2R02-Y	SMB	1	200	2	1	0.003	20	75	175
STTH2R02AF-Y	SOD128Flat	1	200	2	0.83	0.008	20	50	175
STTH3R02-Y	SOD128Flat	1	200	3	0.83	0.0016	21	80	175
STTH4R02-Y	DPAK, SMB, SMC C2	1	200	4	0.83,1.05	0.003	20,30	70	175
STTH602C-Y	DPAK	2	200	2 x 3	0.95	0.003	20	60	175
STTH802-Y	DPAK	1	200	8	1.05	0.006	30	100	175
STTH802SFY	PSMC-3L-EP	1	200	8	1.08	0.006	22	150	175
STTH1002C-Y	D ² PAK, DPAK	2	200	2 x 5	1.1	0.005	25	50	175
STTH1602C-Y	D ² PAK	2	200	2 x 8	1.25	0.006	26	100	175
STTH1003S-Y	DPAK	1	300	10	1.3	0.01	35	100	175
STTH2003C-Y	D ² PAK	2	300	2 x 10	1	0.02	40	110	175
400 V									
STTH1R04-Y	SMA, SMB	1	400	1	0.9	0.05	20	30	175
STTH3R04-Y	TO-220AC	1	400	30	1	0.03	45	280	175
600 V									
STTH1L06-Y	SMB Flat	1	600	1	1.4	0.001	60	20	175
STTH1R06-Y	SMB Flat	1	600	1	1.9	0.001	45	17	175
STTH1R06AFY	SOD128Flat	1	600	1	1.4	0.001	45	20	175
STTH2L06-Y	SMB Flat	1	600	2	1.4	0.002	70	30	175
STTH2R06-Y	SMB Flat	1	600	2	1.9	0.002	50	28	175
STTH3L06-Y	SMB Flat	1	600	3	1.4	0.003	70	30	175

AUTOMOTIVE-GRADE ULTRAFAST DIODES

Part number	Package	Number of Diodes spec	Repetitive Peak Reverse Voltage	Average Rectified Current	V_F	Reverse Current	Reverse Recovery Time	Non-Repet Peak Forward Surge Current	Junction Temperature
			max (V)	max (A)	max (V)	max (mA)	max (ns)	max (A)	max (°C)
STTH3R06-Y	SMB Flat	1	600	3	1.9	0.003	50	30	175
STTH5R06-Y	D ² PAK, DPAK	1	600	5	1.8	0.02	25	50	175
STTH8R06-Y	D ² PAK	1	600	8	3.2	0.05	40	80	175
STTH15RQ06-Y	D ² PAK, D ² PAK HV, DO-247, TO-220AC	1	600	15	1.85	0.02	25	120	175
STTH16L06C-Y	D ² PAK, TO-220AB	2	600	2 x 8	1.35	0.008	35	120	175
STTH30L06-Y	D ² PAK, DO-247	1	600	30	1.25	0.025	65	160	175
STTH30RQ06-Y	D ² PAK, D ² PAK HV, DO-247, TO-220AC	1	600	30	1.85	0.04	50	180	175
STTH30ST06-Y	DO-247	1	600	30	2.2	0.05	30	180	175
STTH60RQ06-Y	DO-247	1	600	60	2.95	0.08	35	425	175
800 V									
STTH208-Y	SMB Flat	1	800	2	1.55	0.005	75	30	175
1000 V									
STTH110-Y	SMB Flat	1	1000	1	1.7	0.005	75	20	175
STTH310-Y	SMB Flat	1	1000	3	1.7	0.01	75	30	175
STTH810-Y	D2PAK	1	1000	8	1.7	0.005	65	60	175
STTH1210-Y	TO-220AC	1	1000	12	1.7	0.01	65	80	175
STTH3010-Y	D ² PAK, DO-247	1	1000	30	1.8	0.015	55	50	175
STTH6010-Y	DO-247	1	1000	60	1.7	0.02	65	400	175
1200 V									
STTH112-Y	SMB Flat	1	1200	1	1.9	0.005	75	18	175
STTH1512-Y	D ² PAK	1	1200	15	2.1	0.015	75	200	175

Bridge Rectifier Diodes

BRIDGE RECTIFIER DIODES

Part number	Package	Number of Diodes spec	Repetitive Peak Reverse Voltage	Average Rectified Current	V_F	Reverse Current	Non-Repet Peak Forward Surge Current	Junction Temperature
			max (V)	max (A)	max (V)	max (mA)	max (A)	max (°C)
1200 V								
STBR3012	D ² PAK HV, DO-247	1	1200	30	1.3	0.002	300	175
STBR6012	DO-247	1	1200	60	1.3	0.005	500	175

Field Effect Rectifiers

FIELD EFFECT RECTIFIERS

Part number	Package	Number of Diodes spec	Repetitive Peak Reverse Voltage (V_{RRM})	Average Rectified Current (I_A)	Forward Voltage V_F	V_F measure condition (@ I_F)	Reverse Current (I_R)	Non-Repet Peak Forward Surge Current (I_{FSM})	Junction Temperature (T)
			max (V)	max (A)	max (V)	spec (A)	max (mA)	max (A)	max (°C)
45 V									
FERD2045S	DKPAK	1	45	20	0.55	20	0.6	180	150
FERD30M45C	D ² PAK, I ² PAK, TO-220AB	2	45	2 x 15	0.47	15	0.6	250	175
FERD40M45C	D ² PAK, TO-220AB	2	45	2 x 20	0.5	20	0.65	275	175
FERD40U45C	D ² PAK, TO-220AB	2	45	2 x 20	0.385	20	1.8	275	175
FERD60M45C	TO-220AB	2	45	2 x 30	0.55	30	0.55	275	175
FERD60U45C	TO-220AB	2	45	2 x 30	0.5	30	1.5	300	175
50 V									
FERD15S50	PowerFLAT TM	1	50	15	0.48	10	0.65	80	150
FERD15S50SB	DKPAK	1	50	15	0.48	10	0.65	100	150
FERD20U50	PowerFLAT TM	1	50	20	0.51	20	0.8	180	150
FERD40U50C	TO-220FPAB	2	50	2 x 20	0.49	20	0.8	250	150
60 V									
FERD20H60C	D ² PAK, TO-220AB	2	60	2 x 10	0.435	5	0.2	130	175
FERD20L60C	D ² PAK, TO-220AB	2	60	2 x 10	0.415	5	0.97	140	150
FERD20M60	I ² PAK, TO-220AB	1	60	20	0.56	20	0.23	275	175
FERD20U60DJFD	PowerFLAT TM	1	60	20	0.51	20	0.8	180	150
FERD30H60C	D ² PAK, TO-220AB	2	60	2 x 15	0.46	7.5	0.17	250	175
FERD30L60C	D ² PAK, TO-220AB	2	60	2 x 15	0.42	7.5	0.82	250	150
FERD40L60C	D ² PAK, TO-220AB	2	60	2 x 20	0.425	10	1.1	250	150

FIELD EFFECT RECTIFIERS

Part number	Package	Number of Diodes spec	Repetitive Peak Reverse Voltage (V_{RRM})	Average Rectified Current (I_A)	Forward Voltage V_F	V_F measure condition (@ I_F)	Reverse Current (I_R)	Non-Repet Peak Forward Surge Current (I_{FSM})	Junction Temperature (T)
			max (V)	max (A)	max (V)	spec (A)	max (mA)	max (A)	max (°C)
100 V									
FERD20H100S	DPAK, TO-220AB, TO-220FPAB	1	100	20	0.51	5	0.14	150	175
FERD20S100S	DPAK, TO-220AB	1	100	20	0.585	5	0.11	150	175
FERD30H100S	DPAK, TO 252 DPAK, TO-220AB	1	100	30	0.745	30	0.13	150	175
FERD30SM100DJF	PowerFLAT TM	1	100	30	0.595	10	0.15	180	175
FERD30SM100S	TO-220AB	1	100	30	0.585	10	0.15	250	175
FERD40H100S	D ² PAK, TO-220AB, TO-220FPAB	1	100	40	0.6	20	0.19	440	175

Schottky barrier diodes

POWER SCHOTTKY HIGH TEMPERATURE

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-Repet Peak Forward Surge Current (I_{FSM})	Junction Temperature (T)
			max (V)	(A)	max (V)	(A)	max (mA)	max (A)	max (°C)
30 , 45 and 60 V									
STPS8L30DEE	PowerFLAT™	1	30	8	0.39	8	0.2	100	150
STPS1045DEE	PowerFLAT™	1	45	10	0.53	10	0.2	100	175
STPS10H60SF	PSMC-3L	1	60	10	0.845	10	0.02	210	175
80 V									
STPS15LCD80C	TO-220FPAB	2	80	2 x 5	0.855	7.5	0.01	120	175
STPS20LCD80C	D ² PAK, I ² PAK, TO-220AB	2	80	2 x 10	0.88	10	0.015	150	175
100 V									
STPS1H100	SMA, SMA Flat, SMB	1	100	1	0.77	1	0.004	50	175
STPS1H100MF	STmiteFLAT	1	100	1	0.77	1	0.004	50	175
STPS2H100	SMA, SMA Flat, SMB, SMB Flat	1	100	2	0.79	2	0.001	75	175
STPS2H100RL	DO 41 PLASTIC	1	100	2	0.86	2	0.001	50	175
STPS2H100ZF	SOD123Flat	1	100	2	0.86	2	0.001	50	175
STPS3H100	SMB, SMB Flat	1	100	3	0.76	3	0.001	75	175
STPS3H100AF	SOD128Flat	1	100	3	0.76	3	0.0015	79	175
STPS5H100	DPAK	1	100	5	0.79	5	0.0035	75	175
STPS5H100AF	SOD128Flat	1	100	5	0.76	5	0.0035	130	175
STPS5H100SF	PSMC-3L-EP	1	100	5	0.745	5	0.008	230	175
STPS5H100UFN	SMB Flat	1	100	5	0.745	5	0.008	190	175
STPS8H100	D ² PAK, TO-220AC, TO-220FPAC	1	100	8	0.71	8	0.0045	250	175

POWER SCHOTTKY HIGH TEMPERATURE

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-Repet Peak Forward Surge Current (I_{FSM})	Junction Temperature (T)
			max (V)	(A)	max (V)	(A)	max (mA)	max (A)	max (°C)
STPS10H100C	D ² PAK, TO-220AB, TO-220FPAB	2	100	2 x 5	0.73	5	0.0035	180	175
STPS15H100C	DKPAK	2	100	2 x 7.5	0.67	10	0.003	75	175
STPS16H100C	D ² PAK	2	100	2 x 8	0.77	8	0.0036	200	175
STPS20H100C	D ² PAK, I ² PAK, TO-220AB, TO-220FPAB	2	100	2 x 10	0.77	10	0.0045	250	175
STPS20S100C	TO-220AB, TO-220FPAB	2	100	2 x 10	0.85	10	0.0035	180	175
STPS30H100C	TO-220AB, TO-247	2	100	2 x 15	0.8	15	0.005	250	175
STPS30H100DJF	PowerFLAT™	1	100	30	0.76	15	0.006	250	150
STPS40H100CW	TO-247	2	100	40	0.73	20	0.01	300	175
STPS41H100C	D ² PAK, I ² PAK, TO-220AB	2	100	2 x 20	0.8	20	0.01	220	175
STPS60H100C	TO-220AB	2	100	2 x 30	0.84	30	0.01	300	175
STPS61H100C	TO-247	2	100	2 x 30	0.79	30	0.016	450	175
STPS80H100	ISOTOP	2	100	80	0.78	40	0.02	700	150
120 V									
STPS10120C	TO-220AB	2	120	2 x 5	0.85	5	0.006	120	175
STPS20120C	DKPAK, I ² PAK, TO-220AB	2	120	2 x 10	0.92	10	0.01	150	175
STPS20120D	TO-220AC	1	120	20	0.93	20	0.02	200	175
STPS30120C	TO-220AB	2	120	2 x 15	0.92	15	0.015	180	175
STPS30120DJF	PowerFLAT™	1	120	30	0.92	30	0.035	200	150
STPS40120C	TO-220AB	2	120	2 x 20	0.9	20	0.025	200	175
150 V									
STPS1150	DO 41 PLASTIC, SMA, SMA Flat	1	150	1	0.82	1	0.001	50,75	175
STPS10150C	D ² PAK, TO-220AB, TO-220FPAB	2	150	2 x 5	0.92	5	0.002	120	175
STPS16150C	TO-220AB	2	150	2 x 8	0.92	8	0.003	150	175

POWER SCHOTTKY HIGH TEMPERATURE

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-Repet Peak Forward Surge Current (I_{FSM})	Junction Temperature (T)
			max (V)	(A)	max (V)	(A)	max (mA)	max (A)	max (°C)
STPS20150C	D ² PAK,I ² PAK,TO-220AB, TO-220FPAB	2	150	2 x 10	0.92	10	0.005	180	175
STPS30150C	D ² PAK,TO-220AB, TO-220FPAB,TO-247	2	150	2 x 15	0.92	15	0.0065	220	175
STPS40150C	D ² PAK,TO-220AB,TO-247	2	150	2 x 20	0.91	20	0.008	250	175
STPS60150C	TO-220AB	2	150	2 x 30	0.94	30	0.015	270	175
STPS61150C	TO-247	2	150	2 x 30	0.84	30	0.02	500	175
STPS80150C	TO-247	2	150	2 x 40	0.84	40	0.03	500	175
170 V									
STPS2170	DO-15,SMA,SMA Flat	1	170	2	0.82	2	0.015	70	-
STPS3170	DO-201AD,SMA Flat,SMB, SMB Flat	1	170	3	0.82	3	0.002	75	175
STPS10170C	D2PAK,DPAK	2	170	2 x 5	0.92	5	0.01	120	175
STPS16170C	D2PAK,DPAK	2	170	2 x 8	0.92	8	0.015	150	175
STPS20170C	D2PAK,TO-220AB,TO-220FPAB	2	170	2 x 10	0.92	10	0.015	180	175
STPS30170C	D2PAK,TO-247	2	150,170	2 x 15	0.92	15	0.02	220	175
STPS30170DJF	PowerFLAT™	1	170	30	0.95	30	0.015	200	150
STPS40170C	D2PAK,TO-220AB,TO-247	2	100,170	2 x 20	0.85,0.92	10,20	0.003	200,250	175
STPS60170C	TO-220AB	2	170	2 x 30	0.94	30	0.035	270	175
STPS61170C	TO-247	2	170	2 x 30	0.84	30	0.06	500	175
STPS80170C	TO-247	2	170	2 x 40	0.84	40	0.08	500	175
STPS200170TV1	ISOTOP	2	170	2 x 100	0.85	100	0.2	700	150

POWER SCHOTTKY LOW VF

Part number	Package	Number of Diodes spec	Repetitive Peak Reverse Voltage	Average rectified current	V_f	V_f measure condition (@ I_f)	Reverse Current	Non-Repet Peak Forward Surge Current	Junction Temperature
			max (V)	max (A)	max (V)	spec (A)	max (mA)	max (A)	max (°C)
15 V									
STPS20L15	D ² PAK, TO-220AC	1	15	20	0.41	19	6	310	125
STPS40L15C	TO-220AB, TO-247	2	15	2 x 20	0.41	19	6	310	125
STPS120L15	ISOTOP	2	15	2 x 60	0.43	60	22	1200	125
20 V									
STPS0520Z	SOD-123	1	20	0.5	0.385	0.5	0.15	5.5	125
STPS120M	STmite	1	20	1	0.49	1	0.0039	50	150
STPS120MF	STmiteFLAT	1	20	1	0.49	1	0.0039	50	150
STPS1L20M	STmite	1	20	1	0.43	1	0.075	50	150
STPS1L20MF	STmiteFLAT	1	20	1	0.43	1	0.075	50	150
25 V									
STPS2L25	SMA Flat, SMB	1	25	2	0.45	2	0.09	75	150
STPS5L25	DPAK	1	25	5	0.47	5	0.35	75	150
STPS10L25	D ² PAK, TO-220AC	1	25	10	0.46	10	0.8	200	150
STPS15L25	TO-220AC	1	25	15	0.46	15	1.3	250	150
STPS20L25C	D ² PAK, TO-220AB	2	25	2 x 10	0.46	10	0.8	220	150
30 V									
STPS1L30	SMA, SMA Flat, SMB	1	30	1	0.95	1	0.2	75	150
STPS1L30M	STmite	1	30	1	0.395	1	0.2	50	150
STPS1L30MF	STmiteFLAT	1	30	1	0.395	1	0.2	50	150
STPS2L30	SMA, SMA Flat	1	30	2	0.45	2	0.2	75	150
STPS8L30	DPAK	1	30	8	0.49	8	1	75	150
STPS15L30C	DPAK	2	30	2 x 7.5	0.48	7.5	1	75	150
STPS15L30CDJF	PowerFLAT™	2	30	2 x 7.5	0.39	7.5	1	75	150

POWER SCHOTTKY LOW VF

Part number	Package	Number of Diodes spec	Repetitive Peak Reverse Voltage	Average rectified current	V_f	V_f measure condition (@ I_f)	Reverse Current	Non-Repet Peak Forward Surge Current	Junction Temperature
			max (V)	max (A)	max (V)	spec (A)	max (mA)	max (A)	max (°C)
STPS30L30C	D ² PAK,I2PAK,TO-220AB	2	30	2 x 15	0.46	15	1.5	220	150
STPS30L30DJF	PowerFLAT™	1	30	30	0.51	30	0.75	250	150
STPS41L30C	D2PAK	2	30	2 x 20	0.48	20	1.5	220	150
STPS60L30C	TO-247	2	30	2 x 30	0.46	30	4	600	150
40 V									
STPS1L40	SMA,S MA Flat, SMB, SOD123Flat	1	40	1	0.5	1	0.035	50	175
STPS1L40M	STmite	1	40	1	0.46	1	0.035	50	150
STPS2L40	SMA Flat, SMB, SMB Flat	1	40	2	0.43	2	0.22	75	150
STPS340	DPAK, SMA Flat, SMB, SMB Flat, SMC	1	40	3	0.63	3	0.02	75	150
STPS5L40	DO-201AD	1	40	5	0.5	5	0.2	150	150
STPS10L40C	D ² PAK, TO-220AB	2	40	2 x 5	0.53	5	0.2	150	150
45 V									
STPS3L45AF	SMA Flat	1	45	3	0.57	3	0.3	75	150
STPS15L45C	DPAK	2	45	2 x 7.5	0.52	7.5	0.5	75	150
STPS20L45C	D ² PAK, TO-220AB, TO-220FPAB	2	45	2 x 10	0.55	10	0.2	180	150
STPS30L45C	D ² PAK, TO-220AB, TO-220FPAB, TO-247	2	45	2 x 15	0.55	15	0.4	220	150
STPS40L45C	D ² PAK, TO-220AB, TO-247	2	45	2 x 20	0.53	20	0.6	230	150
STPS41L45C	D ² PAK	2	45	2 x 20	0.53	20	1.2	220	150
STPS60L45C	TO-247	2	45	2 x 30	0.55	30	1.5	600	150
STPS61L45C	TO-220AB, TO-247	2	45	2 x 30	0.56	30	1.5	400	150
60 V									
STPS1L60	DO 41 PLASTIC, SMA, SMA Flat, SOD123Flat, STmiteFLAT	1	60	1	0.57	1	0.05	40,50	150

POWER SCHOTTKY LOW VF

Part number	Package	Number of Diodes spec	Repetitive Peak Reverse Voltage	Average rectified current	V _F	V _F measure condition (@ I _F)	Reverse Current	Non-Repet Peak Forward Surge Current	Junction Temperature
			max (V)	max (A)	max (V)	spec (A)	max (mA)	max (A)	max (°C)
STPS2L60	DO 41 PLASTIC, SMA, SMA Flat, SMB Flat	1	60	2	0.6	2	0.1	75	150
STPS2L60	DO 41 PLASTIC, SMA, SMA Flat, SMB Flat	1	60	2	0.6	2	0.1	75	150
STPS3L60	DO-15, SMB, SMB Flat	1	60	3	0.62	3	0.15	100	150
STPS3L60S	SMC	1	60	3	0.65	3	0.15	75	150
STPS5L60	DO-201AD, SMB, SMB Flat, SMC	1	60	5	0.52	5	0.22	100	150
STPS5L60SF	PSMC-3L-EP	1	60	5	0.51	5	0.47	220	150
STPS10L60	TO-220AC	1	60	10	0.6	10	0.35	220	150
STPS10L60C	TO-220FPAB	2	60	2 x 5	0.55	5	0.22	180	150
STPS20L60C	D ² PAK, TO-220AB	2	60	2 x 10	0.6	10	0.35	220	150
STPS15L60C	DPAK	2	60	2 x 7.5	0.62	7.5	0.2	75	150
STPS30L60C	D ² PAK, TO-220AB, TO-247	2	60	2 x 15	0.6	15	0.48	230	150
STPS41L60C	D ² PAK, TO-220AB	2	60	2 x 20	0.6	20	0.6	22	150
STPS61L60C	TO-220AB, TO-247	2	60	2 x 30	0.66	30	0.8	400	150
120 V									
STPS30L120C	I ² PAK, TO-220AB, TO-220FPAB	2	120	2 x 15	0.57,0.88	15	0.2	220	125,150

POWER SCHOTTKY MEDIUM VF AND IR

Part number	Package	Number of Diodes spec	Repetitive Peak Reverse Voltage	Average rectified current	V _F	V _F measure condition (@ I _r)	Reverse Current	Non-Repet Peak Forward Surge Current	Junction Temperature
			max (V)	max (A)	max (V)	spec (A)	max (mA)	max (A)	max (°C)
20 V									
1N5817	DO 41 PLASTIC	1	20	1	0.45	1	0.5	25	150
30 V									
1N5818	DO 41 PLASTIC	1	30	1	0.5	1	0.5	25	150
STPS130	SMA, SMA Flat, SMB	1	30	1	0.55	1	0.01	45,60	150
STPS2030C	TO-220AB	2	30	2 x 10	0.5	10	1	180	150
STPS3030C	D ² PAK, I ² PAK	2	30	2 x 15	0.49	15	1	250	150
40 V									
STPS0540Z	SOD-123	1	40	0.5	0.53	0.5	0.04	5.5	150
1N5819	DO 41 PLASTIC	1	40	1	0.5,0.55	1	0.5	25	150
STPS140	SMA, SMA Flat, SMB	1	40	1	0.55	1	0.012	60	150
STPS140Z	SOD-123	1	40	1	0.55	1	0.01	5.5	150
1N5822	DO-201AD	1	40	3	0.525	3	2	80	150
STPS640C	DPAK	2	40	2 x 3	0.63	3	0.1	75	150
45 V									
STPS745	D ² PAK, TO-220AC, TO-220FPAC	1	45	7	0.57	7.5	0.1	150	175
STPS1045B	DPAK	1	45	10	0.63	10	0.1	75	175
STPS1045FD	TO-220AC	1	45	10	0.84	20	0.1	180	175
STPS1545	D ² PAK, TO-220AC, TO-220FPAC	1	45	15	0.84	15	0.2	220	175
STPS1545C	D ² PAK, I ² PAK, TO-220AB	2	45	2 x 7.5	0.84	15	0.1	150	175
STPS2045C	D ² PAK, TO-220AB, TO-220FPAB	2	45	2 x 10	0.84	20	0.1	180	175
STPS2545C	D ² PAK, TO-220AB	2	45	2 x 12.5	0.84	25	0.125	200	175
STPS3045C	D ² PAK, TO-220AB, TO-247	2	45	2 x 15	0.84	30	0.2	220	175
STPS3045DJF	PowerFLAT™	1	45	30	0.64	30	0.3	200	175

POWER SCHOTTKY MEDIUM VF AND IR

Part number	Package	Number of Diodes spec	Repetitive Peak Reverse Voltage	Average rectified current	V _F	V _F measure condition (@ I _r)	Reverse Current	Non-Repet Peak Forward Surge Current	Junction Temperature
			max (V)	max (A)	max (V)	spec (A)	max (mA)	max (A)	max (°C)
STPS4045C	TO-247	2	45	2 x 20	0.76	20	0.2	220	175
STPS6045C	TO-247	2	45	2 x 30	0.84	60	0.5	400	175
STPS12045	ISOTOP	2	45	120	0.91	120	1	900	150
STPS16045	ISOTOP	2	45	160	0.95	160	1	900	150
STPS24045	ISOTOP	2	45	240	0.91	240	2	1500	150
60 V									
STPS0560Z	SOD-123	1	60	0.5	0.53	0.5	0.05	5.5	150
STPS160	SMA, SMA Flat, SMB	1	60	1	0.67	1	0.004	75	150
STPS360	SOD128Flat	1	60	3	0.61	3	0.15	65	175
STPS10M60SF	PSMC-3L-EP	1	60	10	0.65	10	0.05	230	175
STPS20M60	TO-220AC	1	60	20	0.58	20	0.13	380	150
STPS20M60S	D2PAK	1	60	20	0.57	20	0.13	600	150
STPS20SM60	TO-220AC	1	60	20	0.6	20	0.085	400	150
STPS3060C	TO-247	2	60	2 x 15	0.85	15	0.15	200	150
STPS30H60C	D ² PAK, TO-220AB, TO-220FPAB	2	60	2 x 15	0.66	15	0.06	230	150
STPS30M60C	TO-220AB	2	60	2 x 15	0.59	15	0.08	400	150
STPS30M60DJF	PowerFLAT™	1	60	30	0.72	30	0.165	250	150
STPS30M60S	D ² PAK, TO-220AB	1	60	30	0.59	30	0.165	600	150
STPS30SM60S	D ² PAK	1	60	30	0.615	30	0.135	600	150
STPS40M60C	TO-220AB	2	60	2 x 20	0.595	20	0.11	220	150
STPS40SM60C	TO-220AB	2	60	2 x 20	0.63	20	0.09	400	150
80 V									
STPS20SM80C	TO-220AB	2	80	2 x 10	0.78	10	0.025	220	175
STPS30M80C	TO-220AB	2	80	2 x 15	0.745	15	0.04	220	175

POWER SCHOTTKY MEDIUM VF AND IR

Part number	Package	Number of Diodes spec	Repetitive Peak Reverse Voltage	Average rectified current	V _F	V _F measure condition (@ I _F)	Reverse Current	Non-Repet Peak Forward Surge Current	Junction Temperature
			max (V)	max (A)	max (V)	spec (A)	max (mA)	max (A)	max (°C)
STPS30SM80C	TO-220FPAB	2	80	2 x 15	0.79	15	0.04	220	175
STPS40M80C	D ² PAK, TO-220AB	2	80	2 x 20	0.735	20	0.065	150	175
100 V									
STPS6M100SF	PSMC-3L-EP	1	100	6	0.8	6	0.035	200	175
STPS20M100S	D ² PAK, TO-220AB	1	100	20	0.85	20	0.04	350	150
STPS20SM100S	TO-220AB	1	100	20	0.9	20	0.03	350	150
STPS30M100DJF	PowerFLAT™	1	100	30	0.96	30	0.1	200	150
STPS30M100S	TO-220AB, TO-220FPAB	1	100	30	0.8	30	0.175	300	150
STPS30SM100S	D ² PAK, TO-220AB	1	100	30	0.87	30	45	530	150
STPS40M100C	I ² PAK, TO-220AB	2	100	2 x 20	0.64,0.78	20	0.07	230,530	150
STPS40SM100C	TO-220AB	2	100	2 x 20	0.81	20	0.045	230	150
120 V									
STPS10M120SF	PSMC-3L-EP	1	120	10	0.82	10	0.025	340	175
STPS20SM120S	TO-220AB	1	120	20	0.89	20	0.21	220	150
STPS30SM120S	TO-220AB, TO-220FPAB	1	120	30	0.95	30	0.275	240	150
STPS40M120C	TO-220AB	2	120	2 x 20	0.79	20	0.37	220	150
STPS40SM120C	I ² PAK	2	120	2 x 20	0.83	20	0.275	210	150
170 V									
STPS1170	SMA Flat	1	170	1	0.82	1	0.0015	45	175
STPS2170	SMA Flat	1	170	2	0.82	2	0.0028	70	175
STPS3170	SMA Flat, SMB Flat	1	170	3	0.82	3	0.004	75	175
200 V									
STPS4S200	DPAK, SMB Flat, SMC	1	200	4	0.71	4	0.005	130	175
STPS60SM200C	TO-247	2	200	2 x 15	0.83	30	0.05	500	175

SIGNAL SCHOTTKY DIODES

Part number	Package	Number of Diodes spec	Repetitive Peak Reverse Voltage	Average rectified current	V _F	Reverse Current	Junction Capacitance	Reverse recovery time
			max (V)	max (A)	max (V)	max (mA)	max (pF)	max (ns)
10 V and 20 V								
BAT60	SOD-323	1	10	3	0.4	0.006	60	0
BAT20J	SOD-323	1	23	1	0.62	0.012	30	0
30 V								
BAR42	SOT23	1	30	0.1	1	0.5	10	5
BAR43	SOT23	1,2	30	0.1	1	0.5	10	5
BAT30	SOD-523, SOT-323	1,2	30	0.3	0.58	0.005	35	0
BAT30F4	ST0201	1	30	0.3	0.205	0.05	-	-
BAT42	DO-35	1	30	0.2	0.65	0.05	15	5
BAT43	DO-35	1	30	0.2	0.45	0.05	15	5
TMMBAT42	MiniMELF	1	30	0.2	1	0.05	15	5
TMMBAT43	MiniMELF	1	30	0.2	0.45	0.05	15	5
40 V								
BAT48	DO-35, SOD-123, SOD-323	1	40	0.35	0.9	0.05	40	10
BAT54	SOD-323, SOD-523, SOT-323, SOT23	1,2	40	0.3	0.9	0.001	10	5
TMBYV10-40	MELF	1	40	1	0.55	0.5	400	0
TMMBAT48	MiniMELF	1	40	0.35	0.9	0.05	40	10
60 V, 70 V and 80 V								
1N6263	DO-35	1	60	0.015	1	0.2	2.2	0.1
TMBYV10-60	MELF	1	60	1	0.7	0.5	300	0
1N5711	DO-35	1	70	0.015	1	0.02	2	0.1
BAR18	SOT23	1	70	0.07	0.41	0.2	2	0.1
BAS70	SOD-323, SOD-523, SOT-323, SOT23	1,2	70	0.07	1	0.01	2	0
TMBAT49	MELF	1	80	0.5	1	0.2	200	0

SIGNAL SCHOTTKY DIODES

Part number	Package	Number of Diodes spec	Repetitive Peak Reverse Voltage	Average rectified current	V_F	Reverse Current	Junction Capacitance	Reverse recovery time
			max (V)	max (A)	max (V)	max (mA)	max (pF)	max (ns)
100 V								
BAR46	SOT23	1,2	100	0.15	0.45	0.005	20	0
BAT41	SOD-123, SOD-523	1	100	0.2	1	0.1	10	0
BAT41RL	DO-35	1	100	0.2	1	0.1	10	0
BAT46	SOD-123, SOD-323, SOT-323	1,2	100	0.15	1	20	20	0
BAT46RL	DO-35	1	100	0.15	1	20	20	0
TMMBAT41	MiniMELF	1	100	0.2	1	0.1	10	0
TMMBAT46	MiniMELF	1	100	0.15	1	20	20	0

Silicon-carbide diodes

SILICON-CARBIDE DIODES

Part number	Package	Number of Diodes	Repetitive Peak Reverse Voltage (V_{RRM})	Average rectified current (I_A)	Forward Voltage V_f	V_f measure condition (@ I_f)	Reverse Current (I_R)	Total capacitive charge (Q_C)	Non-Repet Peak Forward Surge Current (I_{FSM})	Junction Temperature (T)
			max (V)	max (A)	max (V)	(A)	max (mA)	(nC)	max (A)	max (°C)
650 V										
STPSC2H065	DPAK	1	650	2	1.55	2	0.02	7.9	20	175
STPSC4H065	DPAK,TO-220AC,TO-220AC Ins	1	650	4	1.75	4	0.04	12.5	38	175
STPSC4H065DLF	PowerFLAT 8x8 HV	1	650	4	1.55	4	0.04	14.3	38	175
STPSC6H065	D ² PAK,DPAK,TO-220AC, TO-220AC Ins	1	650	6	1.75	6	0.06	18	60	175
STPSC6H065DLF	PowerFLAT 8x8 HV	1	650	6	1.55	6	0.06	19.9	58	175
STPSC6TH13TI	TO-220AB Ins	2	650	6	1.75	6	0.06	18	60	175
STPSC8065	TO-220AC	1	650	8	1.45	8	0.105	28	46	175
STPSC8H065	D ² PAK,DPAK,TO-220AC, TO-220AC Ins	1	650	8	1.75	8	0.08	23.5	75	175
STPSC8H065C	TO-220AB	2	650	2 x 4	1.75	4	0.04	12.5	38	175
STPSC8H065DLF	PowerFLAT 8x8 HV	1	650	8	1.55	8	0.08	26	75	175
STPSC8TH13TI	TO-220AB Ins	2	650	8	1.75	8	0.08	23.5	75	175
STPSC10065	TO-220AC	1	650	10	1.45	10	0.13	34	48	175
STPSC10065DLF	PowerFLAT 8x8 HV	1	650	10	1.45	10	0.13	-	48	175
STPSC10H065	D ² PAK,DPAK,TO-220AC, TO-220AC Ins	1	650	10	1.75	10	0.1	28.5	90	175
STPSC10H065DLF	PowerFLAT 8x8 HV	1	650	10	1.75	10	0.1	28.5	90	175
STPSC10TH13TI	TO-220AB Ins	2	650	10	1.75	10	0.1	28.5	90	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 (Q_p)	Non-Repet Peak Forward Surge Current (I_{FSM})	Junction Temperature (T_j)
			max (V)	max (A)	max (V)	(A)	max (mA)	(nC)	max (A)	max (°C)
STPSC12065	D ² PAK,TO-220AC	1	650	12	1.45	12	0.15	36	50	175
STPSC12H065	TO-220AC	1	650	12	1.75	12	0.12	36	100	175
STPSC12H065C	TO-220AB	2	650	2 x 6	1.75	6	0.06	18	60	175
STPSC16H065A	TO-247	1	650	16	-	16	0.14	41	120	175
STPSC16H065C	TO-220AB	2	650	2 x 8	1.75	8	0.08	23.5	75	175
STPSC20065	DO-247,TO-220AC, TO-220AC Ins	1	650	20	1.45	20	0.3	62	90	175
STPSC20H065C	TO-220AB,TO-247	2	650	2 x 10	1.75	10	0.1	28.5	90	175
STPSC20065C	TO-247 long leads	2	650	2 x 10	1.45	10	0.13	34	48	175
STPSC40065C	TO-247	2	650	2 x 20	1.45	20	0.3	62	90	175
1200 V										
STPSC2H12	DPAK HV 2L,TO-220AC	1	1200	2	1.5	2	0.012	15.6	15	175
STPSC5H12	DPAK HV 2L,TO-220AC	1	1200	5	1.5	5	0.03	36	35	175
STPSC6H12	DPAK HV 2L	1	1200	6	1.9	6	0.4	29	36	175
STPSC10H12	D ² PAK,DO247 LONG LEADS, DPAK HV 2L,TO-220AC	1	1200	10	1.5	10	0.06	57	71	175
STPSC10H12C	TO-247 long leads	2	1200	2 x 5	1.5	5	0.03	57	210	175
STPSC15H12	DO247 LONG LEADS,TO-220AC	1	1200	15	1.5	15	0.09	94	105	175
STPSC20H12	D ² PAK,DO247 LONG LEADS, TO-220AC	1	1200	20	1.5	20	0.12	129	140	175
STPSC20H12C	TO-247 long leads	2	1200	2 x 10	1.5	10	0.06	57	420	175
STPSC30H12C	TO-247 long leads	2	1200	2 x 15	1.5	15	0.09	94	630	175
STPSC40H12C	TO-247 long leads	2	1200	2 x 20	1.5	20	0.12	129	140	175

Ultrafast Rectifiers

200 V TO 400 V ULTRAFAST RECTIFIERS

Part number	Package	Number of Diodes spec	Repetitive Peak Reverse Voltage	Average rectified current	V _F	Reverse Current	Reverse Recovery Time	Non-Repet Peak Forward Surge Current	Junction Temperature
			max (V)	max (A)	max (V)	max (mA)	max (ns)	max (A)	max (°C)
200 V									
STTH1R02	DO 41 PLASTIC, DO-15,SMA,SMB	1	200	1.5	1	0.003	20	60	175
STTH2R02	SMA,SMB	1	200	2	1	0.003	20	75	175
STTH302	DO-201AD	1	200	3	0.95	0.003	35	130	175
STTH302S	SMC	1	200	3	0.95	0.003	35	100	175
STTH3R02	DO-15,DO-201AD,SMC	1	200	3	1	0.003	20	75	175
STTH4R02	DPAK,SMB,SMC	1	200	4	1.05	0.003	20	70	175
STTH602C	TO-220AB	2	200	2 x 3	1.1	0.003	20	60	175
STTH802	D ² PAK,DPAK,TO-220AC, TO-220FPAC	1	200	8	1.05	0.006	22	100	175
STTH802SF	PSMC-3L-EP	1	200	8	1.08	0.006	22	150	175
STTH802C	DPAK	2	200	2 x 4	1.1	0.004	20	50	175
STTH1002C	D ² PAK,DPAK,I ² PAK, TO-220AB,TO-220FPAB	2	200	2 x 5	1.1	0.005	20	50	175
STTH1202	TO-220AC	1	200	12	1.1	0.01	24	100	175
STTH1502	TO-220AC,TO-220AC Ins, TO-220FPAC	1	200	15	1.1	0.001	25	150	175
STTH1602C	D ² PAK,TO-220AB,TO-220FPAB	2	200	2 x 8	1.1	0.006	26	80	175
STTH2002	D ² PAK,TO-220AC, TO-220AC Ins	1	200	20	1.1	0.01	20	175	175
STTH2002C	D ² PAK,I ² PAK,TO-220AB, TO-220FPAB	2	200	2 x 10	1.1	0.01	27	90	175

200 V TO 400 V ULTRAFAST RECTIFIERS

Part number	Package	Number of Diodes spec	Repetitive Peak Reverse Voltage	Average rectified current	V _F	Reverse Current	Reverse Recovery Time	Non-Repet Peak Forward Surge Current	Junction Temperature
			max (V)	max (A)	max (V)	max (mA)	max (ns)	max (A)	max (°C)
STTH30R02DJF	PowerFLAT™	1	200	30	0.95	0.01	35	300	175
STTH3002	D ² PAK,DOP3 Ins	1	200	30	1.05	0.02	27	300	175
STTH3002C	D ² PAK,TO-220AB,TO-247	2	200	2 x 15	1.05	0.02	22	180	175
STTH30W02C	TO-247	2	200	2 x 15	1.4	0.06	25	140	175
STTH6002C	TO-247,TOP3 Ins	2	200	2 x 30	1.05	0.03	27	330	175
STTH10002	ISOTOP	2	200	2 x 50	1	0.05	30	750	150
STTH20002TV	ISOTOP	2	200	2 x 100	1.2	0.1	50	1000	150
300 V									
STTH803	D ² PAK,TO-220AC	1	300	8	1	0.02	25	100	175
STTH8R03	TO-220AC	1	300	8	1.3	0.01	30	80	175
STTH8R03DJF	PowerFLAT™	1	300	8	1	0.04	35	280	175
STTH1003S	DPAK	1	300	10	1.1	0.01	13	100	175
STTH2003C	D ² PAK,I ² PAK,TO-220AB,TO-220FPAB	2	300	2 x 10	1	0.02	25	110	175
STTH20L03C	TO-220AB	2	300	2 x 10	0.95	0.01	35	150	175
STTH3003	TO-247	2	300	2 x 15	1	0.04	30	140	175
STTH30R03	D ² PAK,TO-247	2	300	2 x 15	1.4	0.02	35	120	175
STTH60W03C	TO-247	2	300	2 x 15	1.15	0.02	35	280	175
STTH50W03C	TO-247	2	300	2 x 25	1.2	0.015	27	200	175
STTH6003	TO-247	2	300	2 x 30	1	0.06	40	300	175
STTH60P03S	TO-247	1	300	60	1.5	0.1	50	250	175
STTH12003	ISOTOP	2	300	2 x 60	1	0.12	55	600	150
STTH16003	ISOTOP	2	300	2 x 80	0.95	0.2	60	800	150
STTH20003	ISOTOP	2	300	2 x 100	0.95	0.2	90	1000	150

200 V TO 400 V ULTRAFAST RECTIFIERS

Part number	Package	Number of Diodes spec	Repetitive Peak Reverse Voltage	Average rectified current	V _F	Reverse Current	Reverse Recovery Time	Non-Repet Peak Forward Surge Current	Junction Temperature
			max (V)	max (A)	max (V)	max (mA)	max (ns)	max (A)	max (°C)
400 V									
STTH1R04	DO-15,SMA,SMB	1	400	1	1.5	0.005	20	30	175
STTH3R04	DO-15,DO-201AD,SMB,SMC	1	400	3	1.5	0.005	25	60	175
STTH8R04	D ² PAK,TO-220AC,TO-220AC Ins	1	400	8	1.5	0.01	35	120	175
STTH10R04	D ² PAK	1	400	10	1.7	0.001	40	100	175
STTH16R04C	D ² PAK,TO-220AB	2	400	2 x 8	1.5	0.01	35	120	175
STTH20R04	D ² PAK,TO-220AC,TO-220FPAC	1	400	20	1.7	0.02	45	150	175
STTH30R04	D ² PAK,DO-247,TO-220AC	1	400	30	1.45	0.015	50	300	175
STTH61R04TV	ISOTOP	2	400	2 x 30	1.45	0.015	35	350	150
STTH6004W	DO-247	1	400	60	1.2	0.05	50	600	175
STTH60R04	DO-247	1	400	60	1.5	0.06	45	650	175
STTH61W04S	TO-247	1	400	60	1.35	0.02	55	500	175
STTH100W04C	TO-247	2	400	2 x 50	1.2	0.025	50	350	175
STTH200F04	ISOTOP	2	400	2 x 100	1.45	0.075	80	1000	150
STTH120R04TV	ISOTOP	2	400	2 x 60	1.5	0.06	55	700	150
STTH20004TV1	ISOTOP	2	400	2 x 100	1.2	0.1	100	900	150
STTH200L04TV1	ISOTOP	2	400	2 x 100	1.2	0.1	100	900	150
STTH200R04TV	ISOTOP	2	400	2 x 100	1.35	0.08	70	1000	150
STTH240F04	ISOTOP	2	400	2 x 120	1.43	0.085	80	1000	150

600 V ULTRAFAST RECTIFIERS

Part number	Package	Number of Diodes spec	Repetitive Peak Reverse Voltage	Average rectified current	V_F	Reverse Current	Reverse Recovery Time	Non-Repet Peak Forward Surge Current	Junction Temperature
			max (V)	max (A)	max (V)	max (mA)	max (ns)	max (A)	max (°C)
STTH1L06	DO 41 PLASTIC,SMA,SMB	1	600	1	1.3	0.001	80	20	175
STTH1R06	DO 41 PLASTIC,SMA,SMB	1	600	1	1.7	0.001	25	20	175
STTH1R06AF	SOD128Flat	1	600	1	1.4	0.001	45	20	175
STTH2L06	DO 41 PLASTIC,SMA,SMB	1	600	2	1.3	0.002	85	35	175
STTH2R06	DO 41 PLASTIC,SMA,SMB,SMC	1	600	2	1.7	0.002	30	30	175
STTH3L06	DO-201AD,SMB,SMC	1	600	3	1.3	0.003	85	60	175
STTH3R06	DO-201AD,SMB,SMC	1	600	3	1.25	0.003	30	45	175
STTH4L06	DO-201AD	1	600	4	1.05	0.003	55	80	175
STTH4R06DEE	PowerFLAT 3.3x3.3	1	600	4	1.7	0.003	40	60	150
STTH506	DPAK,TO-220AC	1	600	5	1.4,1.85	0.005	30	55	175
STTH506D	TO-220AC Ins	1	600	5	3.6	0.006	25	60	150
STTH5L06	DO-201AD,DPAK,TO-220AC, TO-220FPAC	1	600	5	1.3	0.005	95	60	175
STTH5R06	DPAK,TO-220AC,TO-220FPAC	1	600	5	1.8	0.02	25	50	175
STTH5R06DJF	PowerFLAT™	1	600	5	2	0.06	40	190	175
STTH806	D²PAK,TO-220AC,TO-220AC Ins	1	600	8	1.4	0.008	35	90	175
STTH806DTI	TO-220AC Ins	2	600	2 x 4	3.6	0.01	30	180	150
STTH806TTI	TO-220AB Ins	2	600	2 x 4	3.6	0.01	30	80	150
STTH8L06	D²PAK,TO-220AC,TO-220FPAC	1	600	8	1.3	0.008	105	120	175
STTH8R06	D²PAK,TO-220AC, TO-220AC Ins,TO-220FPAC	1	600	8	2.9	0.03	25	80	175
STTH8S06	DPAK,TO-220AC,TO-220FPAC	1	600	8	1.9	0.02	18	60	175
STTH8ST06	TO-220AC Ins	1	600	8	3.1	0.006	26	55	175
STTH8T06	TO-220AC Ins	1	600	8	2.95	0.01	30	80	175
STTH10LCD06	DPAK,TO-220FPAC	1	600	10	2	0.005	50	80	175

600 V ULTRAFAST RECTIFIERS

Part number	Package	Number of Diodes spec	Repetitive Peak Reverse Voltage	Average rectified current	V_F	Reverse Current	Reverse Recovery Time	Non-Repet Peak Forward Surge Current	Junction Temperature
			max (V)	max (A)	max (V)	max (mA)	max (ns)	max (A)	max (°C)
STTH10LCD06C	TO-220AB,TO-220FPAB	2	600	2 x 5	2	0.001	25	45	175
STTH12R06	D ² PAK,TO-220AC, TO-220AC Ins,TO-220FPAC	1	600	12	2.9	0.045	25	100	175
STTH12S06	TO-220FPAC	1	600	12	1.9	0.03	21	100	175
STTH12T06	TO-220AC Ins	1	600	12	2.95	0.02	33	90	175
STTH1506D	DOP3 Ins	1	600	15	3.6	0.02	35	130	150
STTH1506TPI	TOP3 Ins	2	600	2 x 7.5	3.6	0.02	35	130	150
STTH15AC06	TO-220FPAC	1	600	15	1.5	0.002	30	120	175
STTH15AC06C	TO-220AB,TO-220FPAB	2	600	2 x 7.5	1.8	0.001	25	80	175
STTH15L06	D ² PAK,TO-220AC,TO-220FPAC	1	600	15	1.55	0.015	55	200	175
STTH15R06	TO-220AC,TO-220FPAC	1	600	15	2.9	0.06	30	150	175
STTH15RQ06	D ² PAK,D2PAK HV,DO-247, TO-220AC	1	600	15	1.85	0.02	25	120	175
STTH16L06C	D ² PAK,TO-220AB,TO-220FPAB	2	600	2 x 8	1.64	0.008	35	120	175
STTH20LCD06C	TO-220FPAB	2	600	2 x 10	2	0.001	50	80	175
STTH25M06	DPAK,TO-220FPAC	1	600	25	3.4	0.06	35	170	175
STTH3006	DO-247,DOP3 Ins	1	600	30	1.4	0.025	50	300	175
STTH3006D	DOP3 Ins	2	600	2 x 15	3.6	0.04	45	180	150
STTH30AC06	TO-220FPAC	1	600	30	1.95	0.02	35	270	175
STTH30AC06C	TO-247 long leads,TO-3PF	2	600	2 x 15	1.95	0.01	30	140	175
STTH30R06C	TO-247	2	600	2 x 15	1.95	0.06	30	120	175
STTH30ACS06W	DO-247	1	600	30	2.4	0.005	30	190	175
STTH30L06	D ² PAK,DO-247	1	600	30	1.25	0.025	65	300	175
STTH30L06C	D ² PAK,TO-247	2	600	2 x 15	1.45	0.015	55	130	175
STTH60RQ06C	TO-247 long leads	2	600	2 x 15	2.95	0.04	30	200	175

600 V ULTRAFAST RECTIFIERS

Part number	Package	Number of Diodes spec	Repetitive Peak Reverse Voltage	Average rectified current	V_F	Reverse Current	Reverse Recovery Time	Non-Repet Peak Forward Surge Current	Junction Temperature
			max (V)	max (A)	max (V)	max (mA)	max (ns)	max (A)	max (°C)
STTH30R06	DO-247,DOP3 Ins	1	600	30	1.85	0.025	50	300	175
STTH30RQ06	D ² PAK,D2PAK HV, DO-247,DO247 LONG LEADS,TO-220AC	1	600	30	2.95	0.04	30	180	175
STTH31AC06S	TO-247 long leads,TO-3PF	1	600	30	2	0.01	65	150	175
STTH6006TV	ISOTOP	2	600	2 x 30	1.4	0.025	50	210	150
STTH60L06C	TO-247	2	600	2 x 30	1.55	0.025	65	210	175
STTH60AC06C	TO-247,TO-247 long leads, TO-3PF	2	600	2 x 30	1.4	0.01	40	280	175
STTH60L06	DO-247	1	600	60	1.55	0.05	70	600	175
STTH60L06TV	ISOTOP	2	600	60	1.55	0.025	65	210	150
STTH6006W	DO-247	1	600	60	1.4	0.05	60	400	175
STTH60RQ06	DO-247,DO247 LONG LEADS	1	600	60	2.95	0.08	35	425	175
STTH80S06	DO-247	1	600	80	2.15	0.05	45	400	175
STTH100W06C	TO-247	2	600	2 x 50	1.65	0.02	75	360	175
STTH120L06TV	ISOTOP	2	600	2 x 60	1.55	0.05	70	500	150
STTH200L06TV	ISOTOP	2	600	2 x 100	1.55	0.08	80	800	150

800 V TO 1200 V ULTRAFAST RECTIFIERS

Part number	Package	Number of Diodes spec	Repetitive Peak Reverse Voltage	Average rectified current	V _F	Reverse Current	Reverse Recovery Time	Non-Repet Peak Forward Surge Current	Junction Temperature
			max (V)	max (A)	max (V)	max (mA)	max (ns)	max (A)	max (°C)
800 V									
STTH108	DO 41 PLASTIC, SMA	1	800	1	1.65	0.005	75	20	175
STTH208	DO-15, SMB	1	800	2	1.65	0.005	75	35	175
1000 V									
STTH110	DO 41 PLASTIC, SMA	1	1000	1	1.7	0.01	75	18	175
STTH310	DO-201AD, SMC	1	1000	3	1.7	0.01	75	45	175
STTH810	D ² PAK, TO-220AC, TO-220AC Ins, TO-220FPAC	1	1000	8	2	0.005	85	60	175
STTH1210	TO-220AC, TO-220AC Ins	1	1000	12	2	0.01	65	80	175
STTH3010	DO-247, DOP3 Ins, TO-220AC	1	1000	30	2	0.015	70	180	175
STTH6010	DO-247	1	1000	60	2	0.025	80	400	175
STTH6110TV	ISOTOP	2	1000	2 x 30	2	0.015	70	240	150
STTH12010TV	ISOTOP	2	1000	2 x 60	2	0.02	80	400	150
1200 V									
STTH112	DO 41 PLASTIC, SMA, SMB	1	1200	1	1.9	0.005	75	18	175
STTH212	SMB, SMC	1	1200	2	1.75	0.01	75	40	175
STTH512	DPAK, TO-220AC, TO-220FPAC	1	1200	5	2.2	0.005	70	55	175
STTH812	D ² PAK, TO-220AC, TO-220AC Ins, TO-220FPAC	1	1200	8	2.2	0.008	70	80	175
STTH8S12	TO-220AC	1	1200	8	2.5	0.005	45	70	175
STTH1212	TO-220AC	1	1200	12	2.2	0.01	70	100	175
STTH1512	D ² PAK, DO-247, DOP3 Ins	1	1200	15	2.1	0.015	75	200	175
STTH15S12	TO-220AC	1	1200	15	2.7	0.01	40	130	175
STTH3012	DO-247, TO-220AC	1	1200	30	2.25	0.02	80	210	175
STTH30S12	DO-247	1	1200	30	2.7	0.015	50	180	175

800 V TO 1200 V ULTRAFAST RECTIFIERS

Part number	Package	Number of Diodes spec	Repetitive Peak Reverse Voltage	Average rectified current	V_F	Reverse Current	Reverse Recovery Time	Non-Repet Peak Forward Surge Current	Junction Temperature
			max (V)	max (A)	max (V)	max (mA)	max (ns)	max (A)	max (°C)
STTH6012	DO-247	1	1200	60	2.25	0.03	85	400	175
STTH75S12	DO-247	1	1200	75	2.7	0.05	55	370	175
STTH9012TV	ISOTOP	2	1200	2 x 45	2.1	0.03	85	420	150
STTH12012TV	ISOTOP	2	1200	2 x 60	2.25	0.03	125	420	150

Ordering information

STaa

Technology

STPS	Power Schottky
STPSC	SiC
STTH	Ultrafast
FERD	Field effect rectifier

bb

Current rating

Current:	0.5 A to 240 A
Code:	0.5 to 240

c

Series

For Schottky diodes (STPS)

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

For ultrafast diodes (STTH)

Void	medium V_F and Q_{rr}
L	low V_F (600 V mainly)
R	low Q_{rr} recovery
Nota: R trade-off mainly used for 400 V and 600 V	
-	AC à air conditioning
-	RQ à rapid and quiet
-	M -> more rapid & quiet

FERD

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

ddd

Breakdown voltage

STPS (power Schottky)

code: $V_{RRM} = 15 \text{ V to } 600 \text{ V}$

STPSC (SiC)

code: $V_{RRM} = 600 \text{ V} / 1200 \text{ V}$
 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 $V_{RRM} = 45 \text{ V to } 100 \text{ V}$

Connection type

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

e

Packing type

Through-hole packages

Void	Axial: D0-41, D0-15, D0-201
D	TO-220AC
DI	TO-220I
T	TO-220AB
FP	TO-220FPAB
PI	DOP3I
R	I ² PAK
H	IPAK
W	TO-247, D0-247

SMD packages

A	SMA
U	SMB
S	SMC
B	DPAK
G	D ² PAK
TV1	ISOTOP (longitudinal)
TV2	ISOTOP (lateral)
DJF	Powerflat 5x6
DEE	Powerflat 3.3x3.3
AF	SMA Flat
UF	SMB Flat
SF	PSMC
DLF	Powerflat 8x8

f

g

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