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Diodes and rectifiers



High power efficiency and density





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Schottky barrier diodes

SIGNAL SCHOTTKY DIODES

| Part number | Package | Number of diodes | Repetitive peak reverse voltage (V_{RRM}) | Average rectified current (I_R) | 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 400 μ | 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 | |

SIGNAL SCHOTTKY DIODES

| Part number | Package | Number of diodes | Repetitive peak reverse voltage (V_{RRM}) | Average rectified current (I_R) | Forward voltage (V_F) | V_F measure condition (@ I_F) spec | Reverse current (I_R) | Junction capacitance (C_j) | Reverse recovery time (t_r) |
|--------------|-----------------------------------|------------------|---|-------------------------------------|---------------------------|---|---------------------------|--------------------------------|---------------------------------|
| | | | 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 |

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) |
|---------------|------------------------------|------------------|---|-----------------------------------|---------------------------|------------------------------------|---------------------------|---|--------------------------|
| | | | max (V) | (A) | max (V) | (A) | max (mA) | max (A) | max (°C) |
| 15 V | | | | | | | | | |
| STPS20L15 | D ² PAK, 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 | D ² PAK, 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 | D ² PAK, 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 |

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) |
|--------------|--|------------------|---|-----------------------------------|---------------------------|------------------------------------|---------------------------|---|--------------------------|
| | | | max (V) | (A) | max (V) | (A) | max (mA) | max (A) | max (°C) |
| STPS3030C | D ² PAK, I ² PAK, TO-220AB | 2 | 30 | 2 x 15 | 0.4 | 15 | 1 | 250 | 150 |
| STPS30L30C | D ² PAK, I ² PAK, 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 | D ² PAK | 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 | D ² PAK, 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 | D ² PAK, 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 | D ² PAK, I ² PAK, 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 | D ² PAK, 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 | D ² PAK, TO-220AB, TO-220FPAC | 2 | 45 | 2 x 10 | 0.5 | 10 | 0.2 | 180 | 150 |

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) |
|-------------|--|------------------|---|-----------------------------------|---------------------------|------------------------------------|---------------------------|---|--------------------------|
| | | | max (V) | (A) | max (V) | (A) | max (mA) | max (A) | max (°C) |
| STPS2545C | D ² PAK, TO-220AB | 2 | 45 | 2 x 12.5 | 0.72 | 25 | 0.125 | 200 | 175 |
| STPS3045C | D ² PAK, 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 | D ² PAK, I ² PAK, 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 | D ² PAK, TO-220AB, TO-247 | 2 | 45 | 2 x 20 | 0.49 | 20 | 0.6 | 220 | 150 |
| STPS41L45C | D ² PAK | 2 | 45 | 2 x 20 | 0.47 | 20 | 1.2 | 220 | 150 |
| STPS5045S | D ² PAK | 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 | D ² PAK, 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 | D ² PAK, I ² PAK, TO-220AB | 2 | 60 | 2 x 10 | 0.57 | 10 | 0.065 | 300 | 150 |
| STPS20M60S | D ² PAK, I ² PAK, TO-220AB | 1 | 60 | 20 | 0.505 | 20 | 0.125 | 600 | 150 |

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) |
|--------------|---|------------------|---|-----------------------------------|---------------------------|------------------------------------|---------------------------|---|--------------------------|
| | | | 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 | D ² PAK, I ² PAK, 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 | D ² PAK, TO-220AB, TO-220FPAC | 2 | 60 | 2 x 15 | 0.57 | 15 | 0.06 | 230 | 175 |
| STPS30L60C | D ² PAK, TO-220AB, TO-220AB narrow leads, TO-247 | 2 | 60 | 2 x 15 | 0.56 | 15 | 0.48 | 230 | 150 |
| STPS30M60 | TO-220AC, D ² PAK | 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 | D ² PAK, I ² PAK, 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 | D ² PAK, I ² PAK, TO-220AB | 2 | 60 | 2 x 15 | 0.62 | 15 | 0.065 | 300 | 150 |
| STPS30SM60S | D ² PAK, I ² PAK, 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 | D ² PAK, 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 | D ² PAK, 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 |

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) |
|---------------|---|------------------|---|-----------------------------------|---------------------------|------------------------------------|---------------------------|---|--------------------------|
| | | | max (V) | (A) | max (V) | (A) | max (mA) | max (A) | max (°C) |
| STPS5H100 | PAK, 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 | D ² PAK, 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 | D ² PAK, TO-220AB, TO-220FPAC, TO-220AB narrow leads | 2 | 100 | 2 x 5 | 0.71 | 10 | 0.0035 | 180 | 175 |
| STPS15H100C | PAK | 2 | 100 | 2 x 7.5 | 0.67 | 7.5 | 0.003 | 75 | 175 |
| STPS16H100C | D ² PAK | 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 | D ² PAK, I ² PAK, TO-220AB, TO-220FPAC, TO-220AB narrow leads | 2 | 100 | 2 x 10 | 0.77 | 10 | 0.0045 | 250 | 175 |
| STPS20M100S | D ² PAK, I ² PAK, 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 | I ² PAK, 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 | I ² PAK, TO-220AB, TO-220FPAC | 1 | 100 | 30 | 0.655 | 30 | 0.175 | 300 | 150 |
| STPS30SM100S | D ² PAK, I ² PAK, 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 | I ² PAK, TO-220AB | 2 | 100 | 2 x 20 | 0.64 | 20 | 0.07 | 530 | 150 |
| STPS40SM100C | D ² PAK, TO-220AB | 2 | 100 | 2 x 20 | 0.665 | 20 | 0.045 | 530 | 150 |
| STPS41H100C | D ² PAK, I ² PAK, 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 |

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) |
|--------------|--|------------------|---|-----------------------------------|---------------------------|------------------------------------|---------------------------|---|--------------------------|
| | | | 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, I ² PAK, 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 | I ² PAK, TO-220AB narrow leads | 1 | 120 | 20 | 0.57 | 10 | 0.275 | 240 | 150 |
| STPS20SM120S | I ² PAK, TO-220AB narrow leads, TO-220FP | 1 | 120 | 20 | 0.62 | 10 | 0.21 | 220 | 150 |
| STPS40M120C | I ² PAK, 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 | I ² PAK, TO-220AB, TO-220FPAC | 2 | 120 | 2 x 15 | 0.71 | 15 | 0.2 | 220 | 150 |
| STPS30M120S | I ² PAK, TO-220AB narrow leads | 1 | 120 | 30 | 0.73 | 30 | 0.345 | 260 | 150 |
| STPS30SM120S | I ² PAK, 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 | I ² PAK, TO-220AB, TO-220AB narrow leads | 2 | 120 | 2 x 20 | 0.69 | 20 | 0.275 | 210 | 150 |
| 150 V | | | | | | | | | |
| STPS1150 | DO-35, SMA, Strmite | 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 | D ² PAK, 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 | D ² PAK, I ² PAK, TO-220AB, TO-220FPAC | 2 | 150 | 2 x 10 | 0.75 | 10 | 0.005 | 180 | 175 |
| STPS30150C | D ² PAK, TO-220AB, TO-220FPAC, TO-247 | 2 | 150 | 2 x 15 | 0.75 | 15 | 0.0065 | 220 | 175 |
| STPS40150C | D ² PAK, 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) |
|---------------|---|------------------|---|-----------------------------------|---------------------------|------------------------------------|---------------------------|---|--------------------------|
| | | | 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 | D ² PAK, 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 | D ² PAK, DPAK, I ² PAK | 2 | 170 | 2 x 8 | 0.75 | 8 | 0.015 | 150 | 175 |
| STPS20170C | D ² PAK, TO-220AB, TO-220FPAC | 2 | 170 | 2 x 10 | 0.86 | 20 | 0.015 | 180 | 175 |
| STPS30170C | D ² PAK, 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 | D ² PAK, 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 | D ² PAK, 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_A) | Forward voltage (V_F) | V_F measure condition (@ I_A) | 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 | D ² PAK, TO-220AC | 1 | 600 | 6 | 1.7 | 6 | 0.075 | 6 | 27 | 175 |
| STPSC806 | D ² PAK, 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 | D ² PAK; TO-220AC; DPAK, TO-220AC Ins | 1 | 650 | 6 | 1.75 | 6 | 0.06 | 18 | 60 | 175 |
| STPSC8H065 | D ² PAK, DPAK, TO-220AC, TO-220AC Ins | 1 | 650 | 8 | 1.75 | 8 | 0.08 | 23.5 | 75 | 175 |
| STPSC8H065C | DPAK; D ² PAK; TO-220AC | 2 | 650 | 2 x 4 | 1.75 | 4 | 0.04 | 12.5 | 38 | 175 |
| STPSC10H065 | D ² PAK, TO-220AC, DPAK, TO-220AC Ins, Power Flat 5x6 | 1 | 650 | 10 | 1.75 | 10 | 0.10 | 28.5 | 100 | 175 |
| STPSC12H065 | TO-220AC, D ² PAK | 1 | 650 | 12 | 1.75 | 12 | 0.12 | 36 | 100 | 175 |
| STPSC12H065C | D ² PAK, 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, D ² PAK | 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; D ² PAK | 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_A) | Forward voltage (V_F) | V_F measure condition (@ I_A) | 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; D ² PAK | 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; D ² PAK; 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_A) | 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 | 75 | 175 |
| STTH602C | TO-220AB | 2 | 200 | 2 x 3 | 1.05 | 6 | 0.003 | 20 | 60 | 175 |
| STTH802 | D ² PAK, 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 | D ² PAK, DPAK, I ² PAK, 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 | D ² PAK | 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 | D ² PAK, TO-220AB, TO-220FPAC | 2 | 200 | 2 x 8 | 1.05 | 16 | 0.006 | 26 | 80 | 175 |
| STTH2002 | D ² PAK, TO-220AC, TO-220AC Ins | 1 | 200 | 20 | 0.95 | 20 | 0.01 | 20 | 175 | 175 |
| STTH2002C | D ² PAK, I ² PAK, 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 | D ² PAK, DO-247, DOP3 Ins | 1 | 200 | 30 | 0.88 | 30 | 0.02 | 27 | 300 | 175 |
| STTH3002C | D ² PAK, 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_A) | Forward Voltage (V_F) | V_F measure condition (@ I_F) | Reverse current (I_R) | Reverse recovery time (t_r) | Non-repetitive peak forward surge current (I_{FSM}) | Junction temperature (T) | |
|--------------|--|------------------|---|-------------------------------------|---------------------------|------------------------------------|---------------------------|---------------------------------|---|--------------------------|--|
| | | | max (V) | max (A) | max (V) | (A) | max (mA) | max (ns) | max (A) | max (°C) | |
| 300 V | | | | | | | | | | | |
| STTH803 | D ² PAK, 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 | D ² PAK, 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 | D ² PAK, I ² PAK, 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 | D ² PAK, 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 | D ² PAK, TO-220AC, TO-220AC Ins | 1 | 400 | 8 | 1.1 | 8 | 0.01 | 35 | 120 | 175 | |
| STTH10R04 | D ² PAK | 1 | 400 | 10 | 1.35 | 10 | 0.001 | 20 | 100 | 175 | |
| STTH16R04C | D ² PAK, TO-220AB | 2 | 400 | 2 x 8 | 1.37 | 16 | 0.01 | 35 | 120 | 175 | |
| STTH20R04 | D ² PAK, TO-220AC, TO-220FPAC | 1 | 400 | 20 | 1.35 | 20 | 0.02 | 25 | 150 | 175 | |
| STTH30R04 | D ² PAK, 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_r) | Forward Voltage (V_F) | V_F measure condition (@ I_r) | Reverse current (I_R) | Reverse recovery time (t_r) | 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_A) | 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) |
|--------------|--|------------------|---|-------------------------------------|---------------------------|---|---------------------------|------------------------------------|---|--------------------------|
| | | | 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 | D ² PAK, 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 | D ² PAK, TO-220AC Ins, TO-220AC | 1 | 600 | 8 | 1.4 | 8 | 0.008 | 35 | 90 | 175 |
| STTH8L06 | D ² PAK, TO-220AC, TO-220FPAC, TO-220 Ins | 1 | 600 | 8 | 1.05 | 8 | 0.008 | 105 | 120 | 175 |
| STTH8R06 | D ² PAK, 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 | D ² PAK, 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 | D ² PAK, 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 | D ² PAK, 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 | D ² PAK, TO-247 | 1 | 600 | 30 | 1.25 | 30 | 0.025 | 65 | 300 | 175 |
| STTH30L06C | D ² PAK, 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_r) | Forward voltage (V_F) | V_F measure condition (@ I_r) spec | Reverse current (I_R) | Reverse recovery time (t_r) | Non-repetitive peak forward surge current (I_{FSM}) | Junction temperature (T) |
|--------------|------------------|------------------|---|-------------------------------------|---------------------------|---|---------------------------|---------------------------------|---|--------------------------|
| | | | max (V) | max (A) | max (V) | (A) | max (mA) | max (ns) | max (A) | max (°C) |
| SSTH30S06 | DO-247 | 1 | 600 | 30 | 2.2 | 30 | 0.05 | 30 | 180 | 175 |
| SSTH31AC06 | TO-3PF, TP-247LL | 1 | 600 | 30 | 1.75 | 30 | 0.01 | 65 | 150 | 175 |
| SSTH50W06S | TO-247 | 1 | 600 | 50 | 1.6 | 50 | 0.05 | 45 | 390 | 175 |
| SSTH6006TV | ISOTOP | 2 | 600 | 2 x 30 | 1.4 | 30 | 0.025 | 50 | 210 | 150 |
| SSTH6006W | TO-247 | 1 | 600 | 60 | 1.4 | 60 | 0.05 | 60 | 400 | 175 |
| SSTH60L06 | TO-247 | 1 | 600 | 60 | 1.2 | 60 | 0.05 | 70 | 600 | 175 |
| SSTH60AC06C | TO-247, TO-247LL | 2 | 600 | 2 x 30 | 1.7 | 60 | 0.01 | 40 | 280 | 175 |
| SSTH60L06C | TO-247 | 2 | 600 | 2 x 30 | 1.55 | 60 | 0.025 | 65 | 210 | 175 |
| SSTH60L06TV | ISOTOP | 2 | 600 | 2 x 30 | 1.25 | 60 | 0.025 | 65 | 210 | 150 |
| SSTH8006 | DO-247 | 1 | 600 | 80 | 1.3 | 80 | 0.05 | 70 | 500 | 150 |
| SSTH80S06W | TO-247 | 1 | 600 | 80 | 2.15 | 80 | 0.05 | 45 | 400 | 175 |
| SSTH100W06C | TO-247 | 1 | 600 | 80 | 2.15 | 80 | 0.05 | 45 | 400 | 175 |
| SSTH120L06TV | ISOTOP | 2 | 600 | 2 x 60 | 1.2 | 60 | 0.05 | 70 | 500 | 150 |
| SSTH200L06TV | ISOTOP | 2 | 600 | 2 x 100 | 1.2 | 100 | 0.08 | 80 | 800 | 150 |
| SSTH200W06T | 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_A) | 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 _r) | Forward voltage (V _f) | V _r measure condition (@ I _r) | Reverse current (I _r) | Reverse recovery time (t _r) | 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 | D ² PAK, 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 | D ² PAK, 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 | D ² PAK, 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 | DBPAK | 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 | DBPAK | 2 | 40 | 3 | 0.57 | 3 | 0.01 | 75 | 150 |
| 45 V | | | | | | | | | |
| STPS1045BY | DBPAK | 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 | DBPAK | 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 | D ² PAK | 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 | D ² PAK | 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 | D ² PAK | 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 | D ² PAK | 2 | 100 | 2 x 10 | 0.73 | 10 | 0.0045 | 250 | 175 |
| STPS41H100CGY-TR | D ² PAK | 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 | D ² PAK | 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 | D ² PAK | 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_r) | Forward voltage (V_f) | V_f measure condition (@ I_r) | Reverse current (I_R) | Reverse recovery time (t_r) | Non-repetitive peak forward surge current (I_{FSM}) | Junction temperature (T) |
|------------------------|--------------------------|------------------|---|-------------------------------------|---------------------------|------------------------------------|---------------------------|---------------------------------|---|--------------------------|
| | | | 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 | D ² PAK, 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 | D ² PAK | 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 |
| STTH3R04DY | TO-220AC | 1 | 400 | 30 | 1 | 30 | 0.03 | 45 | 280 | 175 |
| STTH3R04WY | 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 | D ² PAK | 1 | 600 | 5 | 3.2 | 5 | 0.03 | 35 | 50 | 175 |
| STTH8R06GY-TR | D ² PAK | 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_r) | Forward voltage (V_f) | V_f measure condition (@ I_r) | Reverse current (I_r) | Reverse recovery time (t_r) | Non-repetitive peak forward surge current (I_{FSM}) | Junction temperature (T) |
|------------------------|--------------------|------------------|---|-------------------------------------|---------------------------|------------------------------------|---------------------------|---------------------------------|---|--------------------------|
| | | | max (V) | max (A) | max (V) | (A) | max (mA) | max (ns) | max (A) | max (°C) |
| STTH30ST06GY-TR | D ² PAK | 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 | D ² PAK | 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 | D ² PAK | 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 | D ² PAK | 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_p) | Forward voltage (V_f) | V_f measure condition (@ I_p) | Reverse current (I_r) | Total capacitive charge (Qc) | Non-repetitive peak forward surge current (I_{FSM}) | Junction temperature (T) |
|------------------|--------------------|------------------|---|-------------------------------------|---------------------------|------------------------------------|---------------------------|------------------------------|---|--------------------------|
| | | | 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 | D ² PAK | 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 | D ² PAK | 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_p) | Forward voltage (V_f) | V_f measure condition (@ I_p) | Reverse current (I_r) | Total capacitance | Non-repetitive peak forward surge current (I_{FSM}) | Junction temperature (T) |
|--------------|---------|------------------|---|-------------------------------------|---------------------------|------------------------------------|---------------------------|-------------------|---|--------------------------|
| | | | 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 |