

# SURFACE MOUNT TVS DIODE

## Electrical Characteristics, 5.0 to 30 Volts

## TRANSIENT VOLTAGE SUPPRESSOR DIODE

Operating Temperature: -55°C to 150°C

| RF Part Number | Working Peak Reverse Voltage<br>$V_{RWM}$ (V) | Break Down Voltage |      |           | Maximum Clamping Voltage<br>$V_{RSM}$ (V) | Maximum Reverse Current & Leakage |                           |              |               |                           |              |               |                           |              |
|----------------|-----------------------------------------------|--------------------|------|-----------|-------------------------------------------|-----------------------------------|---------------------------|--------------|---------------|---------------------------|--------------|---------------|---------------------------|--------------|
|                |                                               | $V_{BR}$ (V)       |      | @ IT (mA) |                                           | *A Size                           |                           |              | *B Size       |                           |              | *C Size       |                           |              |
|                |                                               | Min                | Max  |           |                                           | Current                           | Leakage                   | Device       | Current       | Leakage                   | Device       | Current       | Leakage                   | Device       |
|                |                                               |                    |      |           |                                           | $I_{PPM}$ (A)                     | at $V_{NWM}$ $I_R(\mu A)$ | Marking Code | $I_{PPM}$ (A) | at $V_{NWM}$ $I_R(\mu A)$ | Marking Code | $I_{PPM}$ (A) | at $V_{NWM}$ $I_R(\mu A)$ | Marking Code |
| SM*J5.0        | 5                                             | 6.4                | 7.3  | 10        | 9.6                                       | 32                                | 800                       | AD           | 62.5          | 800                       | KD           | 164           | 1000                      | GDD          |
| SM*J5.0A       | 5                                             | 6.4                | 7    | 10        | 9.2                                       | 34                                | 800                       | AE           | 65.2          | 800                       | KE           | 171           | 1000                      | GDE          |
| SM*J6.0        | 6                                             | 6.7                | 8.2  | 10        | 11.4                                      | 27.6                              | 800                       | AF           | 52.6          | 800                       | KF           | 138           | 1000                      | GDF          |
| SM*J6.0A       | 6                                             | 6.7                | 7.4  | 10        | 10.3                                      | 30.5                              | 800                       | AG           | 58.3          | 800                       | KG           | 152           | 1000                      | GDG          |
| SM*J6.5        | 6.5                                           | 7.2                | 8.8  | 10        | 12.3                                      | 25.6                              | 500                       | AH           | 48.7          | 500                       | KH           | 128           | 500                       | GDH          |
| SM*J6.5A       | 6.5                                           | 7.2                | 8    | 10        | 11.2                                      | 28                                | 500                       | AK           | 53.6          | 500                       | KK           | 140           | 500                       | GDK          |
| SM*J7.0        | 7                                             | 7.8                | 9.5  | 10        | 13.3                                      | 23.6                              | 200                       | AL           | 45.1          | 200                       | KL           | 116           | 200                       | GDL          |
| SM*J7.0A       | 7                                             | 7.8                | 8.6  | 10        | 12                                        | 26                                | 200                       | AM           | 50            | 200                       | KM           | 131           | 200                       | GDM          |
| SM*J7.5        | 7.5                                           | 8.3                | 10.3 | 1         | 14.3                                      | 22                                | 100                       | AN           | 42            | 100                       | KN           | 110           | 100                       | GDN          |
| SM*J7.5A       | 7.5                                           | 8.3                | 9.2  | 1         | 12.9                                      | 24.4                              | 100                       | AP           | 46.5          | 100                       | KP           | 122           | 100                       | GDP          |
| SM*J8.0        | 8                                             | 8.9                | 10.9 | 1         | 15                                        | 21                                | 50                        | AQ           | 40            | 50                        | KQ           | 105           | 50                        | GDQ          |
| SM*J8.0A       | 8                                             | 8.9                | 9.8  | 1         | 13.6                                      | 23                                | 50                        | AR           | 44.1          | 50                        | KR           | 115           | 50                        | GDR          |
| SM*J8.5        | 8.5                                           | 9.4                | 11.5 | 1         | 15.9                                      | 19.8                              | 10                        | AS           | 37.7          | 20                        | KS           | 99            | 25                        | GDS          |
| SM*J8.5A       | 8.5                                           | 9.4                | 10.4 | 1         | 14.4                                      | 21.8                              | 10                        | AT           | 41.7          | 20                        | KT           | 109           | 20                        | GDT          |
| SM*J9.0        | 9                                             | 10                 | 12.2 | 1         | 16.9                                      | 18.6                              | 5                         | AU           | 35.5          | 10                        | KU           | 93            | 10                        | GDU          |
| SM*J9.0A       | 9                                             | 10                 | 11.1 | 1         | 15.4                                      | 20.4                              | 5                         | AV           | 39            | 10                        | KV           | 102           | 10                        | GDV          |
| SM*J10         | 10                                            | 11.1               | 13.6 | 1         | 18.8                                      | 16.7                              | 5                         | AW           | 31.9          | 5                         | KW           | 83            | 5                         | GDW          |
| SM*J10A        | 10                                            | 11.1               | 12.3 | 1         | 17                                        | 18.5                              | 5                         | AX           | 35.3          | 5                         | KX           | 92            | 5                         | GDX          |
| SM*J11         | 11                                            | 12.2               | 14.9 | 1         | 20.1                                      | 15.6                              | 5                         | AY           | 29.9          | 5                         | KY           | 78            | 5                         | GDY          |
| SM*J11A        | 11                                            | 12.2               | 13.5 | 1         | 18.2                                      | 17.3                              | 5                         | AZ           | 33            | 5                         | KZ           | 86            | 5                         | GDZ          |
| SM*J12         | 12                                            | 13.3               | 16.3 | 1         | 22                                        | 14.3                              | 5                         | BD           | 27.3          | 5                         | LD           | 71            | 5                         | GED          |
| SM*J12A        | 12                                            | 13.3               | 14.7 | 1         | 19.9                                      | 15.8                              | 5                         | BE           | 30.2          | 5                         | LE           | 79            | 5                         | GEE          |
| SM*J13         | 13                                            | 14.4               | 17.6 | 1         | 23.8                                      | 13                                | 5                         | BF           | 25            | 5                         | LF           | 66            | 5                         | GEF          |
| SM*J13A        | 13                                            | 14.4               | 15.9 | 1         | 21.5                                      | 14.6                              | 5                         | BG           | 27.9          | 5                         | LG           | 73            | 5                         | GEG          |
| SM*J14         | 14                                            | 15.6               | 19.1 | 1         | 25.8                                      | 12.2                              | 5                         | BH           | 23.3          | 5                         | LH           | 61            | 5                         | GEH          |
| SM*J14A        | 14                                            | 15.6               | 17.2 | 1         | 23.2                                      | 13.5                              | 5                         | BK           | 25.8          | 5                         | LK           | 67            | 5                         | GEK          |
| SM*J15         | 15                                            | 16.7               | 20.4 | 1         | 26.9                                      | 11.7                              | 5                         | BL           | 22.3          | 5                         | LL           | 58            | 5                         | GEL          |
| SM*J15A        | 15                                            | 16.7               | 18.5 | 1         | 24.4                                      | 12.9                              | 5                         | BM           | 24            | 5                         | LM           | 64            | 5                         | GEM          |
| SM*J16         | 16                                            | 17.8               | 21.8 | 1         | 28.8                                      | 10.9                              | 5                         | BN           | 20.8          | 5                         | LN           | 54            | 5                         | GEN          |
| SM*J16A        | 16                                            | 17.8               | 19.7 | 1         | 26                                        | 12                                | 5                         | BP           | 16.7          | 5                         | LP           | 60            | 5                         | GEP          |
| SM*J17         | 17                                            | 18.9               | 23.1 | 1         | 30.5                                      | 10.3                              | 5                         | BQ           | 18.5          | 5                         | LQ           | 51            | 5                         | GEQ          |
| SM*J17A        | 17                                            | 18.9               | 20.9 | 1         | 27.6                                      | 11.4                              | 5                         | BR           | 15.2          | 5                         | LR           | 57            | 5                         | GER          |
| SM*J18         | 18                                            | 20                 | 24.4 | 1         | 32.2                                      | 9.7                               | 5                         | BS           | 16.9          | 5                         | LS           | 48            | 5                         | GES          |
| SM*J18A        | 18                                            | 20                 | 22.1 | 1         | 29.2                                      | 10.7                              | 5                         | BT           | 14            | 5                         | LT           | 53            | 5                         | GET          |
| SM*J20         | 20                                            | 22.2               | 27.1 | 1         | 35.8                                      | 8.7                               | 5                         | BU           | 15.4          | 5                         | LU           | 43            | 5                         | GEU          |
| SM*J20A        | 20                                            | 22.2               | 24.5 | 1         | 32.4                                      | 9.7                               | 5                         | BV           | 12.4          | 5                         | LV           | 48            | 5                         | GEV          |
| SM*J22         | 22                                            | 24.4               | 29.8 | 1         | 39.4                                      | 8                                 | 5                         | BW           | 12            | 5                         | LW           | 39            | 5                         | GEW          |
| SM*J22A        | 22                                            | 24.4               | 26.9 | 1         | 35.5                                      | 8.8                               | 5                         | BX           | 13.2          | 5                         | LX           | 44            | 5                         | GEX          |
| SM*J24         | 24                                            | 26.7               | 32.6 | 1         | 43                                        | 7.3                               | 5                         | BY           | 11.2          | 5                         | LY           | 36            | 5                         | GEY          |
| SM*J24A        | 24                                            | 26.7               | 29.5 | 1         | 38.9                                      | 8                                 | 5                         | BZ           | 12.4          | 5                         | LZ           | 40            | 5                         | GEZ          |
| SM*J26         | 26                                            | 28.9               | 35.3 | 1         | 46.6                                      | 6.7                               | 5                         | CD           | 10.2          | 5                         | MD           | 33            | 5                         | GGD          |
| SM*J26A        | 26                                            | 28.9               | 31.9 | 1         | 42.1                                      | 7.4                               | 5                         | CE           | 11.3          | 5                         | ME           | 37            | 5                         | GGE          |
| SM*J28         | 28                                            | 31.1               | 38   | 1         | 50                                        | 6.3                               | 5                         | CF           | 9.3           | 5                         | MF           | 31            | 5                         | GGF          |
| SM*J28A        | 28                                            | 31.1               | 34.4 | 1         | 45.4                                      | 6.9                               | 5                         | CG           | 10.3          | 5                         | MG           | 34            | 5                         | GGG          |
| SM*J30         | 30                                            | 33.3               | 40.7 | 1         | 53.5                                      | 5.8                               | 5                         | CH           | 8.4           | 5                         | MH           | 29            | 5                         | GGH          |
| SM*J30A        | 30                                            | 33.3               | 36.8 | 1         | 48.4                                      | 6.5                               | 5                         | CK           | 9.3           | 5                         | MK           | 32            | 5                         | GGK          |

\*Replace with A, B, or C, depending on wattage and size needed.