

# 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<br>$I_{PPM}$ (A)          | Leakage at $V_{NWM}$<br>$I_R(\mu A)$ | Device Marking Code | Current<br>$I_{PPM}$ (A) | Leakage at $V_{NWM}$<br>$I_R(\mu A)$ | Device Marking Code | Current<br>$I_{PPM}$ (A) | Leakage at $V_{NWM}$<br>$I_R(\mu A)$ | Device 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.