

Protection of Voltage Sensitive Components.

#### FEATURES

- Low profile package.
- Transient protection for data line to

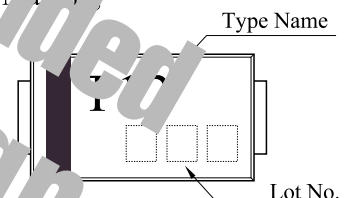
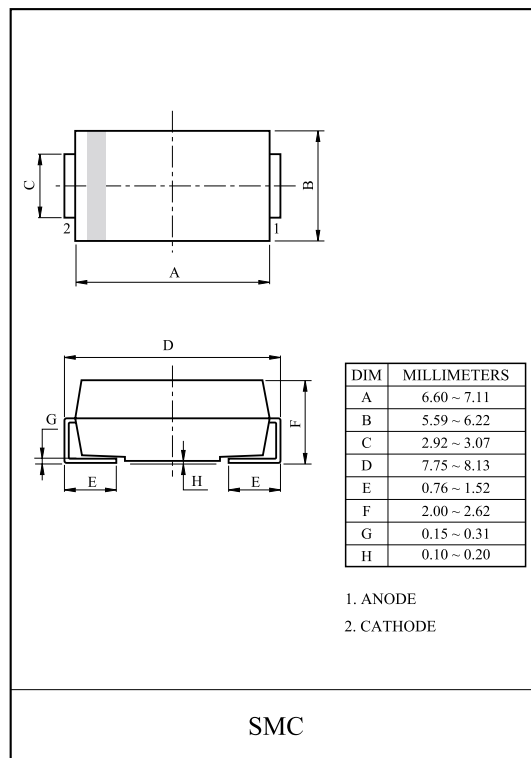
#### APPLICATIONS

- Devices for Unidirectional Applications.
- Automotive Controller.
- Notebooks, Desktops, & Servers.

#### MAXIMUM RATING (Ta=25°C)

| CHARACTERISTIC                    | SYMBOL           | RATING    | UNIT |
|-----------------------------------|------------------|-----------|------|
| Peak Pulse Power (tp=10/100 μs)   | P <sub>PK</sub>  | 500       | W    |
| Peak Pulse Current (tp=10/100 μs) | I <sub>PP</sub>  | 7.4       | A    |
| Operating Temperature             | T <sub>J</sub>   | -55 ~ 150 | °C   |
| Storage Temperature               | T <sub>stg</sub> | -55 ~ 150 | °C   |

- \* Notes) : (1) Derated above Ta=25°C per power derating curve.  
 (2) Mounted on 0.31×0.31 (8.0×8.0mm) copper pads to each terminal.  
 (3) Mounted on minimum recommended pad lay out

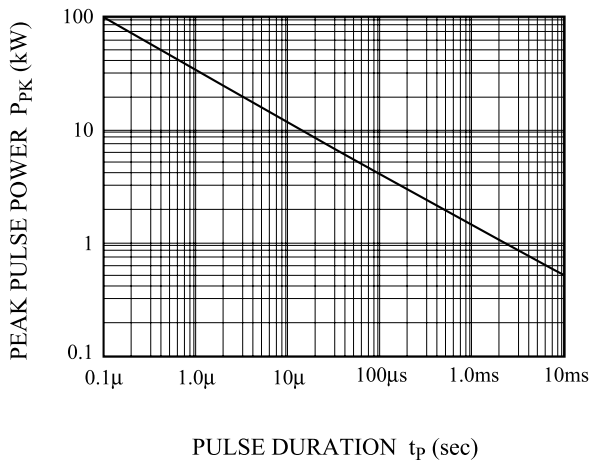


#### ELECTRICAL CHARACTERISTICS (Ta=25°C)

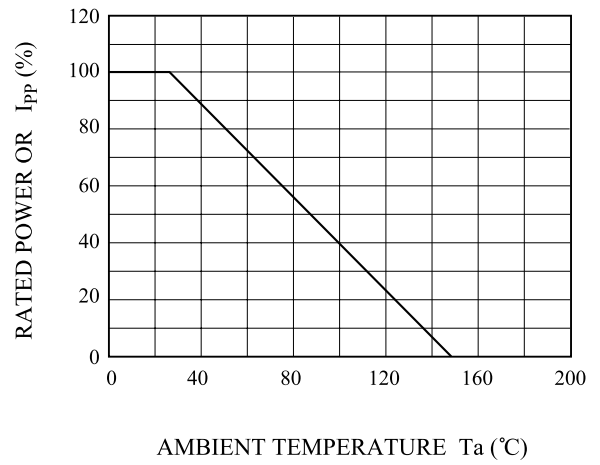
| CHARACTERISTIC            | SYMBOL           | TEST CONDITION                        | MIN. | TYP. | MAX. | UNIT |
|---------------------------|------------------|---------------------------------------|------|------|------|------|
| Reverse Stand-Off Voltage | V <sub>RWM</sub> | -                                     | -    | -    | 12   | V    |
| Reverse Breakdown Voltage | V <sub>BR</sub>  | I <sub>T</sub> =1.0mA                 | 13.3 | -    | 14.7 | V    |
| Reverse Leakage Current   | I <sub>R</sub>   | V <sub>RWM</sub> =12V                 | -    | -    | 5.0  | μA   |
| Clamping Voltage          | V <sub>C</sub>   | I <sub>PP</sub> =75.4A, tp=10/1000 μs | -    | -    | 19.9 | V    |

# PG12NSSMC

NON-REPETITIVE PEAK PULSE  
POWER vs. PULSE TIME



POWER DERATION CURVE



PULSE WAVEFORM

