

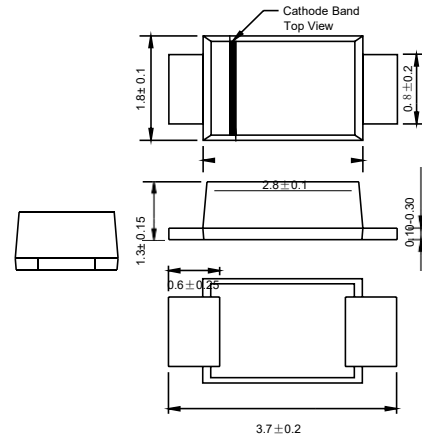
### Features

- Metal to silicon rectifier, majority carrier conduction.
- For use in low voltage, high frequency inverters free

wheeling, and polarity protection applications.

- Low power loss, high efficiency.
- High current capability, low  $V_F$ .
- High surge capacity.
- Glass passivated

### SOD-123FL



Dimensions in millimeters

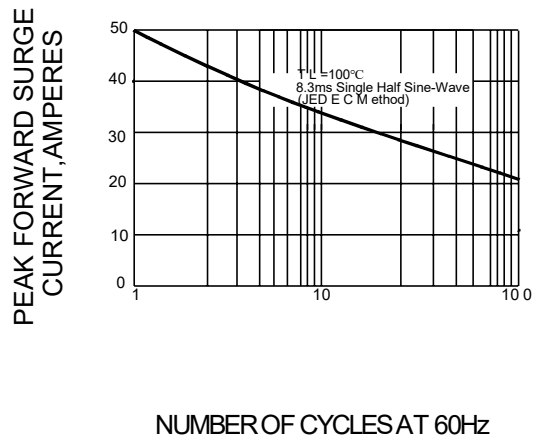
### Absolute Maximum Ratings\*

$T_A = 25^\circ\text{C}$  unless otherwise noted

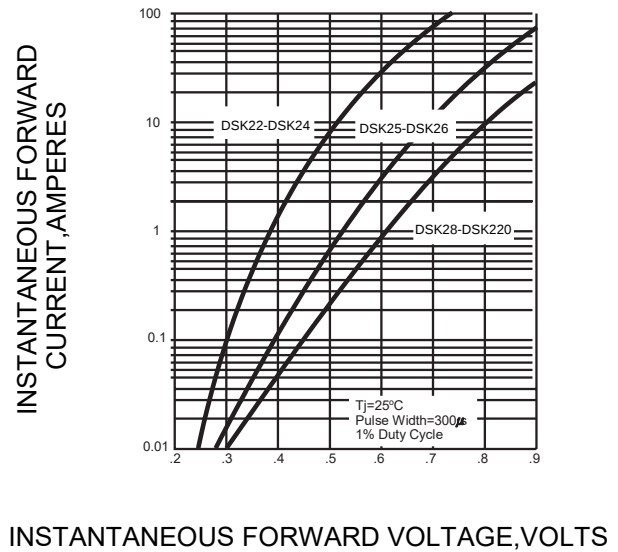
| CHARACTERISTICS                                                                                         | SYMBOL           | DSK22        | DSK23 | DSK24 | DSK25 | DSK26 | DSK28 | DSK210 | DSK215 | DSK220 | UNIT |
|---------------------------------------------------------------------------------------------------------|------------------|--------------|-------|-------|-------|-------|-------|--------|--------|--------|------|
| Maximum Recurrent Peak Reverse Voltage                                                                  | V <sub>RRM</sub> | 20           | 30    | 40    | 50    | 60    | 80    | 100    | 150    | 200    | V    |
| Maximum RMS Voltage                                                                                     | V <sub>RMS</sub> | 14           | 21    | 28    | 35    | 42    | 56    | 70     | 100    | 125    | V    |
| Maximum DC Blocking Voltage                                                                             | V <sub>DC</sub>  | 20           | 30    | 40    | 50    | 60    | 80    | 100    | 150    | 200    | V    |
| Maximum Average Forward Rectified Current @T <sub>L</sub> =100 °C                                       | I(AV)            | 2.0          |       |       |       |       |       |        |        |        | A    |
| Peak Forward Surge Current<br>8.3ms Single Half Sine-Wave<br>Super Imposed On Rated Load (JEDEC Method) | I <sub>FSM</sub> | 60           |       |       |       |       |       |        |        |        | A    |
| Maximum Forward Voltage at 2.0A DC                                                                      | V <sub>F</sub>   | 0.45         | 0.5   | 0.55  | 0.7   |       | 0.85  |        | 0.92   | 0.95   | V    |
| Maximum DC Reverse Current @T <sub>J</sub> =25°C<br>at Rated DC Blocking Voltage @T <sub>J</sub> =100°C | I <sub>R</sub>   | 1.0<br>20    |       |       |       |       |       |        |        |        | mA   |
| Typical Junction Capacitance (Note1)                                                                    | C <sub>J</sub>   | 200          |       |       |       |       |       |        |        |        | pF   |
| Typical Thermal Resistance (Note2)                                                                      | R <sub>θJL</sub> | 15           |       |       |       |       |       |        |        |        | °C/W |
| Operating Temperature Range                                                                             | T <sub>J</sub>   | -55 to +150  |       |       |       |       |       |        |        |        | °C   |
| Storage Temperature Range                                                                               | T <sub>STG</sub> | -55 to + 150 |       |       |       |       |       |        |        |        | °C   |

### RATINGS AND CHARACTERISTIC CURVES

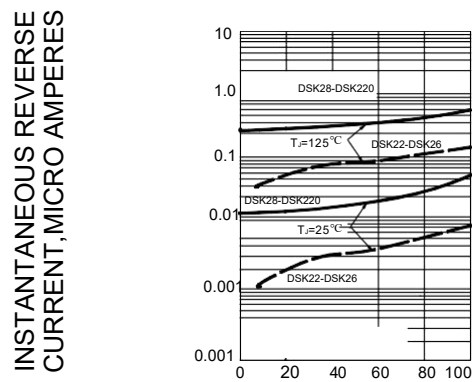
**FIG.1--PEAK FORWARD SURGE CURRENT**



**FIG.2 -- TYPICAL FORWARD CHARACTERISTICS**



**FIG.3 -- TYPICAL REVERSE CHARACTERISTICS**



PERCENT OF RATED PEAK REVERSE VOLTAGE,