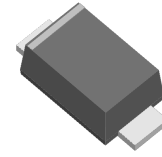


Features

- Low reverse leakage
- High forward surge capability
- High reliability
- High temperature soldering guaranteed: 260 °C / 10seconds
- Lead and body according with RoHS standard



SOD-123FL

Mechanical Data

- Case: SOD-123FL Molded plastic body
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Pure tin plated, lead free

Maximum Ratings & Electrical Characteristics

Ratings at TA = 25°C unless otherwise specified.

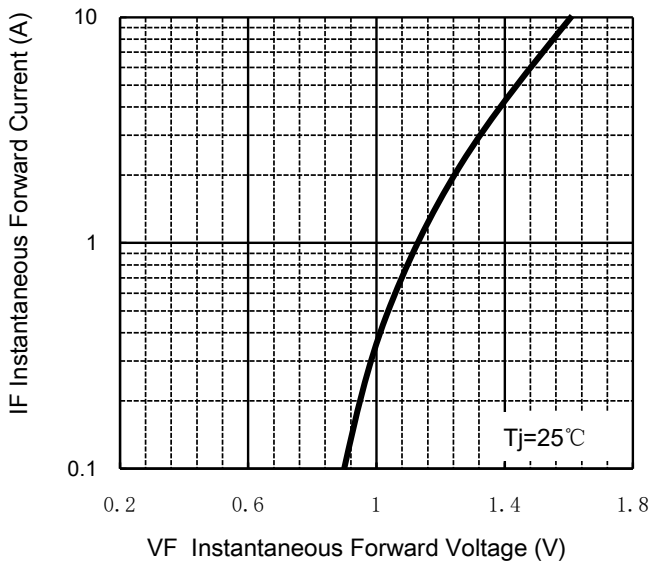
| Characteristic | Symbol | DRS1A | DRS1B | DRS1D | DRS1G | DRS1J | DRS1K | DRS1M | Units |
|---------------------------------------------------------------------------|-----------------|-----------------|-------|-------|-------|-------|-------|-------|-------|
| Maximum repetitive Peak reverse voltage | V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS reverses voltage | V_{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC blocking voltage | V_{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum average forward rectified current | $I_{F(AV)}$ | 1.0 | | | | | | | A |
| Non-repetitive Peak forward surge current 8.3ms single half-sine-wave, | I_{FSM} | 30 | | | | | | | A |
| Maximum forward voltage @ $I_F=1A$ | V_F | 1.3 | | | | | | | V |
| @ V_{DC} | | 5 | | | | | | | μA |
| Maximum Reverse current | I_R | 100 | | | | | | | |
| $I_F=0.5A$, $I_R=1.0A$, $I_{RR}=0.25A$ MAX. reverse recovery time | T_{RR} | 150 | | | | 250 | 500 | | nS |
| Typical thermal resistance (Note 1) | $R_{\theta JA}$ | 180 | | | | | | | °C /W |
| $V_R= 4.0V$, $f=1MHZ$ Type junction capacitance | C_J | 10 | | | | | | | pF |
| Operating junction and storage temperature rang | T_J, T_{STG} | - 55 ---- + 150 | | | | | | | °C |

Note:

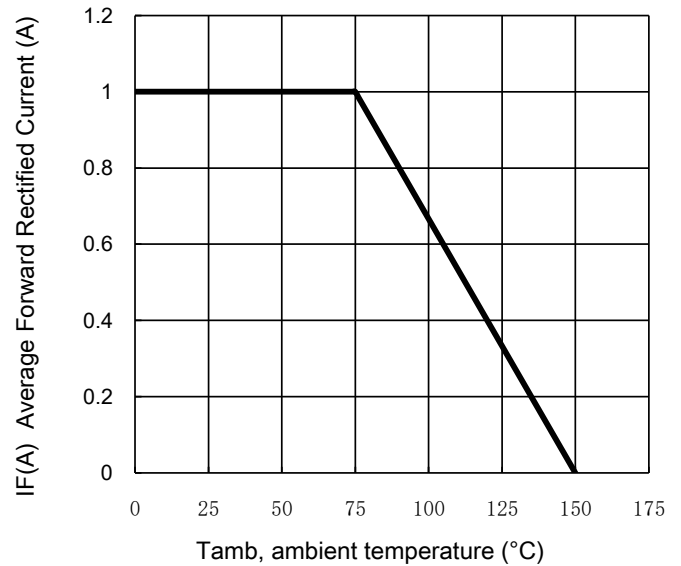
1) Thermal resistance from junction to ambient, PCB mounted.

Characteristic Curves ($T_A=25^{\circ}\text{C}$)

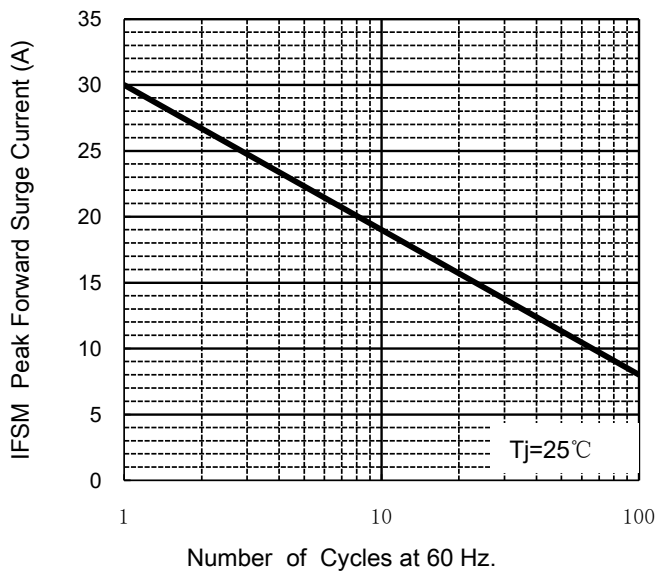
TYPICAL FORWARD CHARACTERISTIC



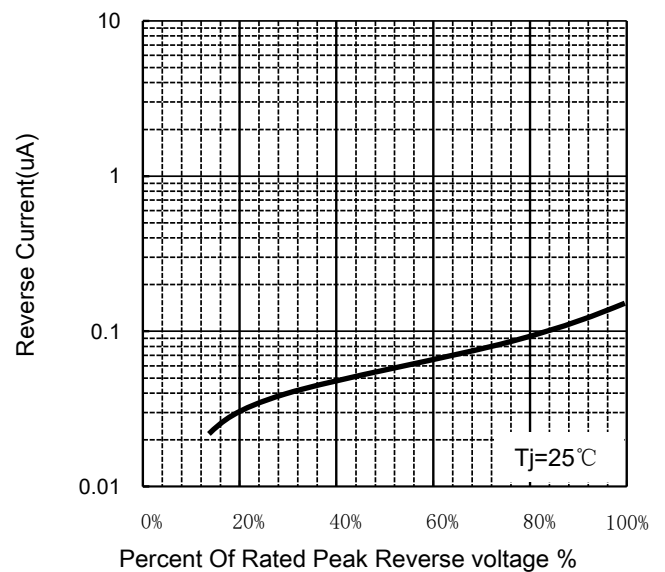
FORWARD CURRENT DERATING CURVE



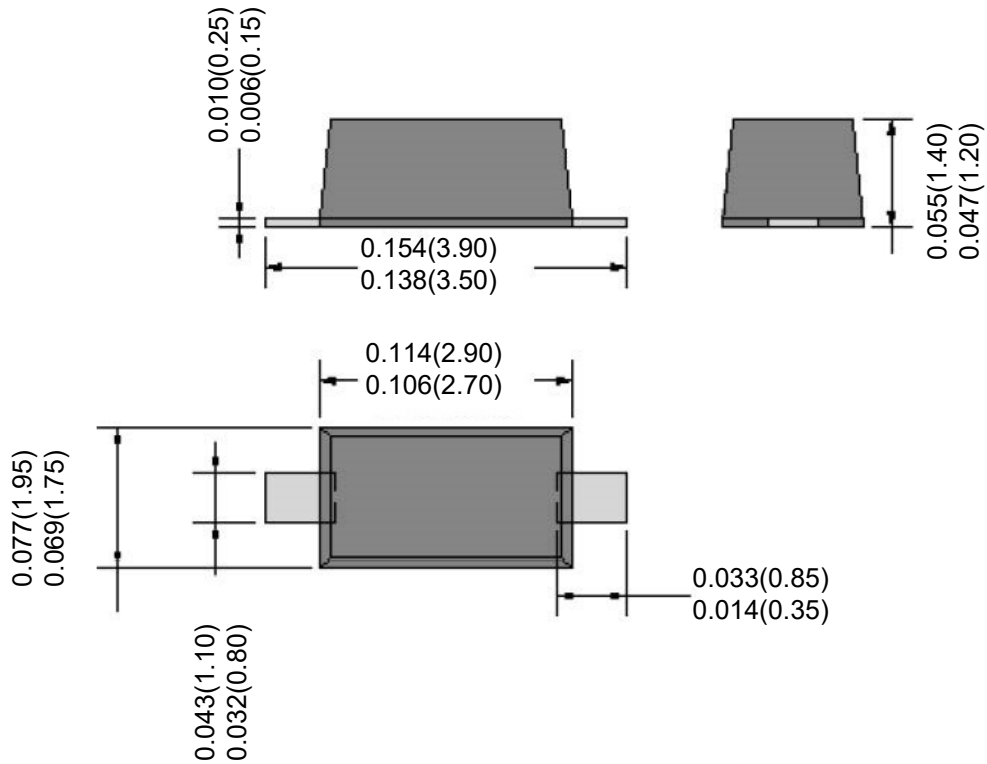
MAXIMUM NON REPETITIVE
PEAK FORWARD SURGE CURRENT



TYPICAL REVERSE CHARACTERISTICS



Package Outline Dimensions(unit:mm)



Unit: inch(mm)

Package Information

Qty : 3,000 pcs/Tape and reel