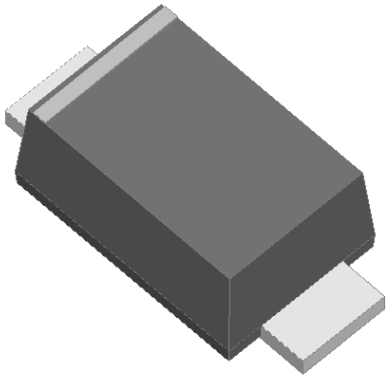
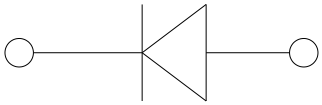
# Surface Mount Schottky Rectifier





## Features

- ●Low profile package
- ● Ideal for automated placement
- ● Guardring for overvoltage protection
- ● Low power losses, high efficiency
- ● High forward surge capability
- ● Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C

## Typical Applications

For use in low voltage high frequency inverters, freewheeling, DC/DC converters, and polarity protection applications.

## Mechanical Date

- ● **Package**: SOD-123FL
  Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant, halogen-free
- ● **Terminals**: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- ● **Polarity:** Cathode line denotes the cathode end

## ■Maximum Ratings (Ta=25℃ Unless otherwise specified）

| PARAMETER | SYMBOL | UNIT | SL24 | SL26 | SL210 |
|---|---|---|---|---|---|
| Device marking code | | | SL24 | SL26 | SL210 |
| Repetitive peak reverse voltage | $V_{RRM}$ | V | 40 | 60 | 100 |
| Average rectified output current @60Hz sine wave, Resistance load, Ta (FIG.1) | $I_O$ | A | 2.0 | | |
| Surge(non-repetitive)forward current @ 60Hz half-sine wave,1 cycle, Tj=25℃ | $I_{FSM}$ | A | 50 | | |
| Storage temperature | $T_{stg}$ | ℃ | -55 ~+150 | | |
| Junction temperature | $T_j$ | ℃ | -55 ~+150 | | |

## ■Electrical Characteristics（Ta=25℃ Unless otherwise specified）

| PARAMETER | SYMBOL | UNIT | TEST CONDITIONS | SL24 | SL26 | SL210 |
|---|---|---|---|---|---|---|
| Maximum instantaneous forward voltage drop per diode | $V_F$ | V | $I_{FM}$=2.0A | 0.47 | 0.55 | 0.75 |
| Maximum DC reverse current at rated DC blocking voltage per diode @ VRM=VRRM | $I_{RRM}$ | mA | $T_a$=25℃ | 0.5 | | 0.1 |
| | | | $T_a$=100℃ | 10 | | 5 |

Note1:Pulse test:300uS pulse widh,1% duty cycle

Note2:Pulse test:pulse widh 40mS

## ■Thermal Characteristics （$T_a$=25℃ Unless otherwise specified）

| PARAMETER | SYMBOL | UNIT | SL24 | SL26 | SL210 |
|---|---|---|---|---|---|
| Thermal Resistance | RθJ-A | ℃/W | 70[1)] | | |
| | RθJ-L | | 20[1)] | | |

Note：

(1) Thermal resistance between junction and ambient and between junction and lead mounted on P.C.B with 3mm*3mm copper pad areas.

## ■ Characteristics(Typical)

FIG1:Io-TL Curve

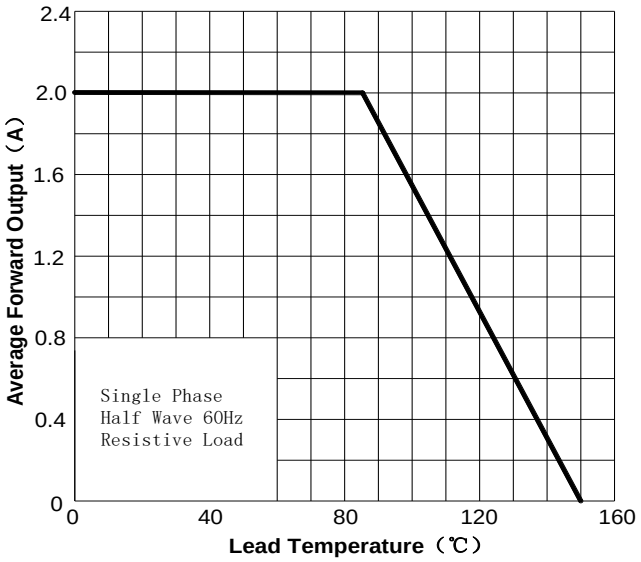



FIG2: Surge Forward Current Capability

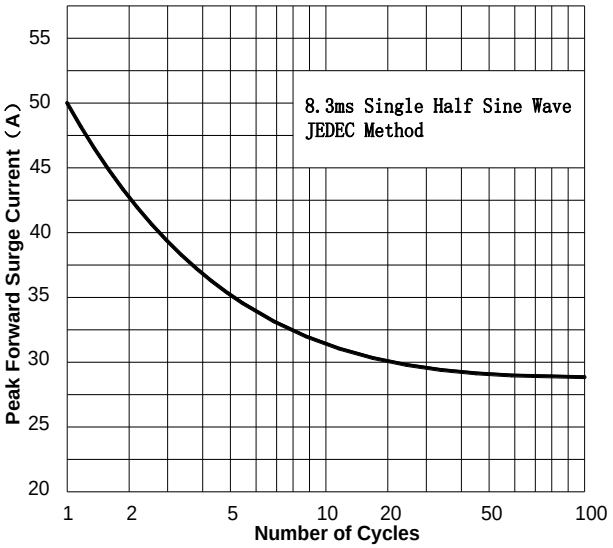



FIG3: Forward Voltage

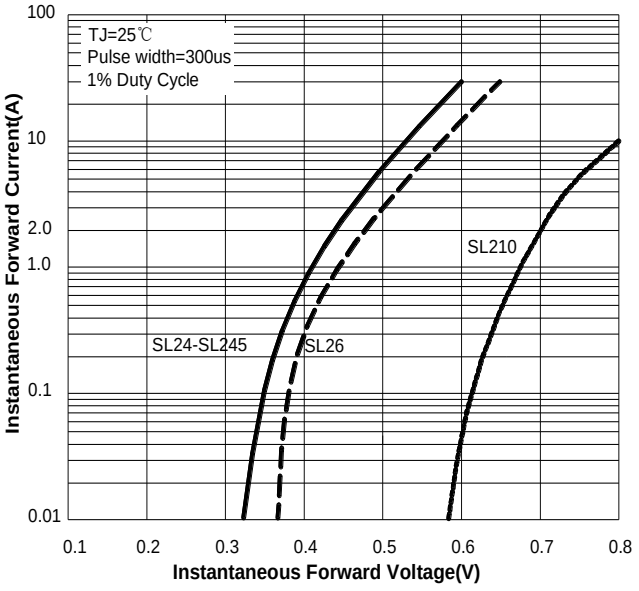
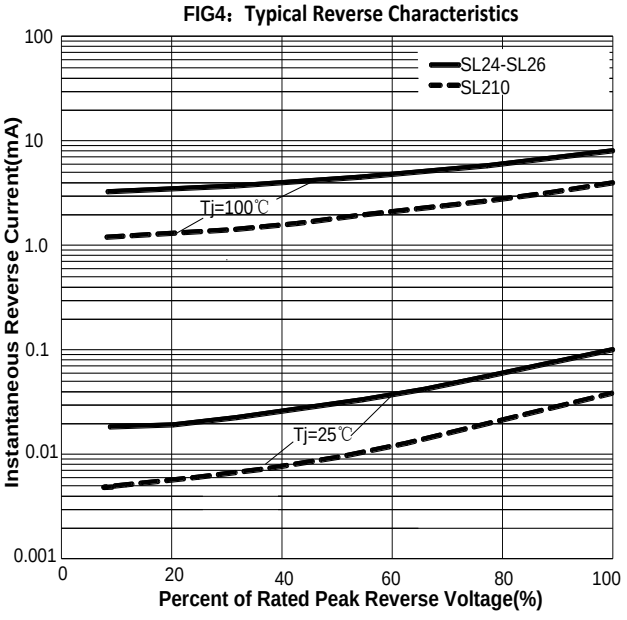


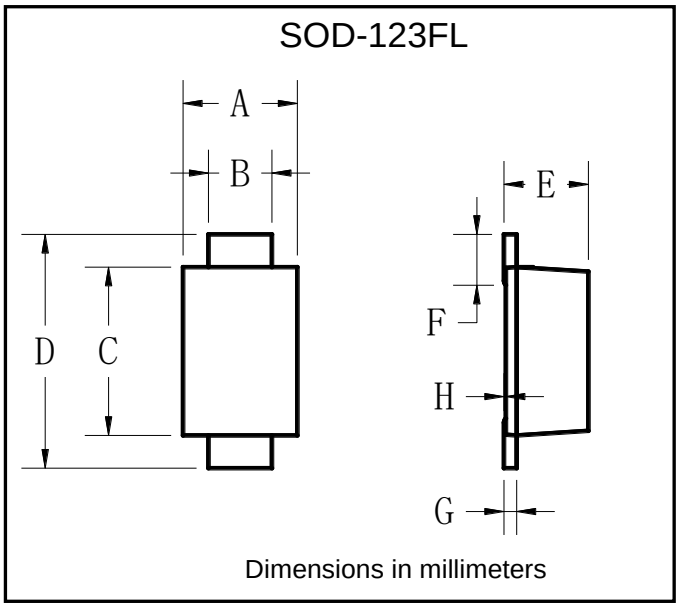

FIG4：Typical Reverse Characteristics



## ■Ordering Information (Example)

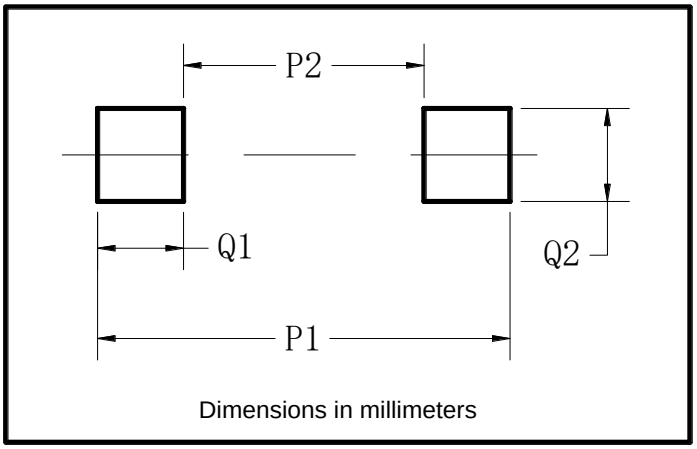
| PREFERED P/N | PACKING CODE | UNIT WEIGHT(g) | MINIMUM PACKAGE(pcs) | INNER BOX QUANTITY(pcs) | OUTER CARTON QUANTITY(pcs) | DELIVERY MODE |
|---|---|---|---|---|---|---|
| SL24 THRU SL210 | F1 | Approximate 0.0169 | 3000 | 30000 | 120000 | 7” reel |
| SL24 THRU SL210 | F2 | Approximate 0.0169 | 2500 | 25000 | 100000 | 7” reel |
| SL24 THRU SL210 | F3 | Approximate 0.0169 | 10000 | 30000 | 210000 | 13” reel |
| SL24 THRU SL210 | F4 | Approximate 0.0169 | 3000 | 27000 | 108000 | 7” reel |
| SL24 THRU SL210 | F5 | Approximate 0.0169 | 10000 | 20000 | 160000 | 13” reel |
| SL24 THRU SL210 | F6 | Approximate 0.0169 | 3000 | 12000 | 60000 | 7” reel |

## ■ Outline Dimensions




| SOD-123FL | | |
|---|---|---|
| Dim | Min | Max |
| A | 1.60 | 1.90 |
| B | 0.90 | 1.10 |
| C | 2.55 | 2.85 |
| D | 3.60 | 3.90 |
| E | 1.00 | 1.20 |
| F | 0.40 | 0.90 |
| G | 0.10 | 0.25 |
| H | 0 | 0.05 |

## ■ Suggested pad layout




| SOD-123FL | |
|---|---|
| Dim | Millimeters |
| P1 | 3.90 |
| P2 | 1.90 |
| Q1 | 1.00 |
| Q2 | 1.50 |

## Notice

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