# SMA Plastic-Encapsulate Diodes

**Schottky Rectifier Diode**

## Features

- $I_{F(AV)}$ 3A
- $V_{RRM}$ 40V
- High surge current capability
- Polarity: Color band denotes cathode
- Low peak forward voltage

**SMA**





## Applications

- Rectifier

## Chip

- MOS process chip 58mil

## Marking

- SS34P

## Limiting Values(Absolute Maximum Rating)

| Item | Symbol | Unit | Test Conditions | SLL34A |
|---|---|---|---|---|
| Repetitive Peak Reverse Voltage | $V_{RRM}$ | V | | 40 |
| Maximum RMS Voltage | $V_{RMS}$ | V | | 28 |
| Average Forward Current | $I_{F(AV)}$ | A | 60Hz Half-sine wave, Resistance load | 3.0 |
| Surge(Non-repetitive)Forward Current | $I_{FSM}$ | A | 60Hz Half-sine wave, 1 cycle, Ta=25℃ | 90 |
| Junction Temperature | $T_J$ | ℃ | | -55 ~ +150 |
| Storage Temperature | $T_{STG}$ | ℃ | | -55 ~ +150 |

## Electrical Characteristics (T=25℃ Unless otherwise specified)

| Item | Symbol | Unit | Test Condition | | SLL34A |
|---|---|---|---|---|---|
| Peak Forward Voltage | $V_F$ | V | $I_F$= 3.0A | Ta =25℃ | 0.40 |
| Peak Reverse Current | $I_{RRM1}$ | mA | $V_{RM}=V_{RRM}$ | Ta =25℃ | 0.2 |
| | $I_{RRM2}$ | | | Ta =100℃ | 20 |
| Thermal Resistance(Typical) | $R_{\theta J-A}$ | ℃/W | Between junction and ambient | | 105 |
| | $R_{\theta J-L}$ | | Between junction and lead | | 35 |
| Juction Capacitance (Typical) | Cj | pF | Measured at 1MHZ and Applied Reverse Voltage of 4.0 V.D.C | | 130 |

## Notes:

Thermal resistance from junction to ambient and from juction to lead mounted on FR4 PCB double sided copper mini pad

## Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

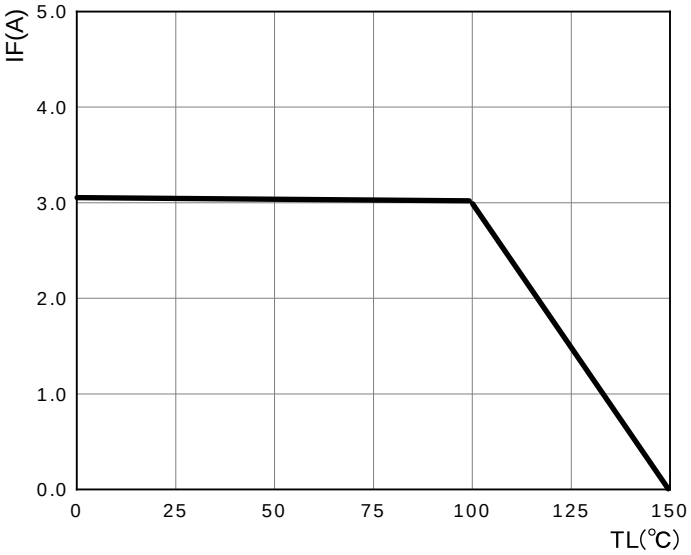



FIG 2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

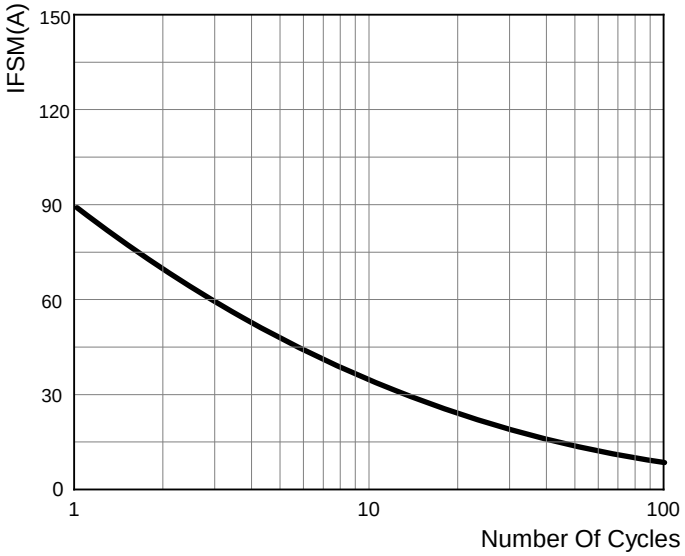



FIG.3: TYPICAL FORWARD CHARACTERISTICS

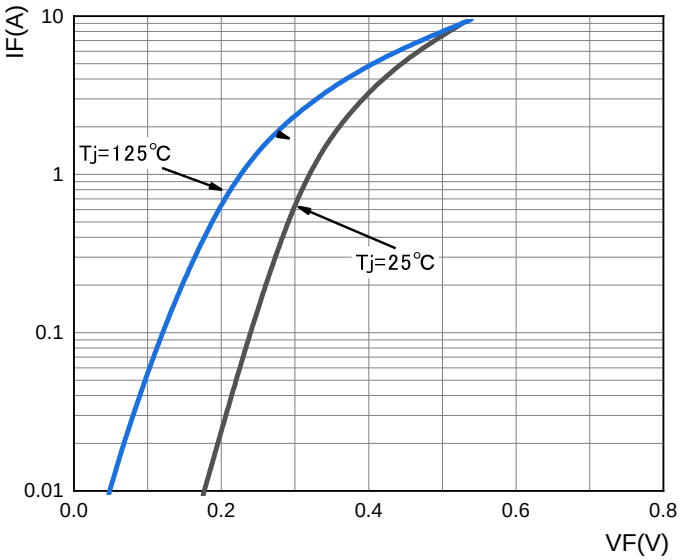
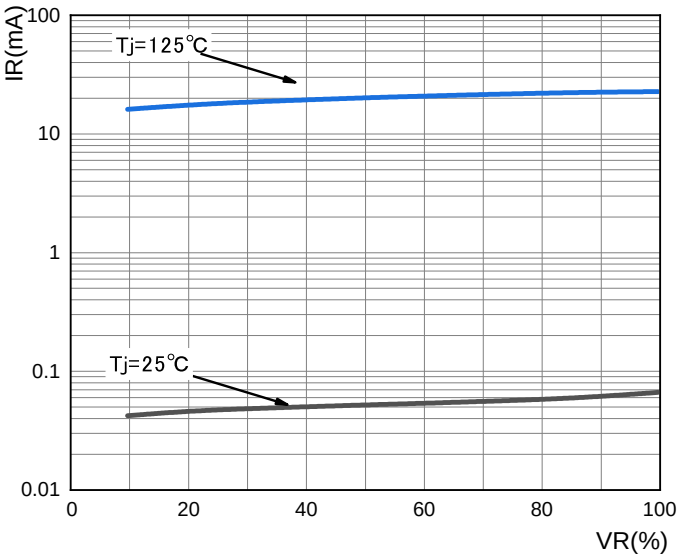
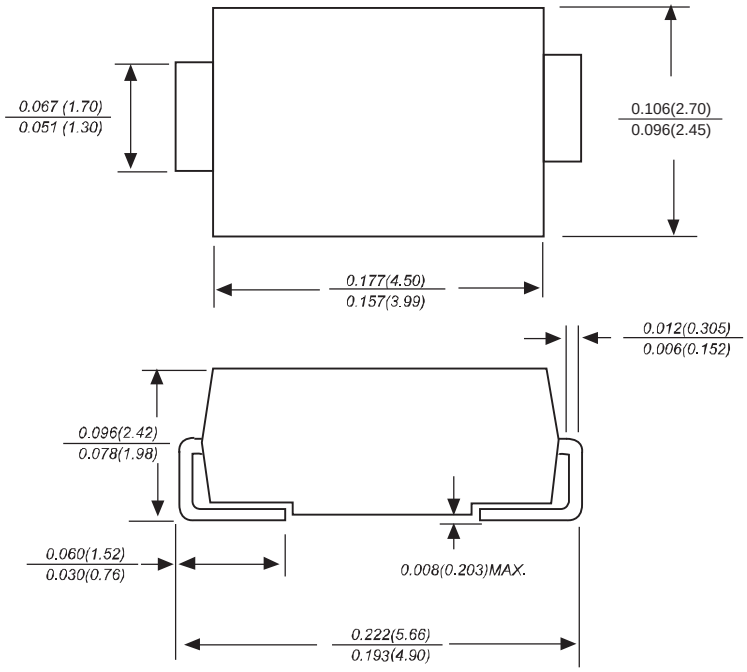



FIG.4: TYPICAL REVERSE CHARACTERISTICS

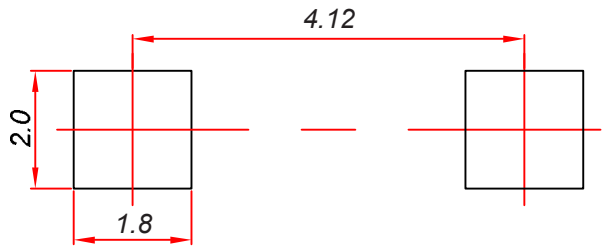


## SMA Package Outline Dimensions




*Dimensions in inches and (millimeters)*

## SMA Suggested Pad Layout




**Note:**
1.Controlling dimension:in millimeters.
2.General tolerance:± 0.05mm.
3.The pad layout is for reference purposes only.

## Reel Taping Specifications For Surface Mount Dev ices- SMA

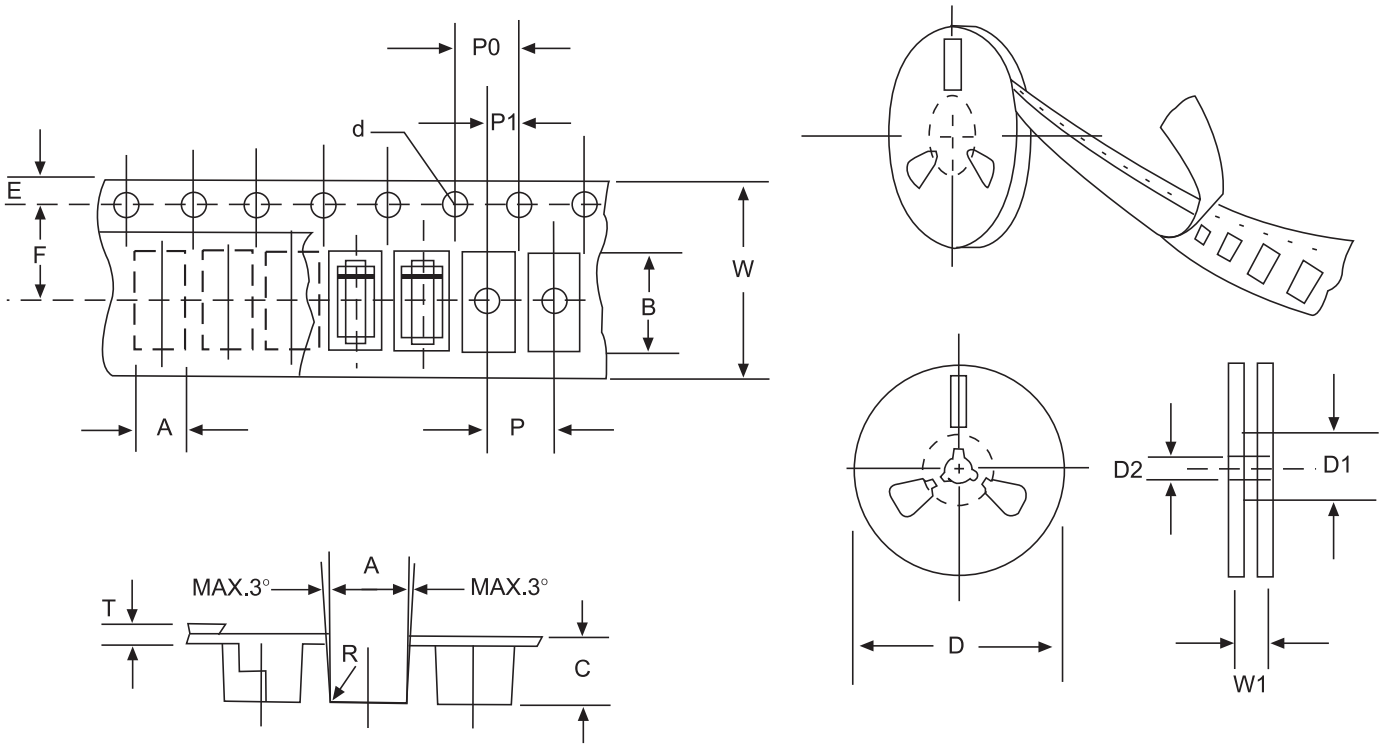



FIG:CONFIGURATION OF SURFACE MOUNTED DEVICES TAPING

| ITEM | SYMBOL | SMA mm(inch) |
|---|---|---|
| Carrier width | A | 2.79±0.1(0.110±0.004) |
| Carrier length | B | 5.33±0.1(0.210±0.004) |
| Carrier depth | C | 2.36±0.1(0.093±0.004) |
| Sprocket hole | d | 1.55±0.05(0.061±0.002) |
| Reel outside diameter | D | 279±2.0 (11± 0.079) |
| Reel inner diameter | D1 | 75 ±1.0 ( 2.95 ±0.039) |
| Feed hole diameter | D2 | 13±0.5(0.512±0.020) |
| Stroket hole position | E | 1.75±0.1(0.069±0.004) |
| Punch hole position | F | 5.5±0.05(0.217±0.002) |
| Punch hole pitch | P | 4.0±0.1(0.157±0.004) |
| Sprocket hole pitch | P0 | 4.0±0.1(0.157±0.004) |
| Embossment center | P1 | 2.0±0.1(0.079±0.004) |
| Totall tape thickness | T | 0.28±0.02(0.011±0.0008) |
| Tape width | W | 12.0±0.2(0.472±0.008) |
| Reel width | W1 | 16.8±2.0(0.661±0.079) |

NOTE:Devices are packed in accordance with EIA standard RS-481-A and specification given above.