



SS1040HE SERIES

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE 40-200V **CURRENT** 1 Ampere

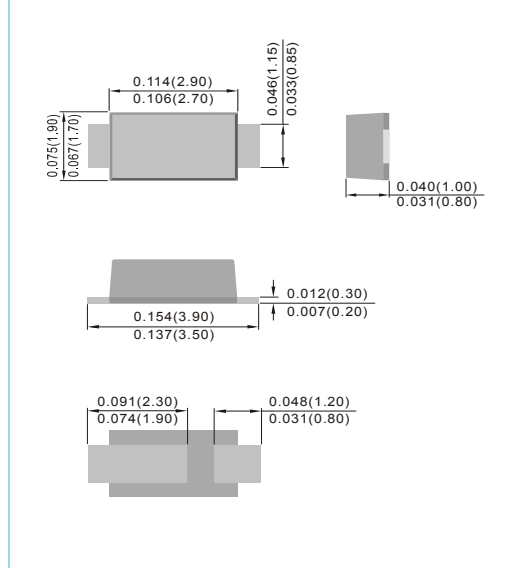
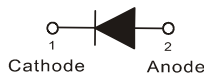
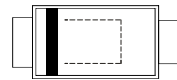
SOD-123HE Unit : inch(mm)

FEATURES

- Fast switching speed
- Surface mount package ideally suited for automatic insertion
- Electrical identical standard JEDEC.
- High conductor
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

MECHANICAL DATA

- Case: SOD-123HE, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Apporx. Weight: 0.0006 ounces, 0.0184 grams
- Polarity: Color band denotes cathode end



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

| PARAMETER | SYMBOL | SS1040HE | SS1060HE | SS10100HE | SS10150HE | SS10200HE | UNITS | |
|---|--------------------------------------|-------------|----------|-----------|-----------|-----------|-------|------|
| Marking Code | | EM | EN | EP | ERL | ES | | |
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 40 | 60 | 100 | 150 | 200 | V | |
| Maximum RMS Voltage | V _{RMS} | 28 | 42 | 70 | 105 | 140 | V | |
| Maximum DC Blocking Voltage | V _R | 40 | 60 | 100 | 150 | 200 | V | |
| Maximum Average Forward Current | I _O | 1 | | | | | | A |
| Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load | I _{FSM} | 30 | | | | | | A |
| Maximum Forward Voltage at 1A | V _F | 0.55 | 0.7 | 0.8 | 0.85 | | V | |
| Maximum DC Reverse Current | I _R | 30 | | | | | | μA |
| Typical Junction capacitance at V _R =0V, f=1MHz | C _J | 155 | 125 | 100 | 85 | | pF | |
| Typical Thermal Resistance, Junction to Ambient (Note 2) Junction to Case (Note 1) | R _{θJA} R _{θJC} | | | | 185 | | | °C/W |
| Operating Junction Temperature and Storage Temperature Range | T _J , T _{STG} | -55 to +150 | | | | | | °C |

NOTES:

1. Mounted on a FR4 PCB, single-sided copper, with 100cm² copper pad area.
2. Mounted on a FR4 PCB, single-sided copper, mini pad.



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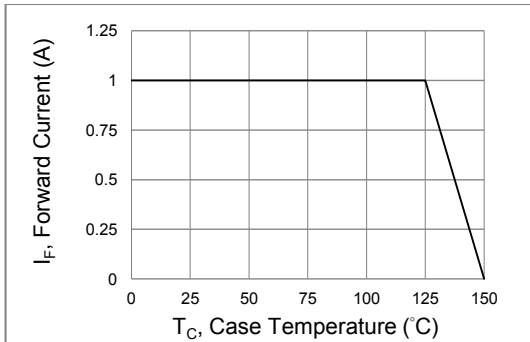


Fig.1 Forward Current Derating Curve

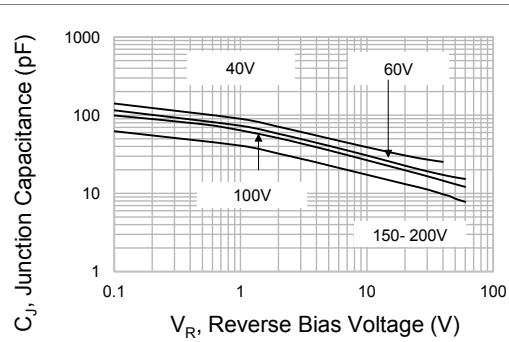


Fig.2 Typical Junction Capacitance

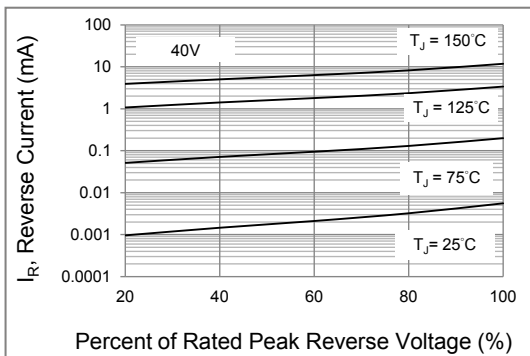


Fig.3 Typical Reverse Characteristics

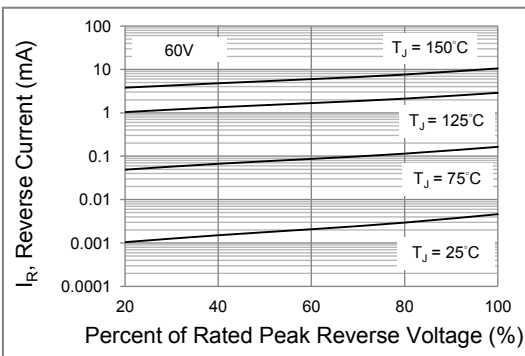


Fig.4 Typical Reverse Characteristics

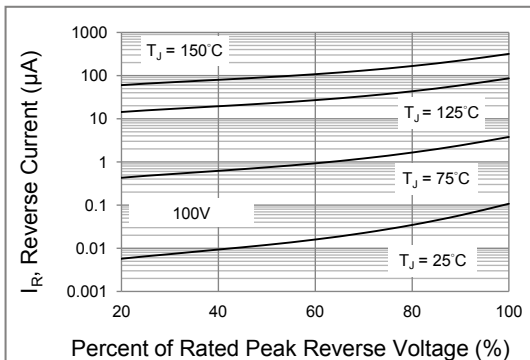


Fig.5 Typical Reverse Characteristics

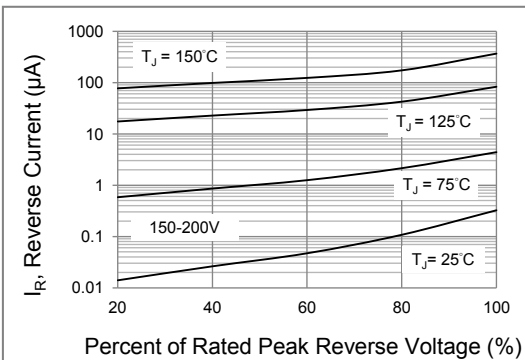


Fig.6 Typical Reverse Characteristics

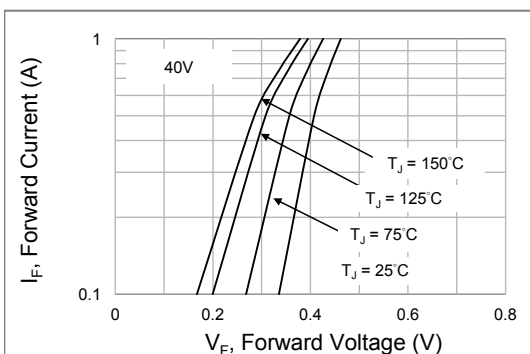


Fig.7 Typical Forward Characteristics

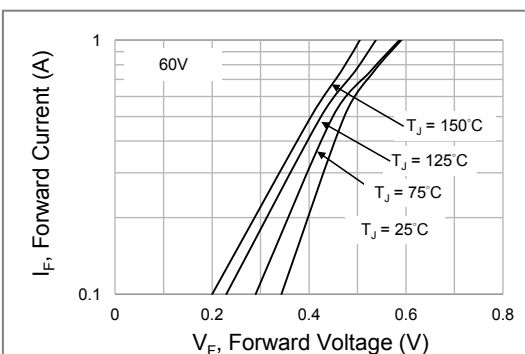


Fig.8 Typical Forward Characteristics



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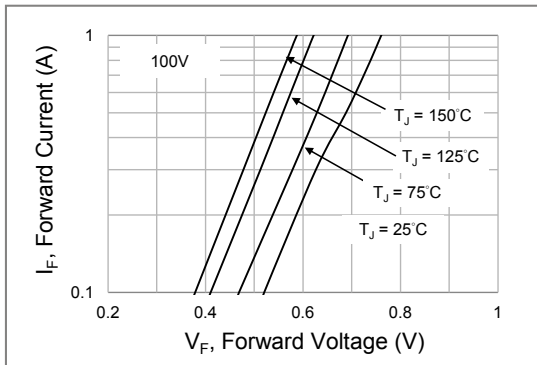


Fig.9 Typical Forward Characteristics

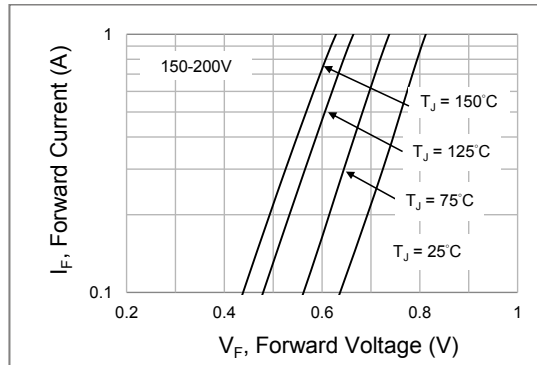


Fig.10 Typical Forward Characteristics

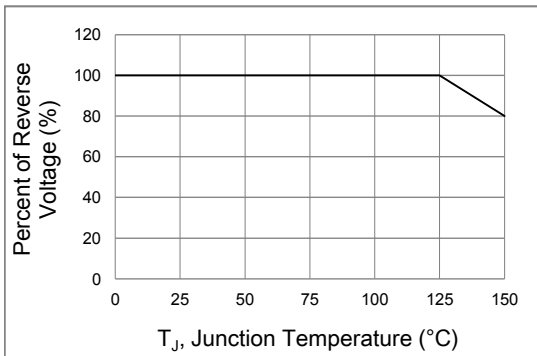


Fig.11 Operating Temperature Derating Curve

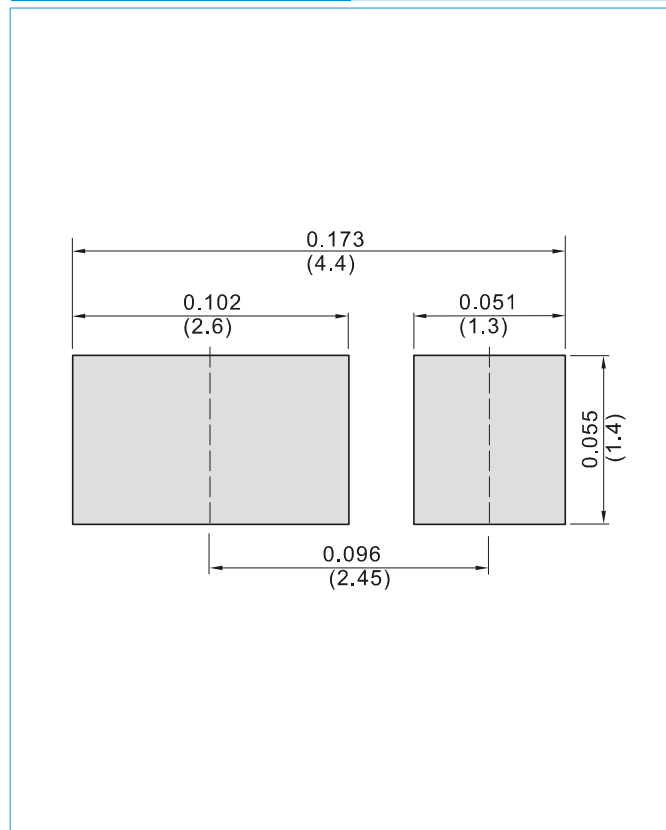


SS1040HE SERIES

MOUNTING PAD LAYOUT

SOD-123HE

Unit : inch(mm)



ORDER INFORMATION

- Packing information
T/R - 10K per 13" plastic Reel
T/R - 3K per 7" plastic Reel



SS1040HE SERIES

Part No_packing code_Version

SS1040HE_R1_00001

SS1040HE_R2_00001

For example :

RB500V-40_R2_00001



| Packing Code XX | | | | Version Code XXXXX | | |
|--------------------------------------|----------------------|----------------------------------|----------------------|---------------------------|----------------------|---------------------------------------|
| Packing type | 1 st Code | Packing size code | 2 nd Code | HF or RoHS | 1 st Code | 2 nd ~5 th Code |
| Tape and Ammunition Box (T/B) | A | N/A | 0 | HF | 0 | serial number |
| Tape and Reel (T/R) | R | 7" | 1 | RoHS | 1 | serial number |
| Bulk Packing (B/P) | B | 13" | 2 | | | |
| Tube Packing (T/P) | T | 26mm | X | | | |
| Tape and Reel (Right Oriented) (TRR) | S | 52mm | Y | | | |
| Tape and Reel (Left Oriented) (TRL) | L | PANASERT T/B CATHODE UP (PBCU) | U | | | |
| FORMING | F | PANASERT T/B CATHODE DOWN (PBCD) | D | | | |