

SDBA6HS

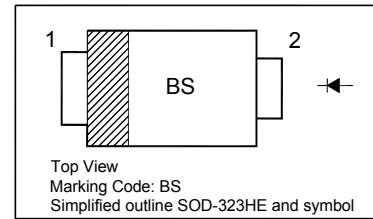
Surface Mount Schottky Barrier Rectifier

Reverse Voltage - 60 V

Forward Current - 1 A

PINNING

| PIN | DESCRIPTION |
|-----|-------------|
| 1 | Cathode |
| 2 | Anode |



Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

| Parameter | Symbol | Value | Unit |
|---|-----------------|---------------|--------------------|
| Reverse Voltage | V_R | 60 | V |
| RMS Reverse Voltage | $V_{R(RMS)}$ | 42 | V |
| Maximum Average Forward Rectified Current | $I_{F(AV)}$ | 1 | A |
| Non-repetitive Peak Forward Current (t = 8.3 ms Half Sine Wave, JEDEC method) | I_{FSM} | 35 | A |
| Thermal Resistance from Junction to Ambient ¹⁾ | $R_{\theta JA}$ | 173 | $^\circ\text{C/W}$ |
| Thermal Resistance from Junction to Ambient ²⁾ | $R_{\theta JA}$ | 125 | $^\circ\text{C/W}$ |
| Operating Junction and Storage Temperature Range | T_J, T_{stg} | - 65 to + 150 | $^\circ\text{C}$ |

¹⁾ FR-4 PCB, 2 oz. Copper, minimum recommended pad layout per.

²⁾ Polyimide PCB, 2 oz. Copper, minimum recommended pad layout per.

Characteristics at $T_a = 25^\circ\text{C}$

| Parameter | Symbol | Min. | Typ. | Max. | Unit |
|---|-------------|------|---------------------|--------------------|---------------|
| Reverse Breakdown Voltage ¹⁾ at $I_R = 100 \mu\text{A}$ | $V_{(BR)R}$ | 60 | - | - | V |
| Forward Voltage at $I_F = 0.1 \text{ A}$ at $I_F = 0.7 \text{ A}$ at $I_F = 1 \text{ A}$ | V_F | - | 0.5 0.64 0.68 | 0.55 0.7 0.8 | V |
| Reverse Current ¹⁾ at $V_R = 5 \text{ V}$ at $V_R = 60 \text{ V}$ | I_R | - | 0.3 1 | 1 2 | μA |
| Diode Capacitance ²⁾ at $V_R = 10 \text{ V}$, f = 1 MHz | C_J | - | 136 | - | pF |

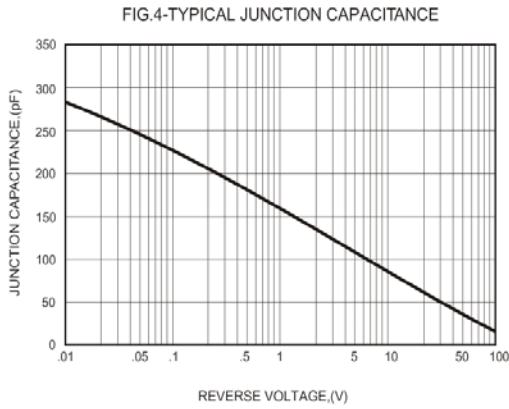
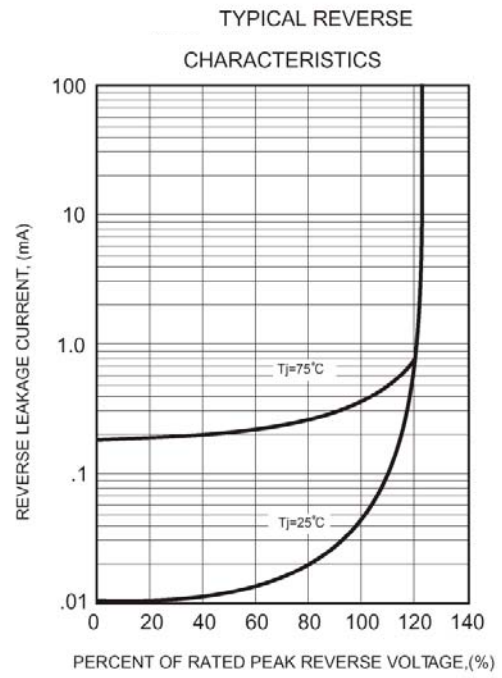
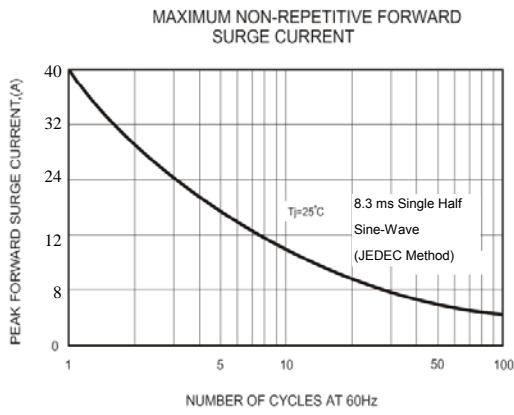
¹⁾ Short duration pulse test to minimize self-heating effect.

²⁾ Polyimide PCB, 2 oz. Copper, minimum recommended pad layout per.

TOP DYNAMIC



Dated: 02/09/2016 Rev: 01



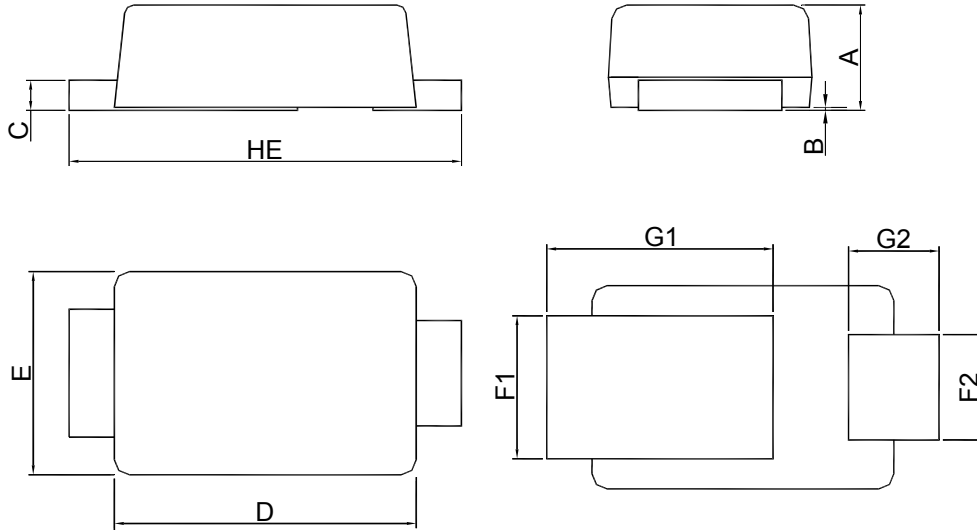
TOP DYNAMIC

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PACKAGE OUTLINE

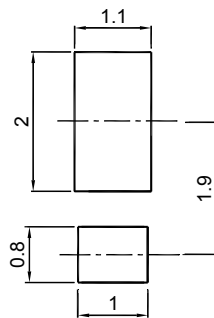
Plastic surface mounted package; 2 leads

SOD-323HE



| UNIT | A | B | C | D | E | F1 | F2 | G1 | G2 | H _E |
|------|-----|------|-----|-----|------|------|-----|-----|-----|----------------|
| mm | 0.7 | 0.02 | 0.2 | 2 | 1.35 | 0.95 | 0.7 | 1.5 | 0.6 | 2.6 |
| | 0.5 | 0 | 0.1 | 1.8 | 1.15 | 0.75 | 0.5 | 1.3 | 0.4 | 2.4 |

RECOMMENDED SOLDERING FOOTPRINT



SOD-323HE

Packing information

| Package | Tape Width (mm) | Pitch | | Reel Size | | Per Reel Packing Quantity |
|-----------|-----------------|---------|---------------|-----------|------|---------------------------|
| | | mm | inch | mm | inch | |
| SOD-323HE | 8 | 4 ± 0.1 | 0.157 ± 0.004 | 178 | 7 | 3,000 |

TOP DYNAMIC



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