**SB425D** 

### Silicon Epitaxial Planar Schottky Barrier Diode

SOT-23

**Features** 

Low current rectification

**Mechanical Data** 

• Marking: YA

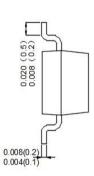
Case:Molded Plastic,SOT-23

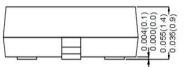
• Mounting Position : Any. • Equivalent Circuit:

• Epoxy:UL 94V-0 rate flame retardant

• Terminals:Plated Leads Solderable perMIL-STD-750,Method-2026.

0.020 (0.5) 0.012 (0.3) 2 0.118 (3.0) 0.087 (2.2) 0.059 (1.5) 0.043 (1.1) (1.5) 0.081 (2.05) 0.069 (1.75) 0.122 (3.1) 0.106 (2.7)





Dimensions in inches and (millimeters)

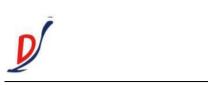
# Maximum Ratings Maximum Ratings (Rating at 25°C ambient temperature unless otherwise specified.)

| Parameter  | Symbol             | Value         | Unit |
|--|--------------------|---------------|------|
| Repetitive Peak Reverse Voltage                          | V <sub>RM</sub>    | 40            | V    |
| Reverse Voltage  | V <sub>R</sub>     | 40            | V    |
| Average Rectified Forward Current <sup>1)</sup>          | I <sub>F(AV)</sub> | 100           | mA   |
| Peak Forward Surge Current (60 Hz 1 Cycle) <sup>1)</sup> | I <sub>FSM</sub>   | 1             | А    |
| Junction Temperature                                     | Tj                 | 125           | °C   |
| Storage Temperature Range                                | T <sub>stg</sub>   | - 55 to + 125 | °C   |

<sup>1)</sup> Rating of per diode

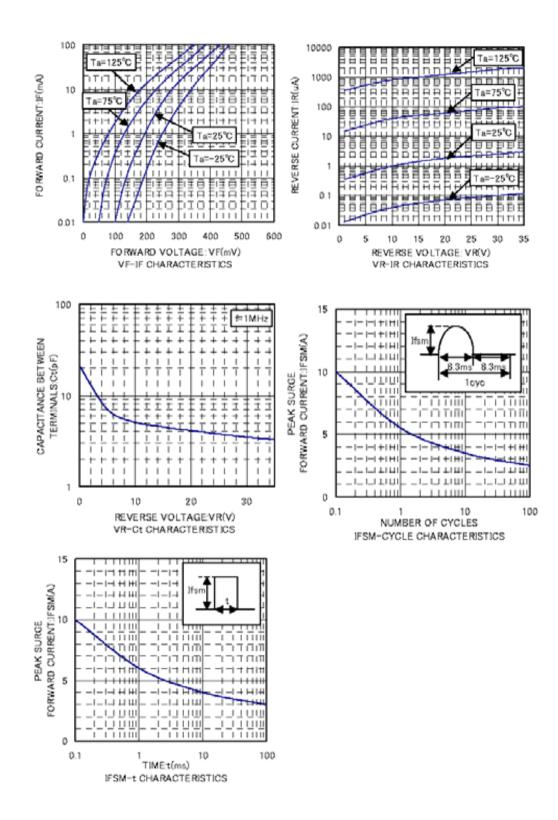
# Electrical Characteristics (Rating at 25°C ambient temperature unless otherwise specified.)

| Parameter  | Symbol         | Тур. | Max.         | Unit |
|--|----------------|------|--------------|------|
| Forward Voltage<br>at $I_F = 10 \text{ mA}$<br>at $I_F = 100 \text{ mA}$ | V <sub>F</sub> | -    | 0.34<br>0.55 | V    |
| Reverse Current<br>at V <sub>R</sub> = 10 V                              | I <sub>R</sub> | -    | 30           | μA   |
| Capacitance between Terminals<br>at $V_R = 10 V$ , f = 1 MHz             | C <sub>t</sub> | 6    | -            | pF   |



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# **Rating And Characteristic Curves**



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