

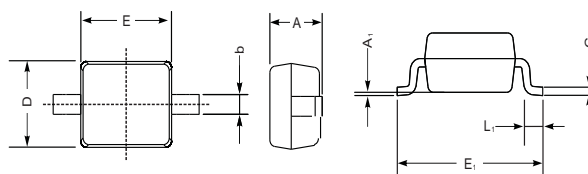
## Features

Low forward voltage drop  
High current capability  
High reliability  
High surge current capability  
Epitaxial construction

## General Description

Case: molded plastic  
Polarity: Color band denotes cathode  
Package: SOD-323 Plastic Package

## SOD323



| UNIT |     | A   | C    | D   | E   | E <sub>1</sub> | b    | L <sub>1</sub> | A <sub>1</sub> |
|------|-----|-----|------|-----|-----|----------------|------|----------------|----------------|
| mm   | max | 1.1 | 0.15 | 1.4 | 1.8 | 2.75           | 0.4  | 0.45           | 0.2            |
|      | min | 0.8 | 0.08 | 1.2 | 1.4 | 2.55           | 0.25 | 0.2            | —              |
| mil  | max | 43  | 5.9  | 55  | 70  | 108            | 16   | 16             | 8              |
|      | min | 32  | 3.1  | 47  | 63  | 100            | 9.8  | 7.9            | —              |

## Maximum Ratings & Thermal Characteristics

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

| Parameters                                              | Symbol | B110WS   | Unit |
|---------------------------------------------------------|--------|----------|------|
| Maximum repetitive peak reverse voltage                 | VRRM   | 100      | V    |
| Maximum RMS voltage                                     | VRMS   | 70       | V    |
| Maximum DC blocking voltage                             | VDC    | 100      | V    |
| Maximum average forward rectified current               | IFM    | 1.0      | A    |
| Peak forward surge current 8.3 ms single half sine-wave | IFSM   | 9        | A    |
| Typical thermal resistance                              | RθJA   | 400      | °C/W |
| Storage temperature range                               | TSTG   | -50-+150 | °C   |

# B110WS

## Electrical Characteristics

(Ratings at 25℃ ambient temperature unless otherwise specified).

| Symbol         | Parameter                       | Test conditions      | Min | Typ | Max  | Unit |
|----------------|---------------------------------|----------------------|-----|-----|------|------|
| V <sub>F</sub> | Forward voltage(1)              | I <sub>F</sub> =1A   |     |     | 0.85 | V    |
| I <sub>R</sub> | Reverse voltage leakage current | V <sub>R</sub> =100V |     | 0.5 | 2.0  | μA   |

RATING AND CHARACTERISTIC CURVES (B110WS)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

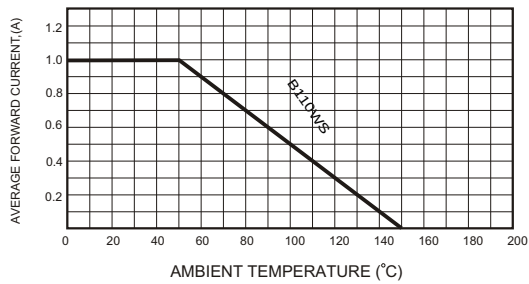


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

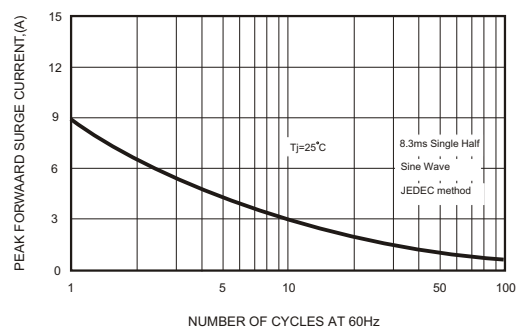


FIG.3-TYPICAL FORWARD CHARACTERISTICS

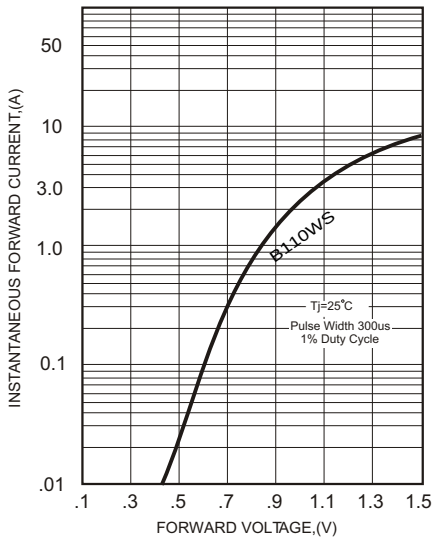


FIG.4 Reverse Characteristics

