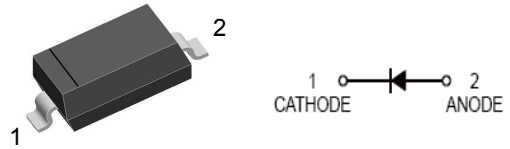


## Schottky Barrier Diode in SOD-323

### Features

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Low Reverse Recovery Time
- Low Reverse Capacitance



### Mechanical Data

- **Case:** SOD-323 (plastic package).  
Lead free; RoHS compliant; Halogen free
- **Molding Compound Flammability Rating:**  
UL 94 V-0
- **Terminals:** High temperature soldering guaranteed:  
260 °C/10 sec. at terminals

### Applications

- Low current rectification
- High efficiency DC-to-DC conversion
- Switch Mode Power Supply (SMPS)
- Reverse polarity protection
- Low power consumption applications

### Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

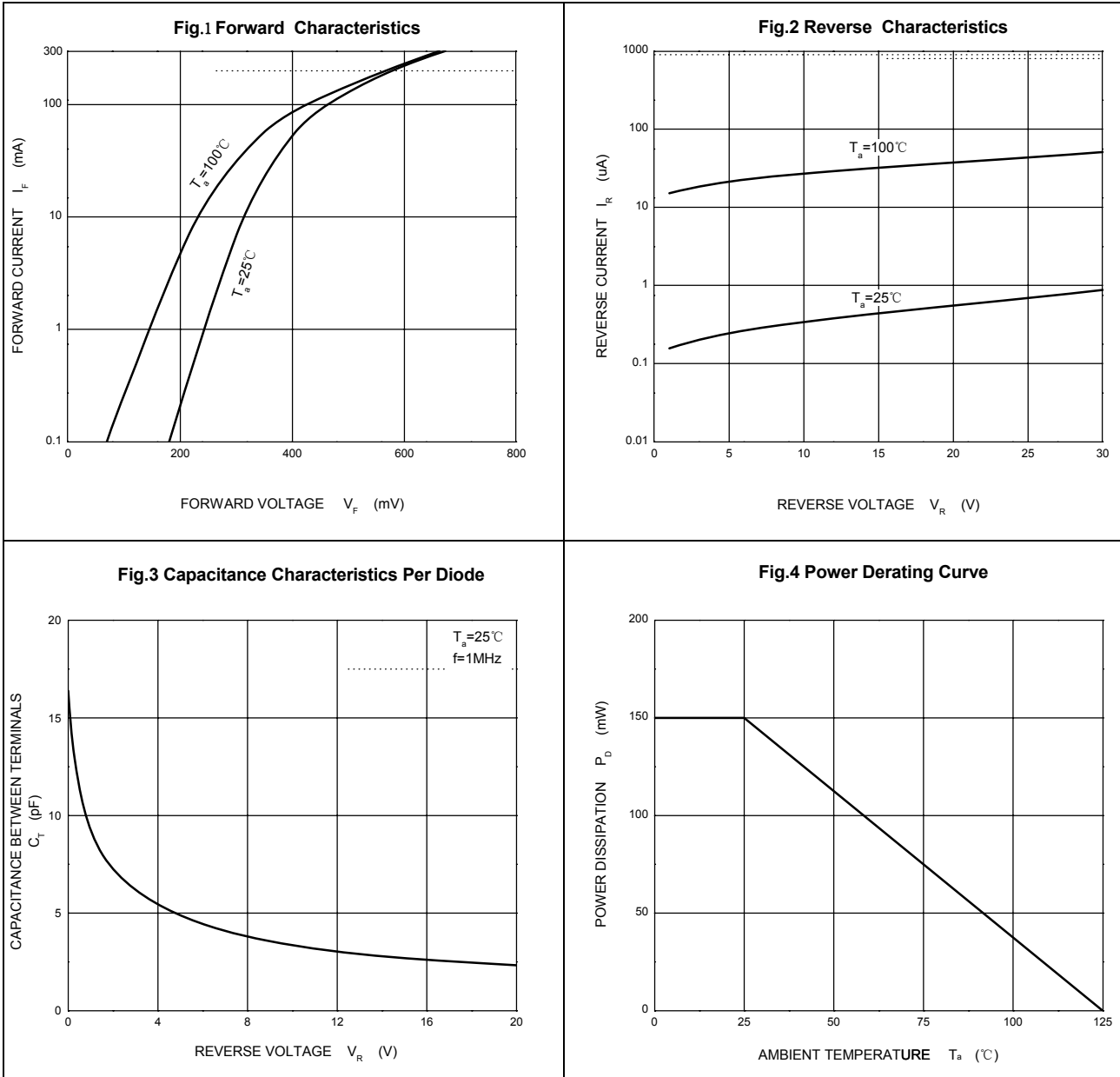
Parameter	Symbol	Limit	Unit
DC reverse voltage	$V_R$	30	V
Mean rectifying current	$I_{FM}$	200	mA
Non-repetitive Peak forward surge current @ t=8.3ms	$I_{FSM}$	600	mA
Power dissipation	PD	200	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	635	°C/W
Junction temperature	$T_j$	125	°C
Storage temperature	$T_{stg}$	-55~+150	°C

### Electrical Characteristics

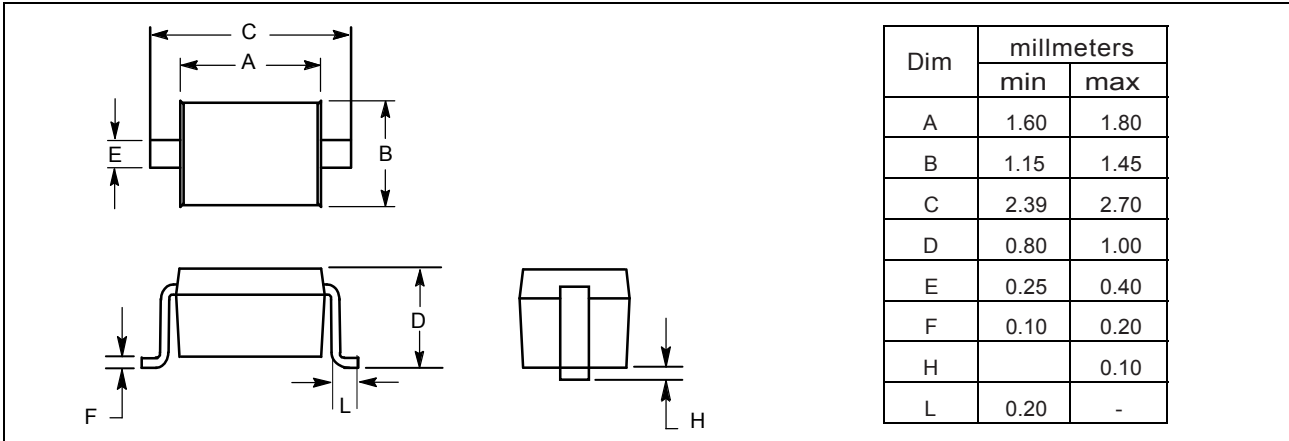
( $T_A = 25\text{ °C}$  unless otherwise specified)

Symbol	Parameter	Conditions	Min	Typ	Max	Units
$V_{BR}$	Reverse breakdown voltage	$I_R = 100\mu A$	30			V
$V_F$	Forward Voltage	$I_F = 0.1mA$ $I_F = 1.0mA$ $I_F = 10mA$ $I_F = 30mA$ $I_F = 100mA$			240 320 400 500 1000	mV
$I_R$	Reverse Current	$V_R = 25V$			2.0	$\mu A$
$C_T$	Capacitance	$V_R = 1V, f = 1MHz$			10	pF
$t_{rr}$	Reverse recovery time	$I_F = 10mA,$ $I_R = 10mA \text{ to } 1mA,$ $R_L = 100\Omega$			5.0	ns

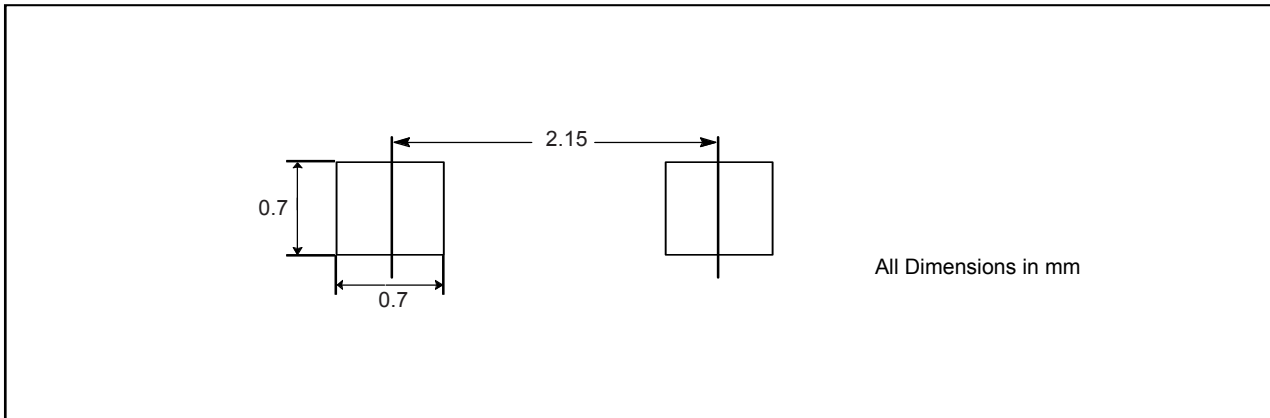
Typical Characteristics ( $T_{amb} = 25\text{ }^{\circ}\text{C}$  unless otherwise specified)



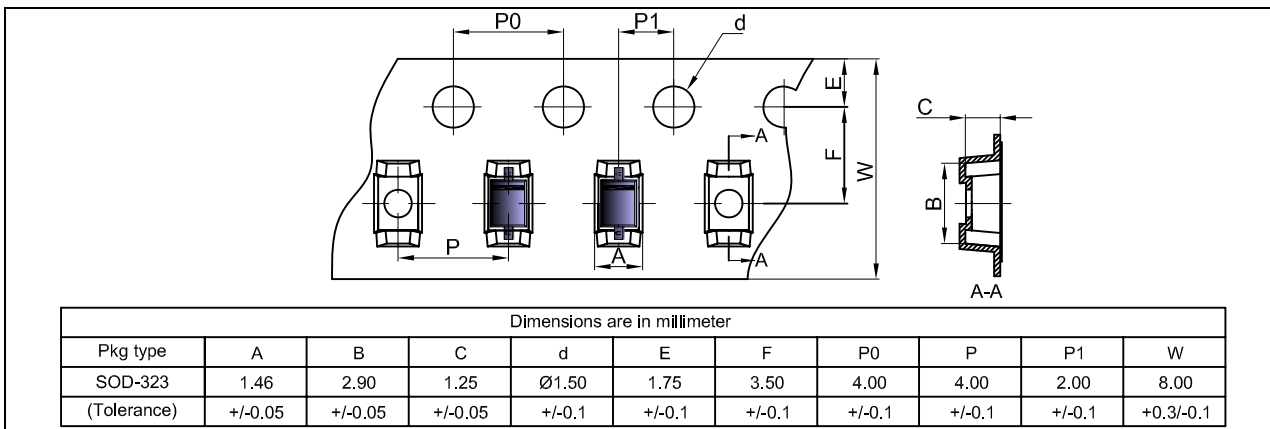
Package Dimensions



### PAD Dimension



### Package Information



### Marking



### Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
BAT54WS	SOD-323	Tape and reel	3000pcs / reel	EIA STD RS-481

### Revision history

Date	Revision	Changes
23-May-2020	1.0	Initial release

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