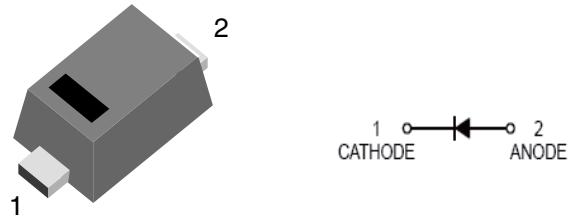


## Schottky Barrier Diode in SOD-523

### Features

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



### Mechanical Data

- **Case:** SOD-523 (plastic package).  
Lead free; RoHS compliant
- **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

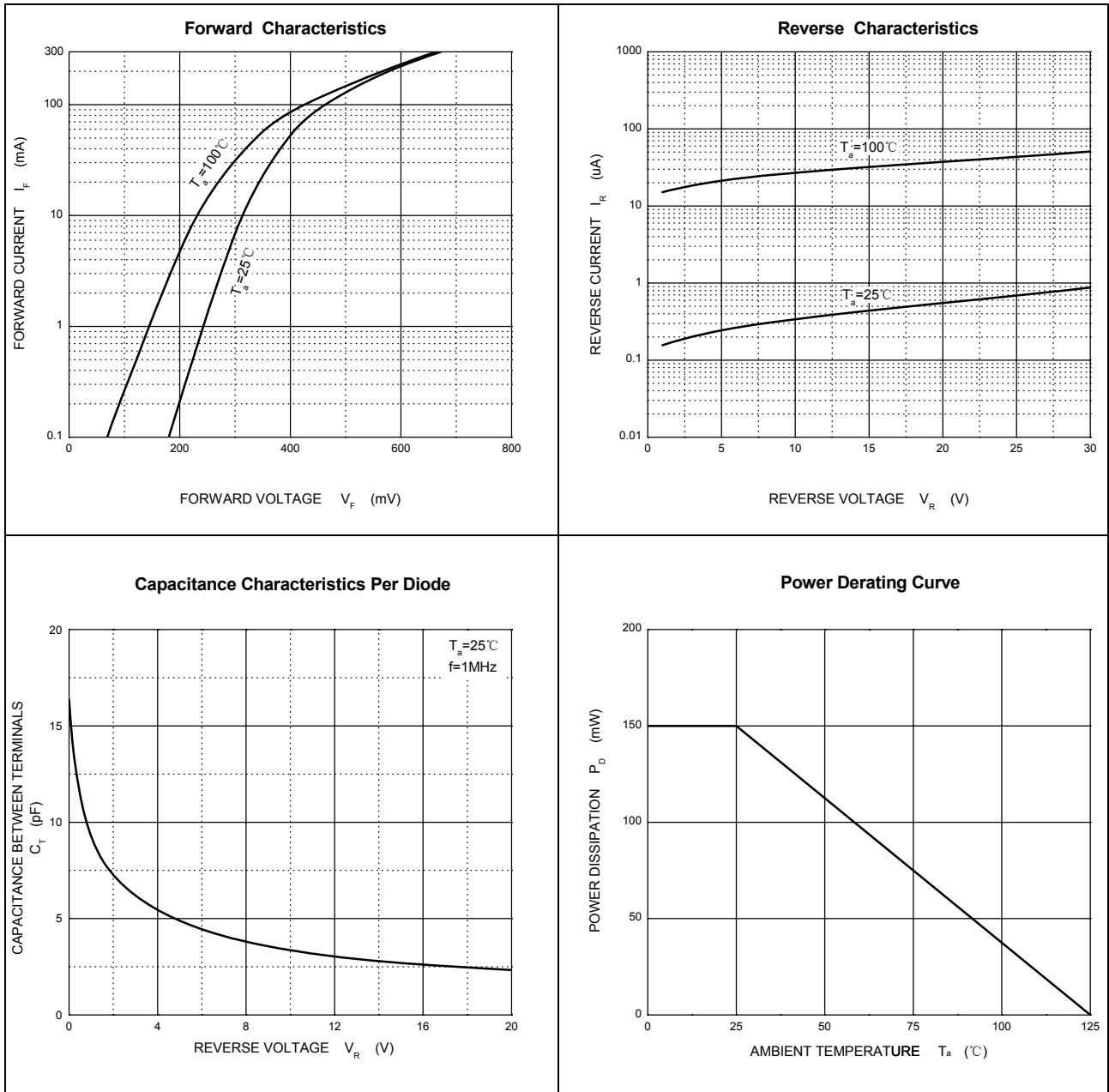
Parameter	Symbol	Limit	Unit
DC reverse voltage	$V_R$	30	V
Mean rectifying current	$I_{FM}$	200	mA
Non-repetitive Peak forward surge current @ t=8.3ms	$I_{FSM}$	600	mA
Power dissipation	PD	150	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	667	°C/W
Junction temperature	$T_j$	125	°C
Storage temperature	$T_{stg}$	-55~+150	°C

### Electrical Characteristics

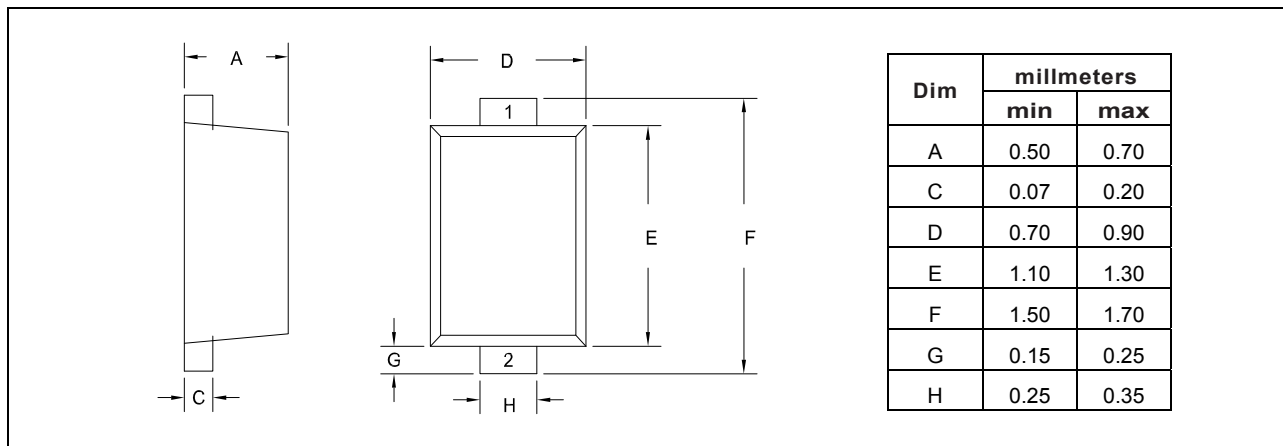
( $T_A = 25\text{ °C}$  unless otherwise specified)

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Forward voltage	$V_{F1}$			0.32	V	$I_F=1\text{mA}$
	$V_{F2}$			0.4	V	$I_F=10\text{mA}$
Reverse current	$I_R$			2	$\mu\text{A}$	$V_R=25\text{V}$

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



## Package Dimensions



## Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
BAT54WT	SOD-523	Tape and reel	8000pcs / reel	EIA STD RS-481

## Revision history

Date	Revision	Changes
23-May-2020	1.0	Initial release

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