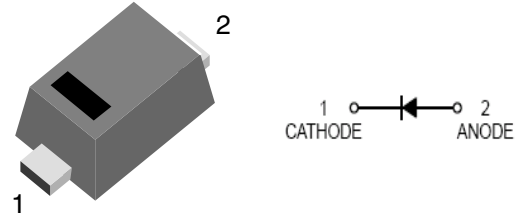


## High Speed Switching Diode in SOD-523

### Features

- Small surface mounting type
- High speed
- High reliability with high surge current handing capability



### Mechanical Data

- **Case:** SOD-523 (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

- High Speed Switching and Reverse Polarity Protection
- High Speed Rectifying Applications
- Consumer, Automotive and Telecommunication Industry

### Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

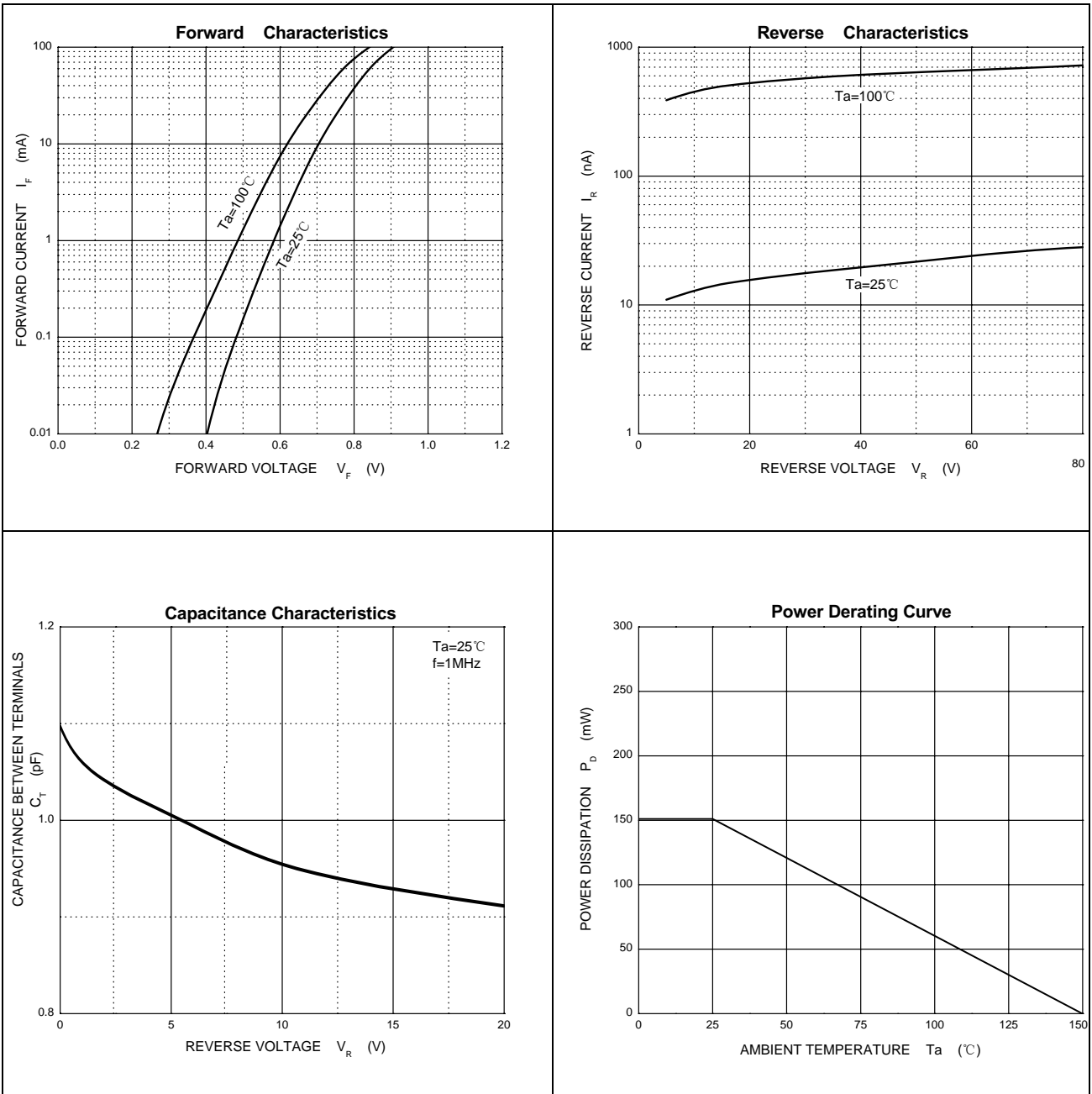
Symbol	Parameter	Value	Unit
$V_{RRM}$	Peak Repetitive Reverse Voltage	90	V
$V_R$	DC Blocking Voltage	80	
$I_O$	Continuous Forward Current	100	mA
$I_{FSM}$	Non-repetitive Peak Forward Surge Current@ $t=8.3\text{ms}$	2.0	A
$P_D$	Power Dissipation	150	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	883	°C/W
$T_j$	Junction Temperature	150	°C
$T_{stg}$	Storage Temperature	-55~+150	°C

### Electrical Characteristics

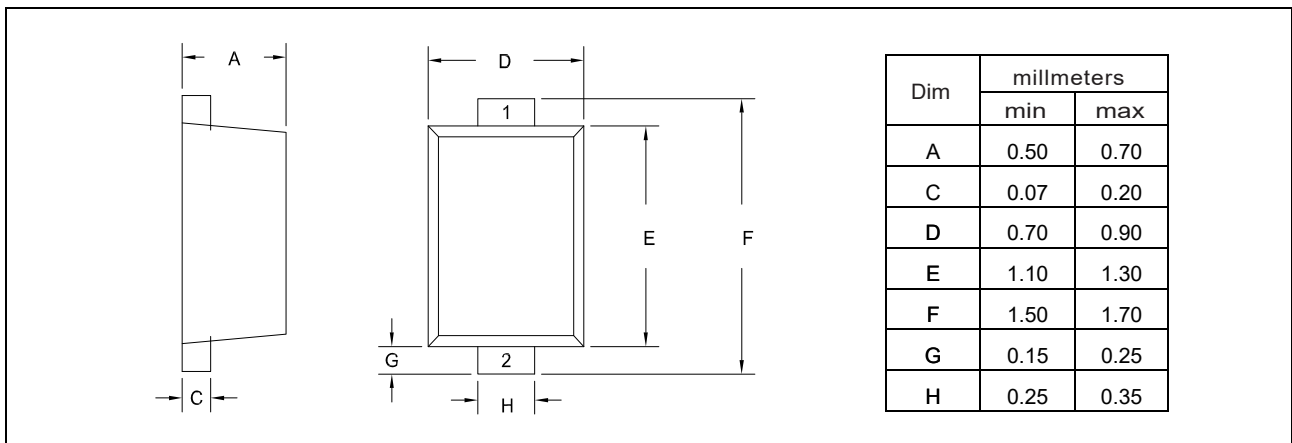
( $T_A = 25\text{°C}$  unless otherwise specified)

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
<b>Forward voltage</b>	$V_F$			1.2	V	$I_F=100\text{mA}$
<b>Reverse current</b>	$I_R$			0.1	μA	$V_R=80\text{V}$
<b>Capacitance between terminals</b>	$C_T$			3	pF	$V_R=0.5\text{V}, f=1\text{MHz}$
<b>Reverse recovery time</b>	$t_{rr}$			4	ns	$I_F=10\text{mA}, V_R=6\text{V}, R_L=100\Omega$

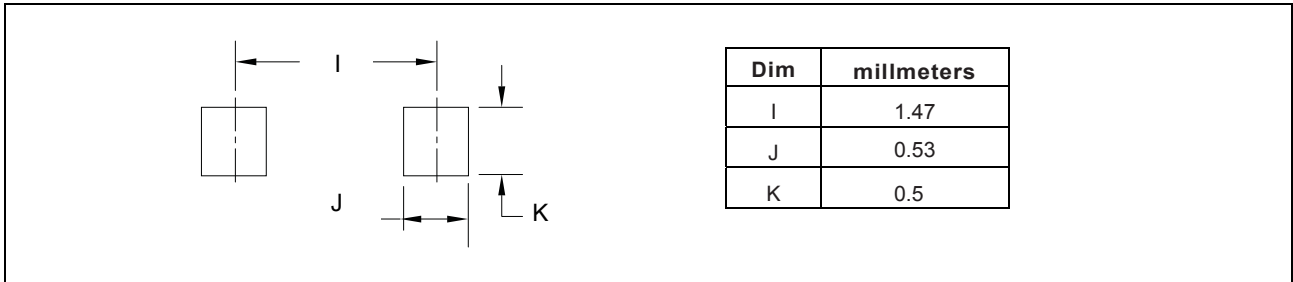
**Typical Characteristics** ( $T_{amb} = 25\text{ }^{\circ}\text{C}$  unless otherwise specified)



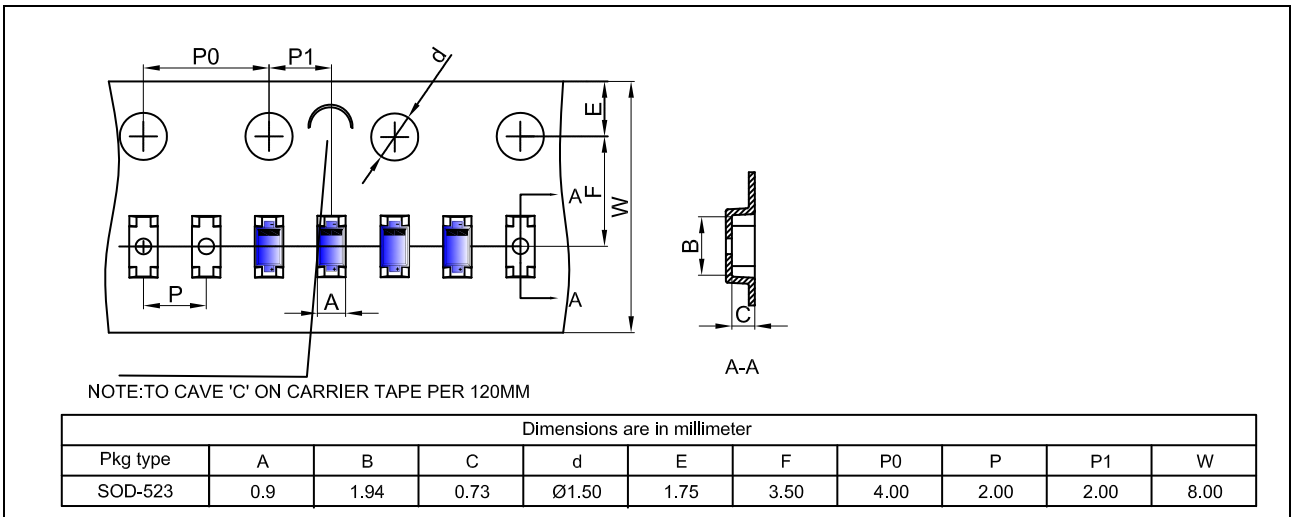
**Package Dimensions**



### PAD Dimensions



### Package Information



### Marking



### Ordering information

Order code	Package	Net Weight	Packaging option	Base quantity	Packaging specification
1SS400	SOD-523	0.0014g	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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