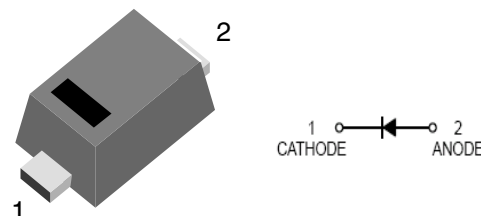


Fast Switching Diode in SOD-523

Features

- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance



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

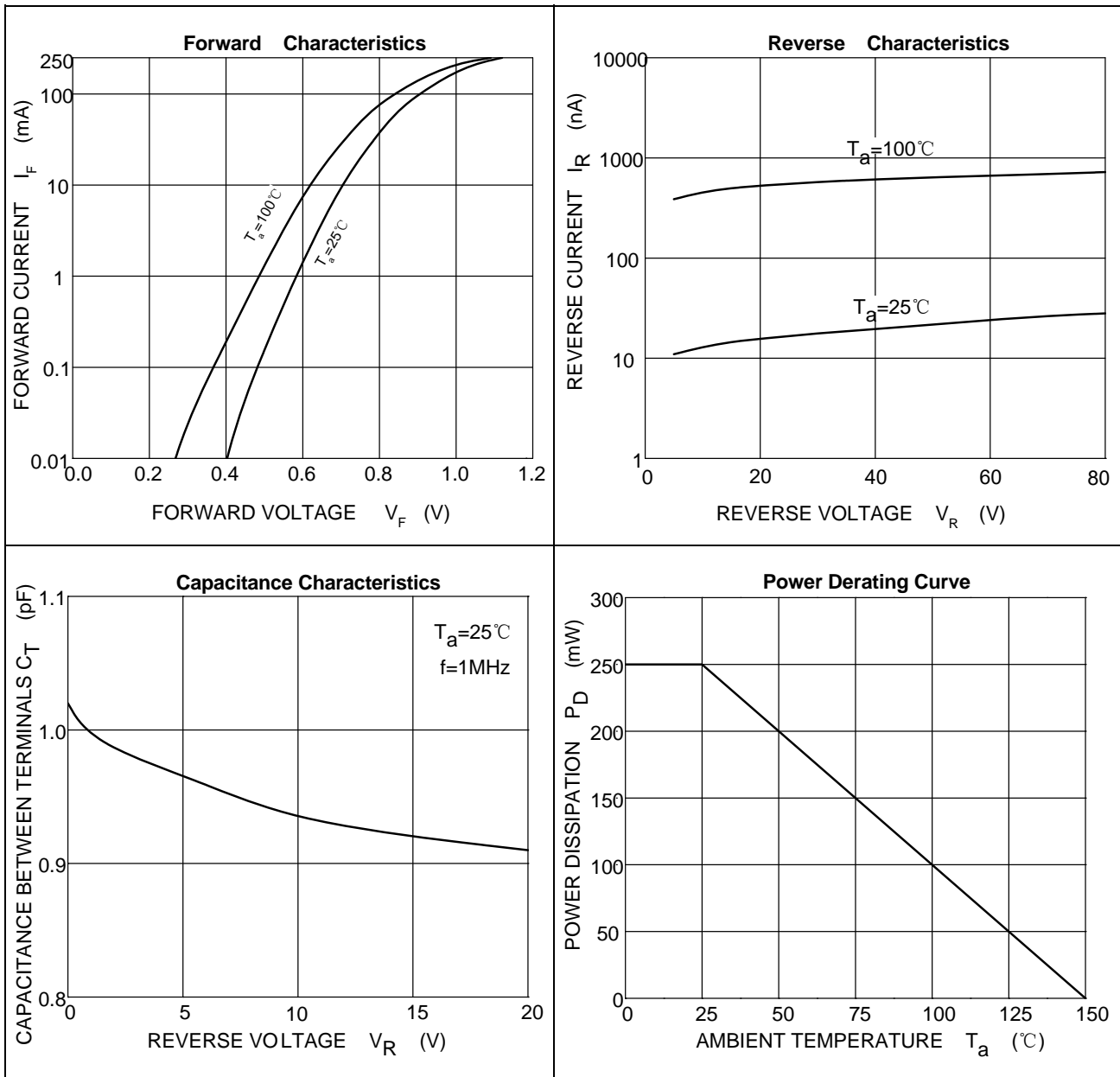
Symbol	Parameter	Value	Unit
V_{RRM}	Peak Repetitive Reverse Voltage	75	V
V_{RM}	DC Blocking Voltage Continuous	100	
I_O	Forward Current	250	mA
I_{FSM}	Non-repetitive Peak Forward Surge Current@t=8.3ms	2.0	A
P_D	Power Dissipation	150	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	500	°C/W
T_j	Junction Temperature	150	°C
T_{stg}	Storage Temperature	-55~+150	°C

Electrical Characteristics

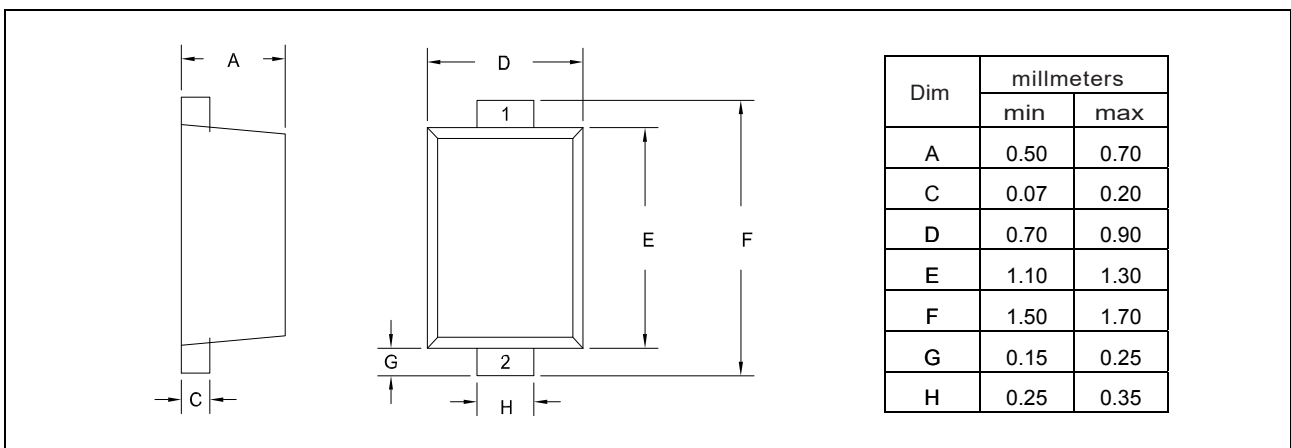
($T_A = 25\text{ °C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	$I_R=100\mu A$	75			V
Reverse current	I_R	$V_R=25V$			30	nA
		$V_R=75V$			1	μA
Forward voltage	V_F	$I_F=1mA$			0.715	V
		$I_F=10mA$			0.855	
		$I_F=50mA$			1	
		$I_F=150mA$			1.25	
Total capacitance	C_{tot}	$V_R=0V, f=1MHz$			1.0	pF
Reverse recovery time	t_{rr}	$I_F=I_R=10mA, I_{rr}=0.1 \times I_R$			4	ns

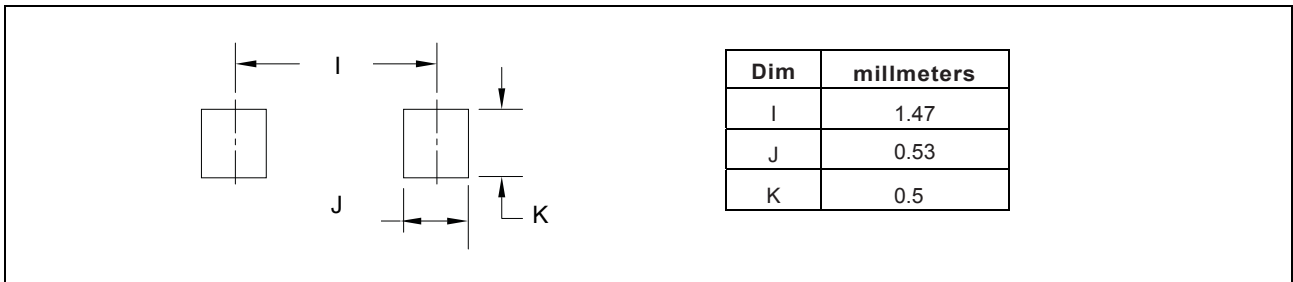
Typical Characteristics ($T_{amb} = 25\text{ }^{\circ}\text{C}$ unless otherwise specified)



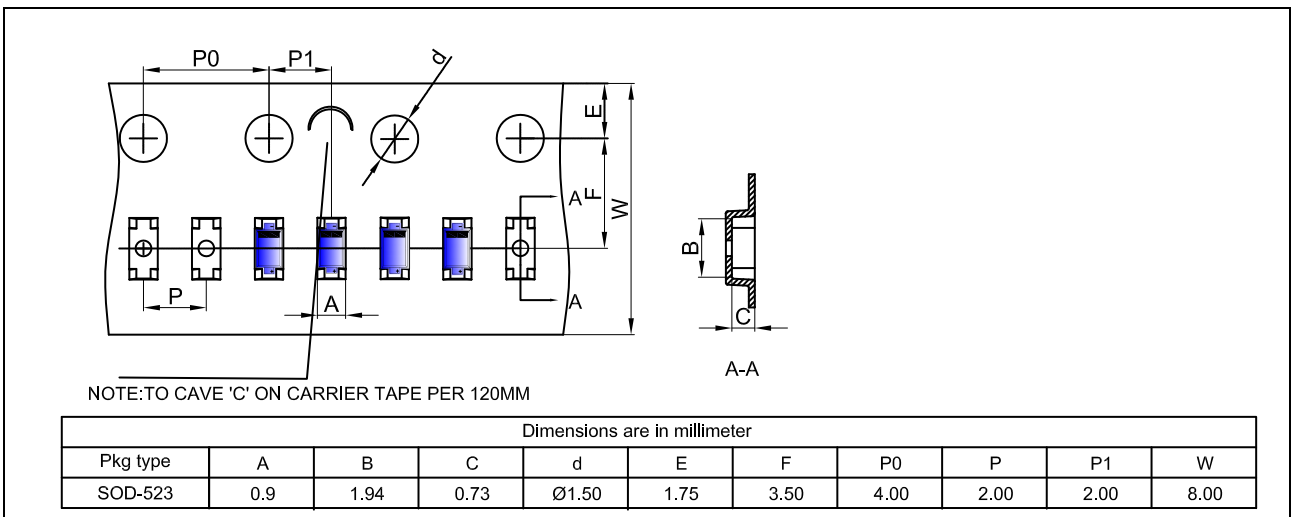
Package Dimensions



PAD Dimensions



Package Information



Marking



Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
BAS516	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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