

Features

- Low Forward Voltage Drop
- Very Small SMD Package



SOD-523



Equivalent Circuit

Absolute Maximum Ratings($T_A=25^{\circ}\text{C}$)

Symbol	Parameter	Value	Unit
V_R	DC reverse voltage	40	V
I_o	Mean rectifying current	1	A
I_{FSM}	Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	7	A
P_d	Power Dissipation	0.5	W
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	250	$^{\circ}\text{C}/\text{W}$
T_J	Operating Junction Temperature Range	$-40 \sim +125$	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	$-55 \sim +150$	$^{\circ}\text{C}$

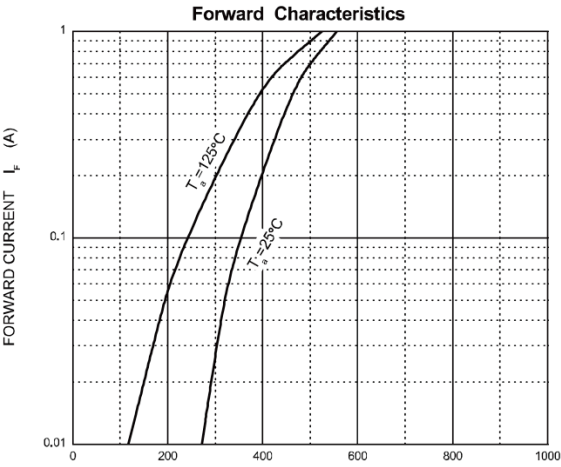
Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

Symbol	Parameter	Test conditions	Min	Type	Max	Unit
$V_{(BR)}$	Reverse voltage	$I_R=1\text{mA}$	40			V
I_R	Reverse current	$V_R=40\text{V}$		10	40	μA
V_F	Forward voltage	$I_F=0.1\text{A}$		0.35	0.38	V
		$I_F=0.2\text{A}$		0.37	0.40	V
		$I_F=0.5\text{A}$		0.42	0.49	V
		$I_F=0.7\text{A}$		0.47	0.55	V
		$I_F=1\text{A}$		0.51	0.61	V
C_{tot}	Total capacitance	$V_R=10\text{V}, f=1\text{MHz}$		19		pF

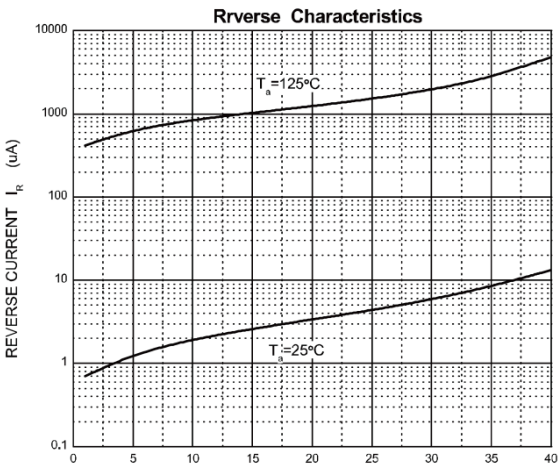
Ordering information

Product ID	Marking	Naming rule	Pack	Qty(PCS)
B1040X	4A	B1040X 产品名称 product name	SOD-523	3000

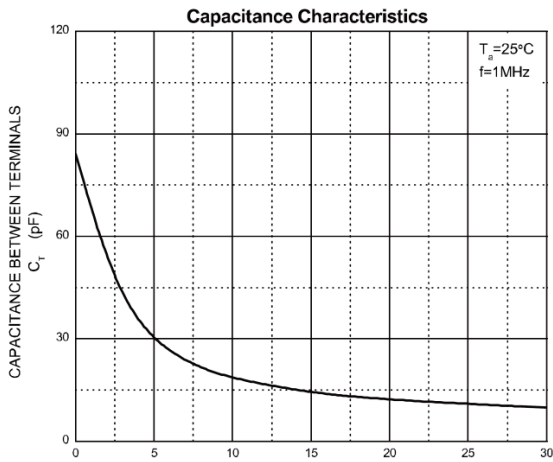
Typical Characteristics



FORWARD VOLTAGE V_F (mV)



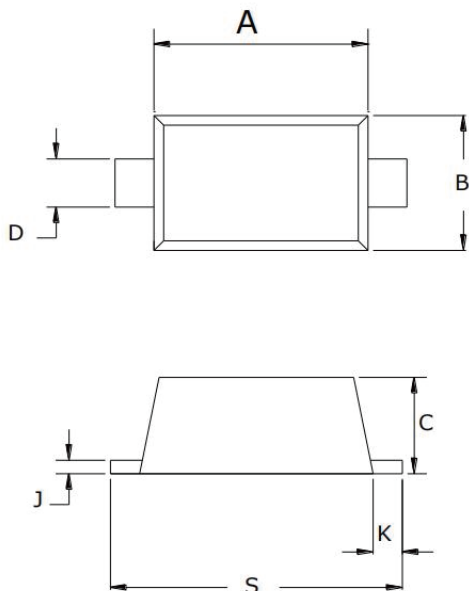
REVERSE VOLTAGE V_R (V)



REVERSE VOLTAGE V_R (V)

Package Outline Dimensions

SOD523



SYMBOL	MILLIMETERS	
	MIN	MAX
A	1.10	1.30
B	0.70	0.90
C	0.50	0.70
D	0.25	0.35
J	0.07	0.20
K	0.15	0.25
S	1.50	1.70

Soldering Footprint (mm)

