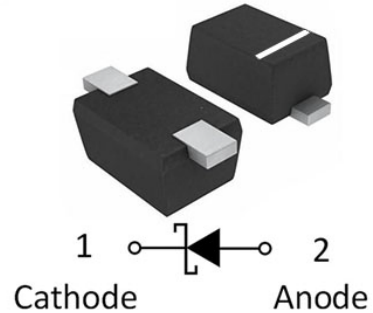


»Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Epitaxial construction

»General Description

- Case: molded plastic
- Polarity: Color band denotes cathode
- Package: SOD-523 Plastic Package



» Maximum Ratings @ $T_A=25^{\circ}\text{C}$ unless otherwise noted

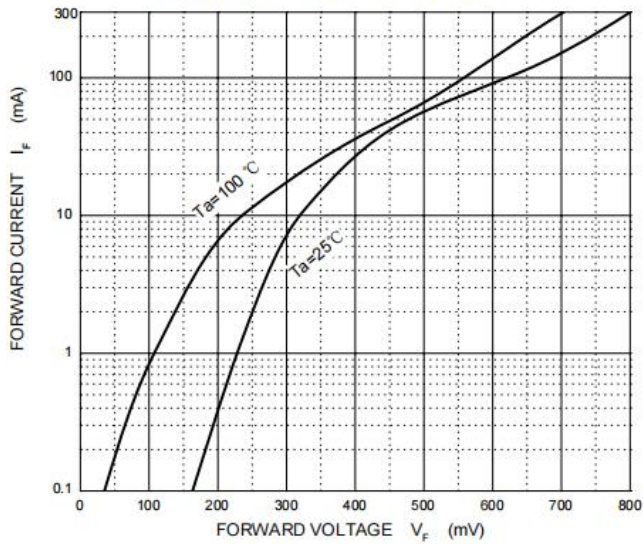
Symbol	Parameter	Value	Unit
VRRM VRWM	Peak Repetitive Peak Reverse Voltage Working Peak Reverse Voltage	100	V
IFM	Forward Continuous Current	150	mA
IFRM	Repetitive peak forward current @ $t_p < 1.0\text{s}$, Duty Cycle < 50%	350	mA
IFSM	Non-repetitive Peak Forward Surge Current@8.3mS	750	mA
Pd	Power Dissipation	150	mW
R θ JA	Thermal Resistance From Junction To Ambient	667	$^{\circ}\text{C}/\text{W}$
TJ	Operation Junction Temperature Range	-40~+125	$^{\circ}\text{C}$
TSTG	Storage Temperature Range	-55~+150	$^{\circ}\text{C}$

»Electrical Characteristics @ $T_A=25^{\circ}\text{C}$ unless otherwise noted

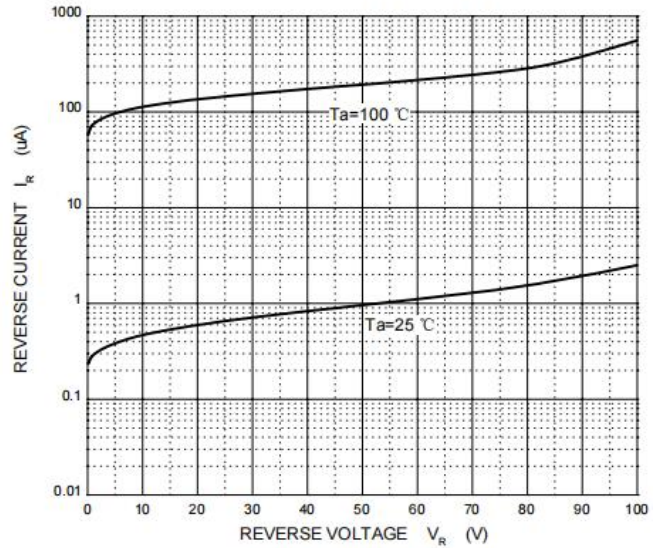
Symbol	Parameter	Test conditions	Min	Typ	Max	Unit
V(BR)	Reverse breakdown voltage	IR=100 μA	100			V
IR	Reverse voltage leakage current	VR1=1.5V			0.3	μA
		VR2=10V			0.5	μA
		VR3=50V			1.0	μA
		VR4=75V			2.0	μA
VF(1)	Forward voltage	IF=0.1mA			0.25	V
VF(2)		IF=10mA			0.45	V
VF(3)		IF=250mA			1.00	V
CT	Diode capacitance	VR=0V, f=1.0MHz		20		pF
		VR=1V, f=1.0MHz		12		pF

»Typical Performance Characteristics (T_J = 25 °C, unless otherwise noted)

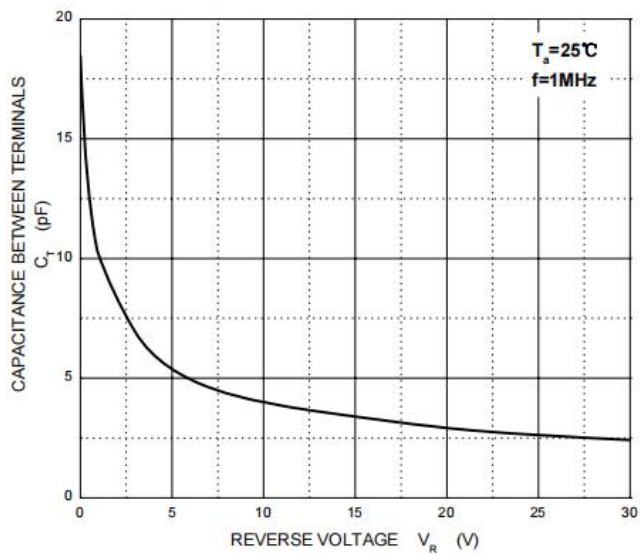
Forward Characteristics



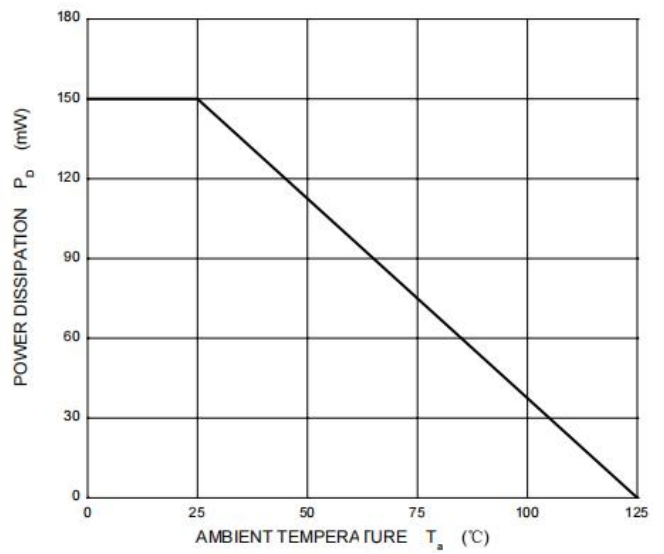
Reverse Characteristics



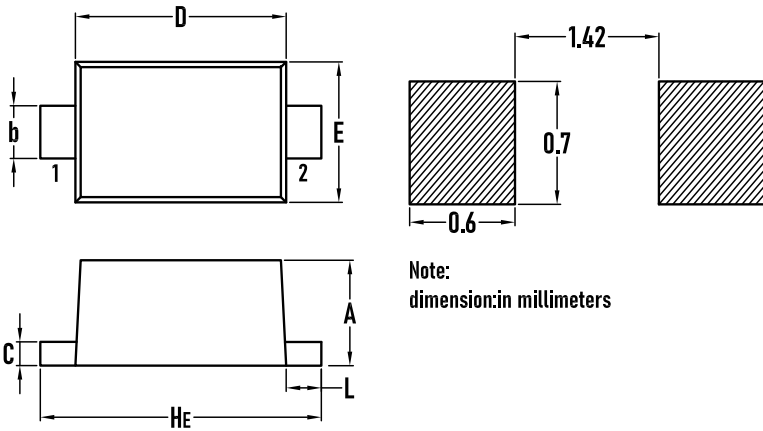
Capacitance Characteristics



Power Derating Curve

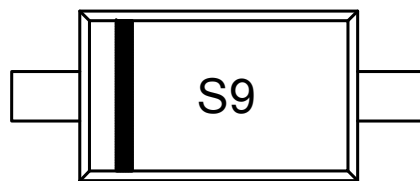


»Package Information SOD-523



SYMBOL	MILLIMETER		INCHES	
	MIN.	MAX.	MIN.	MAX.
A	0.50	0.70	0.020	0.028
b	0.25	0.35	0.010	0.014
C	0.07	0.20	0.0028	0.0079
D	1.10	1.30	0.043	0.051
E	0.70	0.90	0.028	0.035
H _E	1.50	1.70	0.059	0.067
L	0.15	0.25	0.006	0.010

»Marking



»Ordering information

Order code	Package	Base qty	Delivery mode
BAT46X	SOD-523	3K	Tape and reel