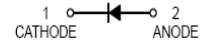




Features

- Low reverse current and low forward voltage
- High reliability
- Small surface mounting type



Typical Applications

- Low current rectification



Mechanical Data

- Case: SOD-323
- Molding compound, UL flammability classification rating 94V-0.
- Terminals: Tin plated leads, solderable per MIL-STD-202, Method 208.

SOD-323

Ordering Information

Part Number	Package	Shipping	Marking Code
RB500V-40	SOD-323	3000pcs / Tape & Reel	2

Maximum Ratings (@ $T_A=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	V_{RM}	45	V
DC Reverse Voltage	V_R	40	V
Mean Rectifying Current	I_O	0.1	A
Peak Forward Surge Current	I_{FSM}	1	A

Thermal Characteristics

Parameter	Symbol	Value	Unit
Power Dissipation	P_D	200	mW
Typical Thermal Resistance per leg	$R_{\theta JA}^*$	500	$^{\circ}\text{C}/\text{W}$
Operating Junction Temperature Range	T_J	125	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-40 to +150	$^{\circ}\text{C}$

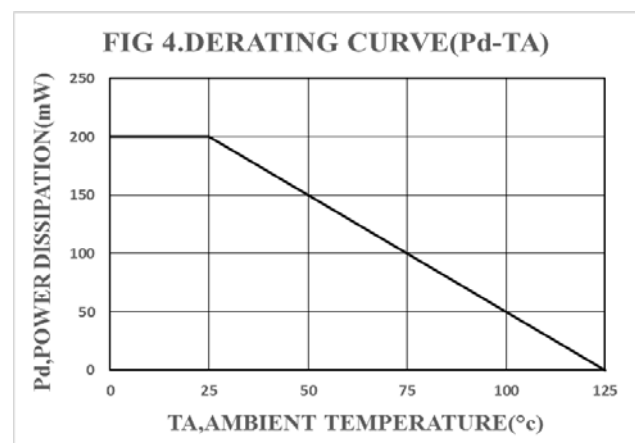
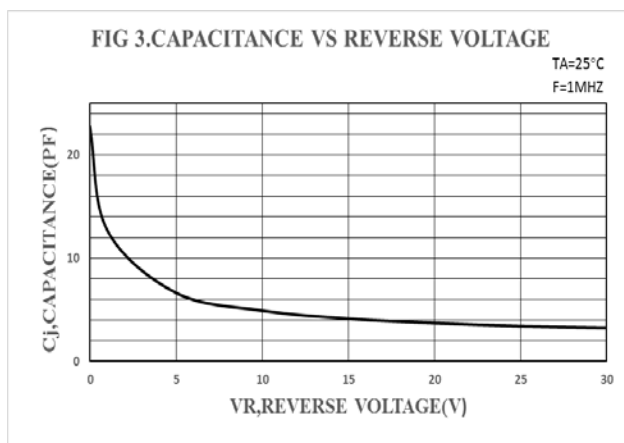
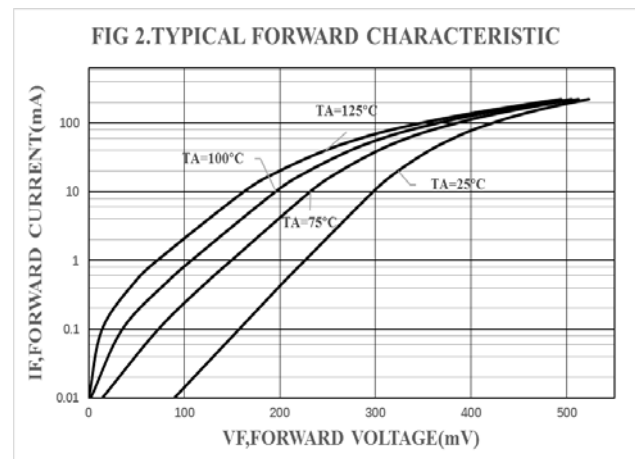
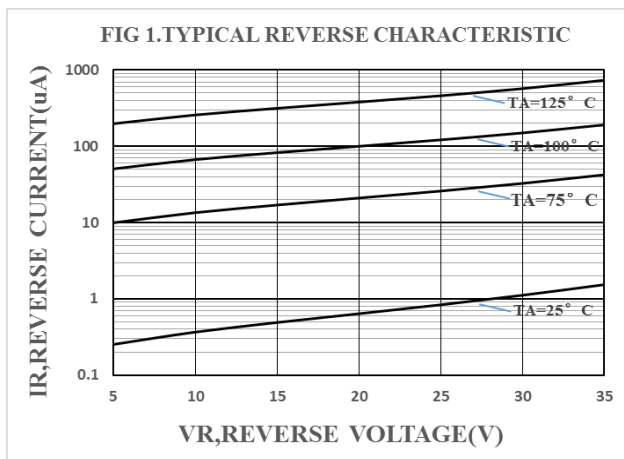
* Part mounted on FR-4 board with recommended pad layout

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

Parameter	Symbol	Test conditions	Min.	Typ.	Max.	Units
Forward Voltage	V_F^*	$I_F=10\text{mA}$	-	-	0.45	V
Reverse Current	I_R^{**}	$V_R=10\text{V}$	-	-	1	μA
Capacitance between terminals	C_T	$V_R=10\text{V}, f=1\text{MHz}$	-	6	-	pF

*Pulse width $\leq 380\ \mu\text{s}$, Duty cycle $< 2\%$
 **pulse test, $t_p \leq 5\text{ms}$

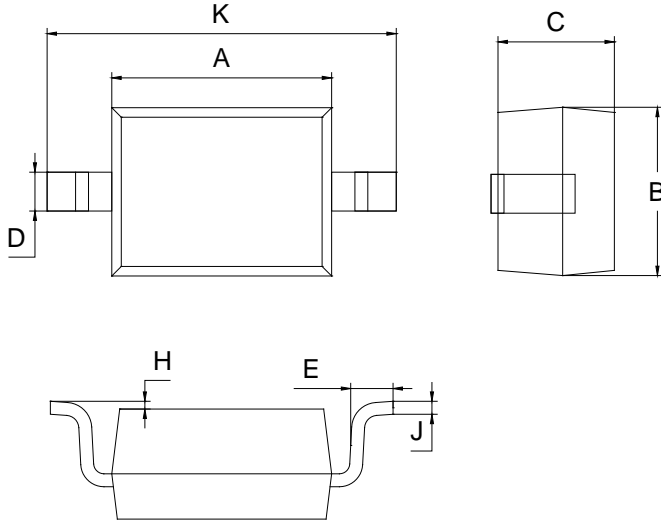
Ratings and Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)





Package Outline Dimensions(unit:mm)

SOD-323



SOD-323		
Dim	Min	Max
A	1.60	1.80
B	1.20	1.40
C	0.80	0.90
D	0.25	0.35
E	0.22	0.42
H	0.02	0.10
J	0.05	0.15
K	2.55	2.75

Mounting Pad Layout(unit:mm)

SOD-323

