

Features

- General rectification
- Low V_F ; Low I_R
- High reliability

Applications

- surface mount schottky barrier rectifier

Ordering Information

- Shipping Qty:3000/7inch Tape& Reel

SOD323



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

Parameter	Symbol	TPB1A30-323	TPB1A40-323	Units
Peak Repetitive Reverse Voltage	V_{RRM}	30	40	V
RMS Reverse Voltage	V_{RMS}	21	28	V
Maximum Average Forward Output Current	$I_{F(AV)}$	1		A
Peak Forward Surge Current, 8.3ms Single Half-sine-wave	I_{FSM}	10		A

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

Parameter	Symbol	TPB1A30-323	TPB1A40-323	Units
Power Dissipation	P_D	250		mW
Typical Thermal Resistance per leg	$R_{\theta JA}^*$	400		$^\circ\text{C}/\text{W}$
Operating Junction Temperature Range	T_J	125		$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 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 noted)

Parameter	Symbol	Test conditions	Min.	Typ.	Max.	Units
Forward Voltage	V_F^*	$I_F=1\text{A}$ TPB1A30-323	-	-	0.55	V
		$I_F=1\text{A}$ TPB1A40-323			0.60	
		$I_F=3\text{A}$ TPB1A30-323			0.875	
		$I_F=3\text{A}$ TPB1A40-323	-	-	0.90	
Maximum Peak Reverse Current	I_R^{**}	$V_R=30\text{V}$ TPB1A30-323 $V_R=40\text{V}$ TPB1A40-323	-	-	1	mA
Capacitance Between Terminals	C_T	$V_R=4\text{V}, f=1\text{MHz}$	-	39	120	pF

Typical Electrical Characteristic Curves

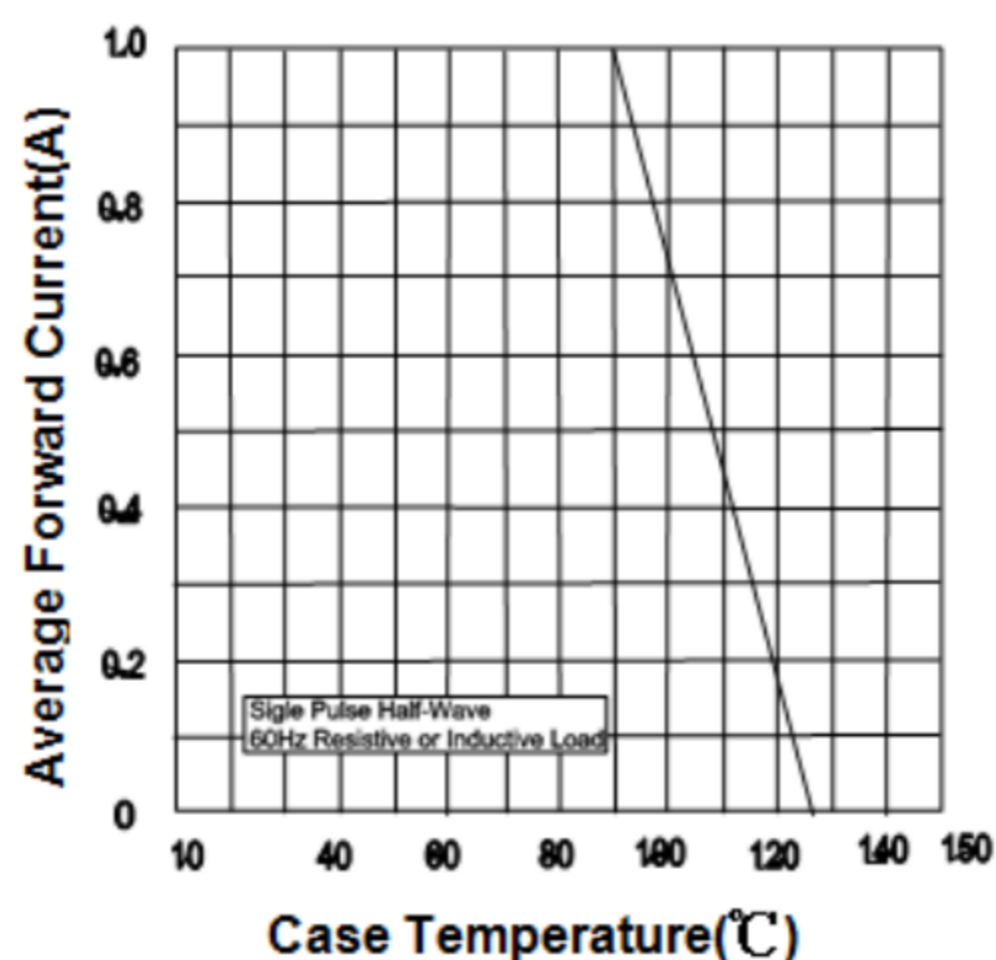


Fig.1 Forward Current Derating Curve

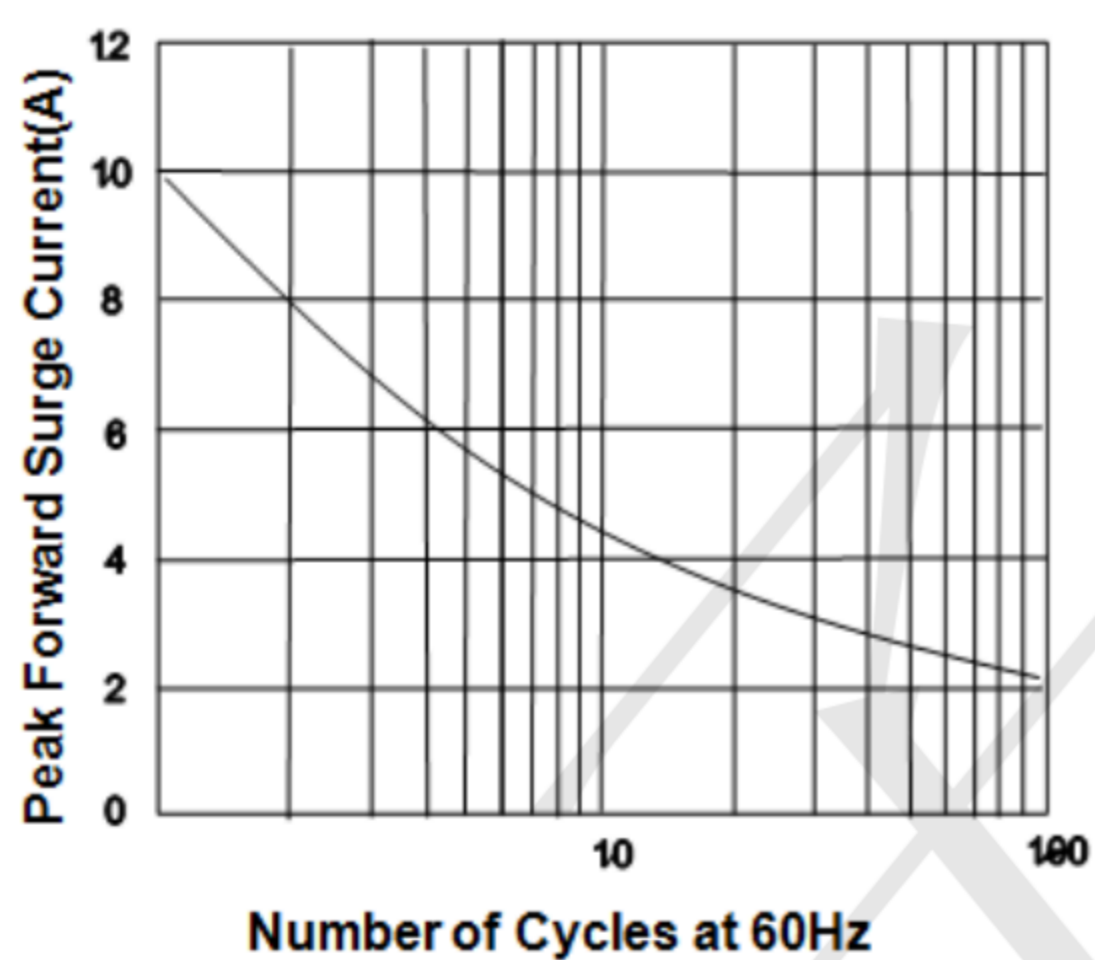


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

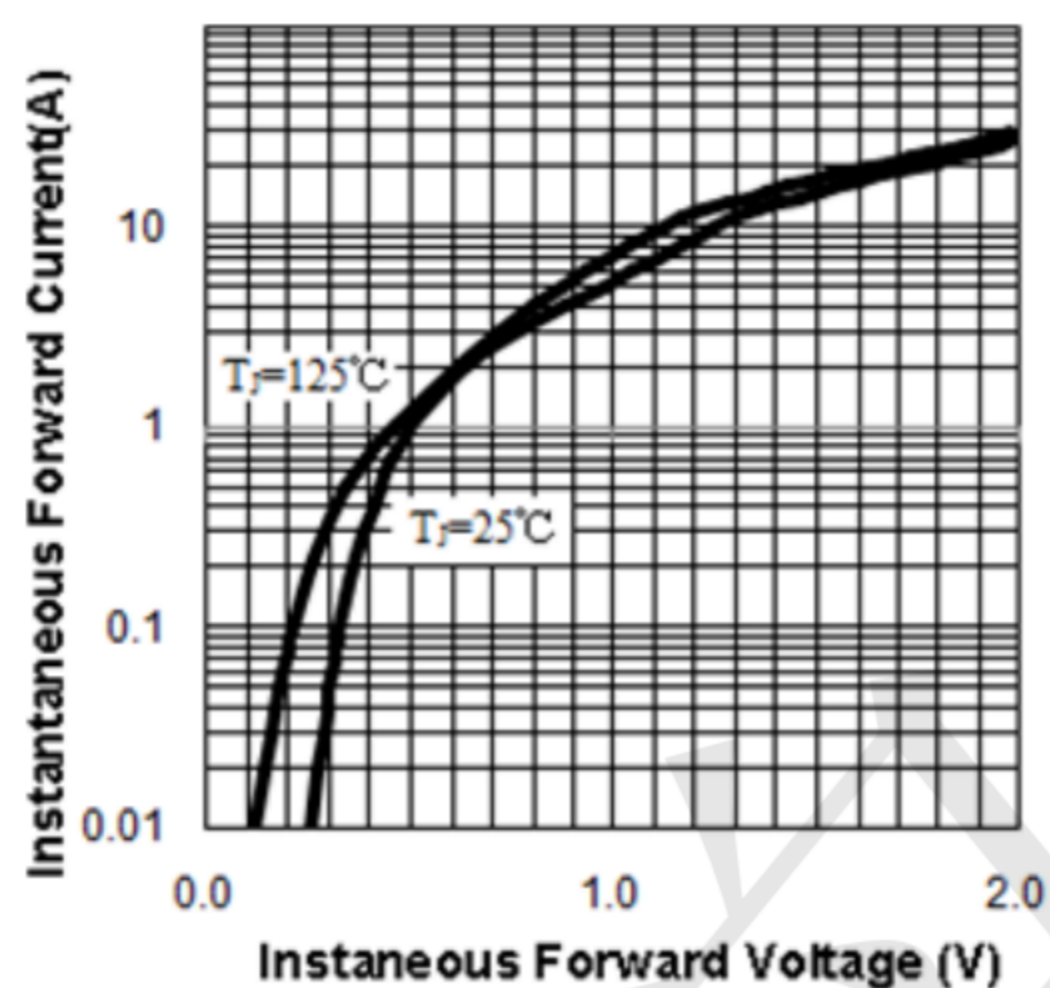


Fig.3 Typical Instantaneous Forward Characteristics

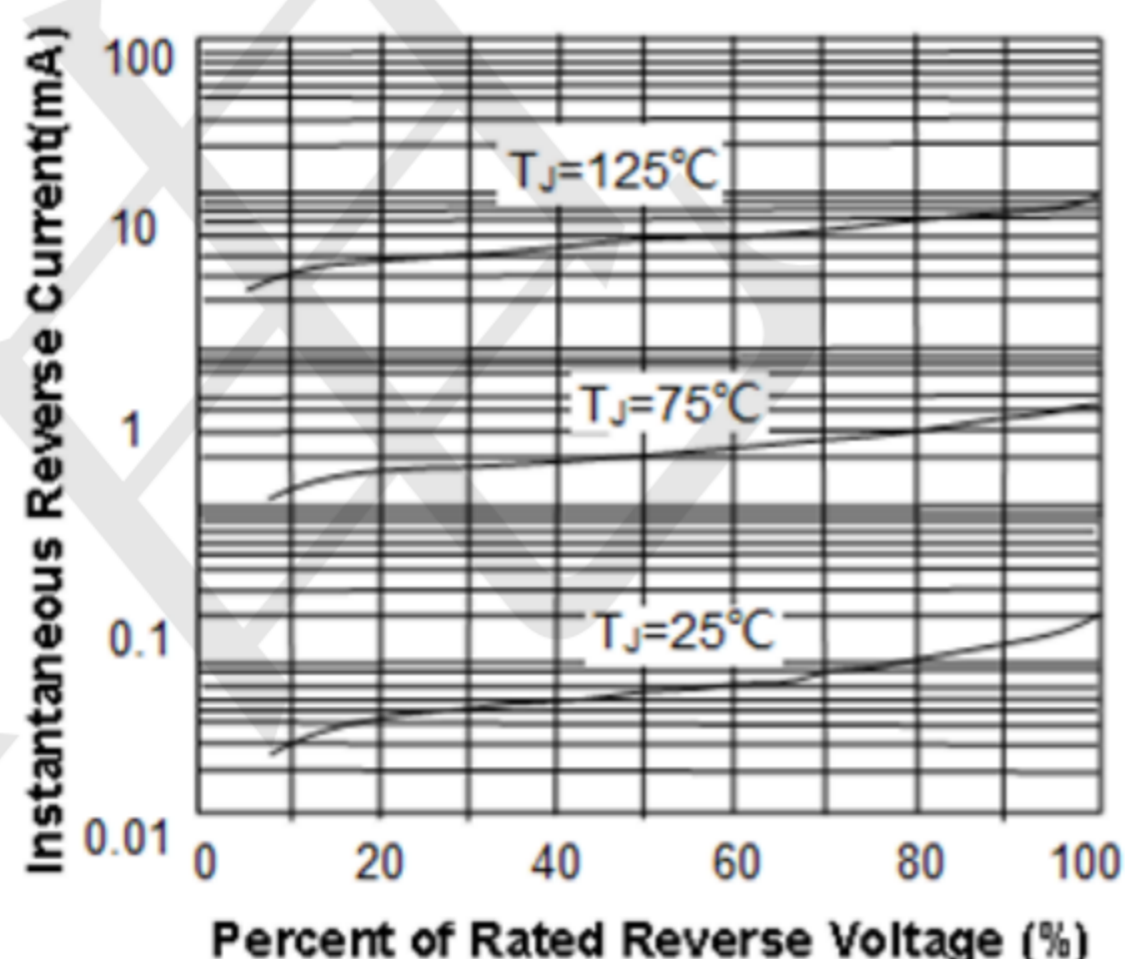
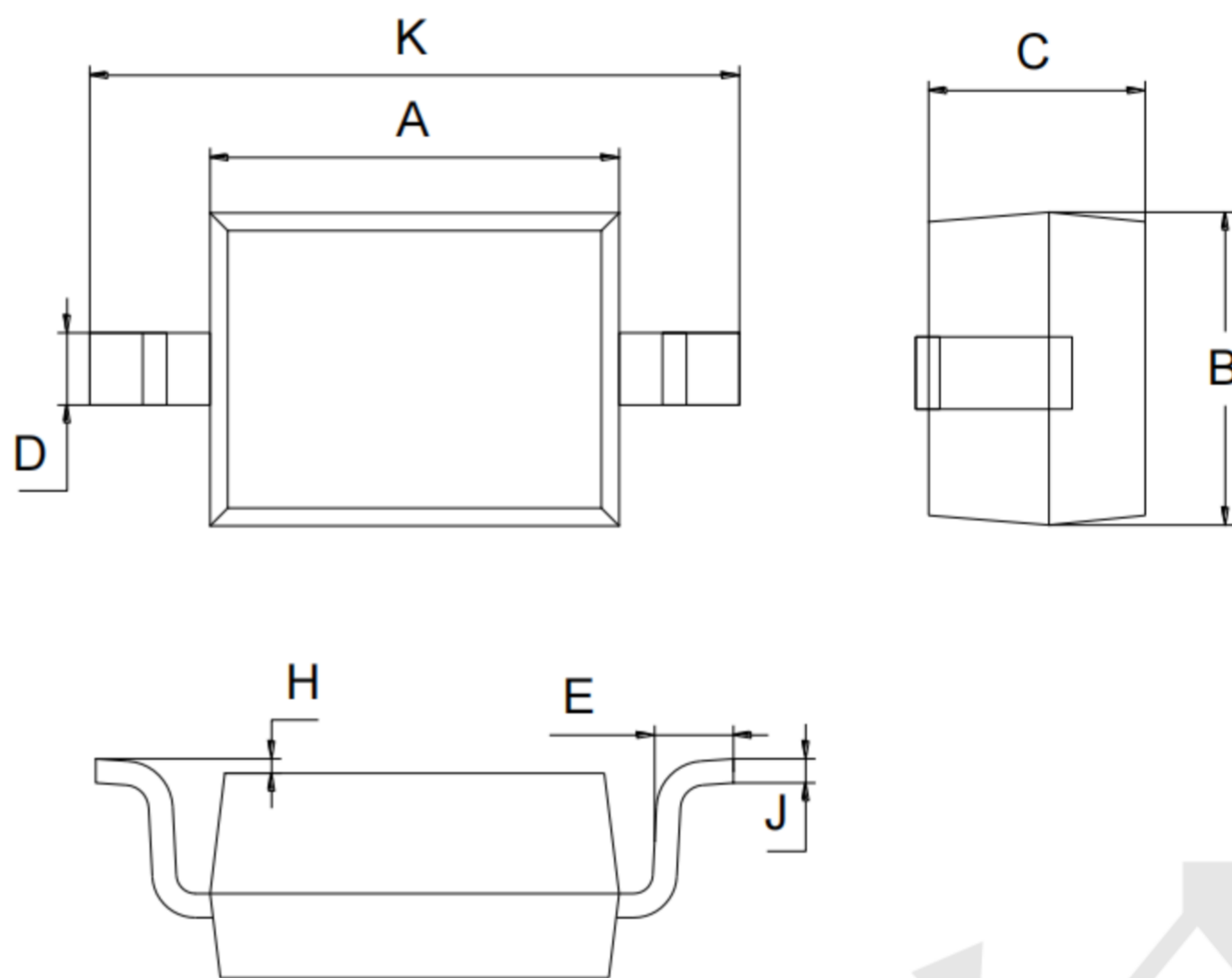


Fig.4 Typical Reverse Characteristics

Outline Drawing - SOD323



SOD-323		
Dim	Min	Max
A	1.60	1.80
B	1.20	1.40
C	0.85	1.15
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-SOD323 (unit: mm)

