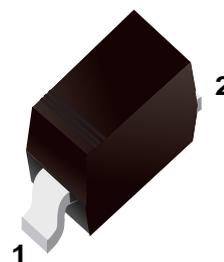


## Schottky Diodes

### ■ Features

- Fast Switching Speed
- For General Purpose Switching Applications.
- High Conductance



■ Simplified outline(SOD-323)

### ■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Reverse Voltage	$V_{RM}$	10	V
Forward Current	$I_F$	3	A
Peak Forward Surge Current ( $t \leq 10ms$ )	$I_{FM}$	5	
Power Dissipation $T_S \leq 28^\circ C$	$P_d$	350	mW
Thermal Resistance Junction to Point <sup>1</sup>	$R_{\theta JS}$	$\leq 90$	K/W
Junction Temperature	$T_J$	150	°C
Operating Temperature Range	$T_{OP}$	-55 to 85	
Storage Temperature range	$T_{stg}$	-55 to 150	

#### NOTES:

1.For calculation of  $R_{thJA}$  please refer to Application Note Thermal Resistance

### ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	$V_R$	$I_R = 100 \mu A$	10			V
Forward voltage	$V_F$	$I_F = 10 mA$			0.32	
		$I_F = 100 mA$			0.38	
		$I_F = 1000 mA$			0.58	
Reverse voltage leakage current	$I_R$	$V_R = 5 V$			1	mA
		$V_R = 8 V$			2.6	
		$V_R = 5 V, T_A = 80^\circ C$		18		
Junction capacitance	$C_j$	$V_R = 5 V, f = 1 MHz$			35	pF

■ Typical Characteristics

Reverse current  $I_R = f(V_R)$

$T_A = \text{Parameter}$

Forward current  $I_F = f(V_F)$

$T_A = \text{Parameter}$

Fig 1. Reverse Characteristic Curve

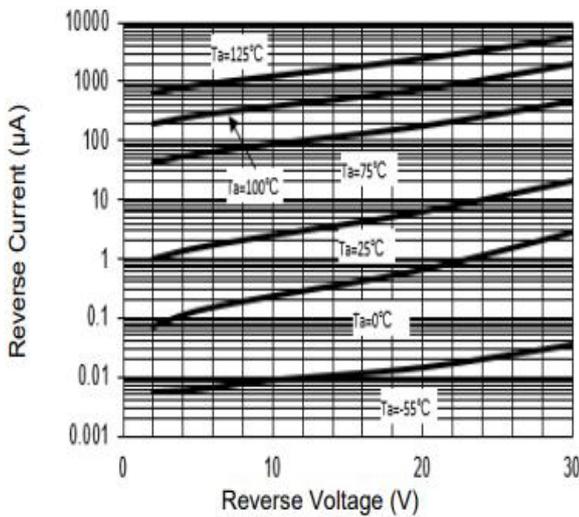


Fig 2. Forward Characteristic Curve

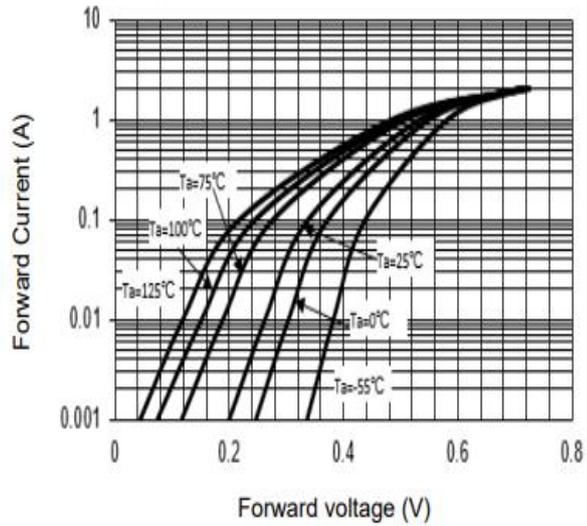


Fig 3. Junction Capacitance

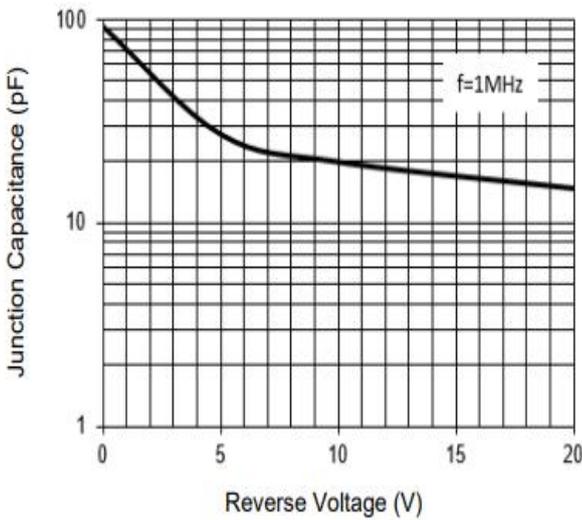
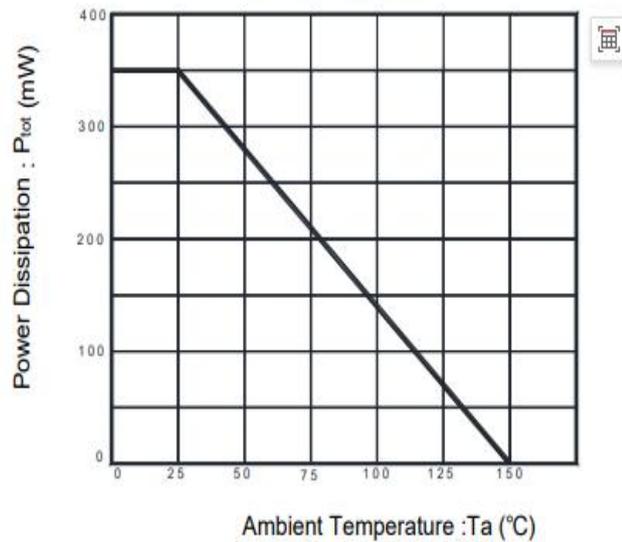
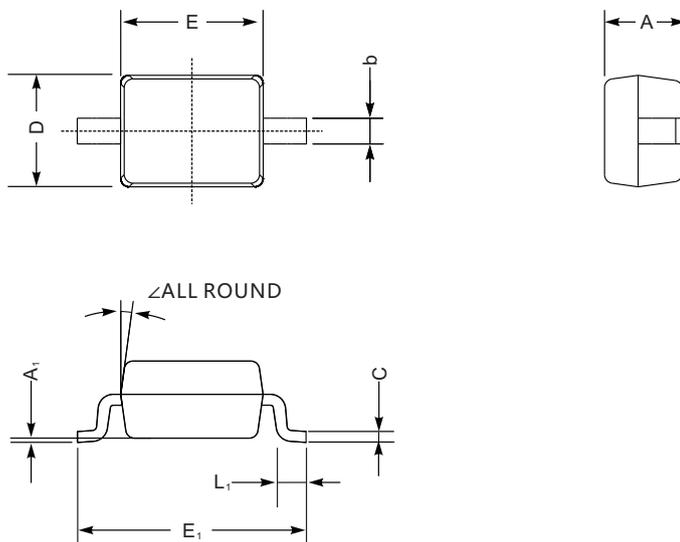


Fig 4. Derating Curve



**■ SOD-323**

**SOD-323 mechanical data**

UNIT		A	C	D	E	E <sub>1</sub>	b	L <sub>1</sub>	A <sub>1</sub>	∠
mm	max	1.1	0.15	1.4	1.8	2.75	0.4	0.45	0.2	9°
	min	0.8	0.08	1.2	1.4	2.55	0.25	0.2	—	
mil	max	43	5.9	55	70	108	16	16	8	
	min	32	3.1	47	63	100	9.8	7.9	—	

**■ The recommended mounting pad size**
