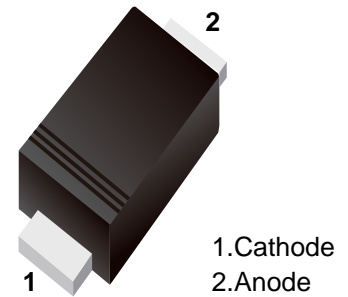


## ■ Schottky Barrier Diode

### ■ FEATURES

- Low forward voltage drop.
- Guard ring construction for transient protection.
- Low reverse recovery time.
- Low reverse capacitance.



### ■ Simplified outline(SOD-523)



### ■ APPLICATIONS

- Schottky barrier application.

### MAXIMUM RATING @ Ta=25°C unless otherwise specified

Parameter	Symbol	Limits	Unit
DC Reverse voltage	$V_R$	40	V
Continuous forward current	$I_F$	350	mA
Repetitive peak forward current @t≤1.0s	$I_{FRM}$	1	A
Total power dissipation	$P_{tot}$	400	mW
Total resistance junction to ambient	$R_{\theta JA}$	300	°C/W
Junction temperature	$T_j$	125	°C
Storage temperature	$T_{stg}$	-65-125	°C

### ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse breakdown voltage	$V_{(BR)R}$	40			V	$I_R=100\mu A$
Forward voltage	$V_F$			0.37 0.60	V	$I_F=20mA$ $I_F=200mA$
Reverse current	$I_R$			5.0	$\mu A$	$V_R=30V$
Diode capacitance	$C_d$		50		pF	$V_R=0V, f=1MHz$
Reverse recovery time	$t_{rr}$		10		ns	$I_F=I_R=50mA, R_L=100\Omega$

■ TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

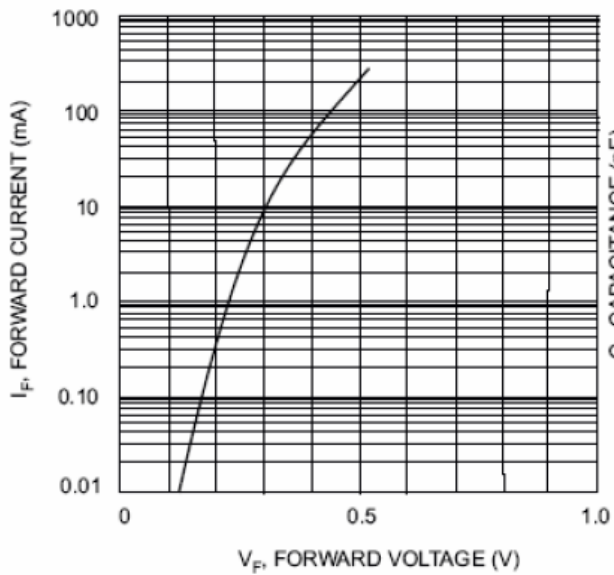


Fig. 1 Typical Forward Characteristics

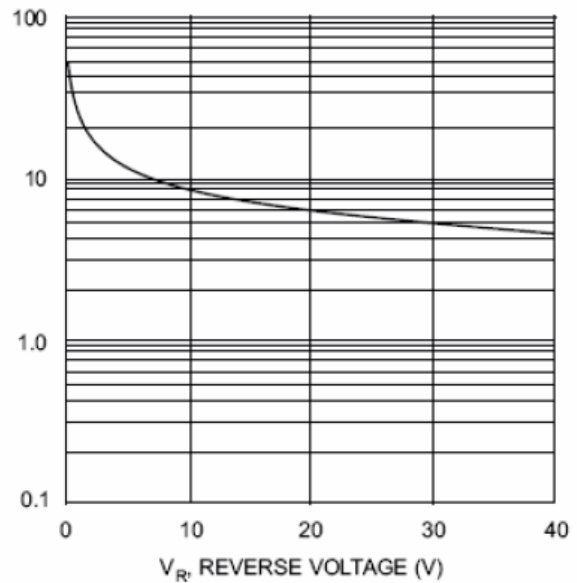
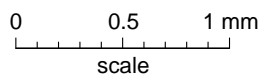
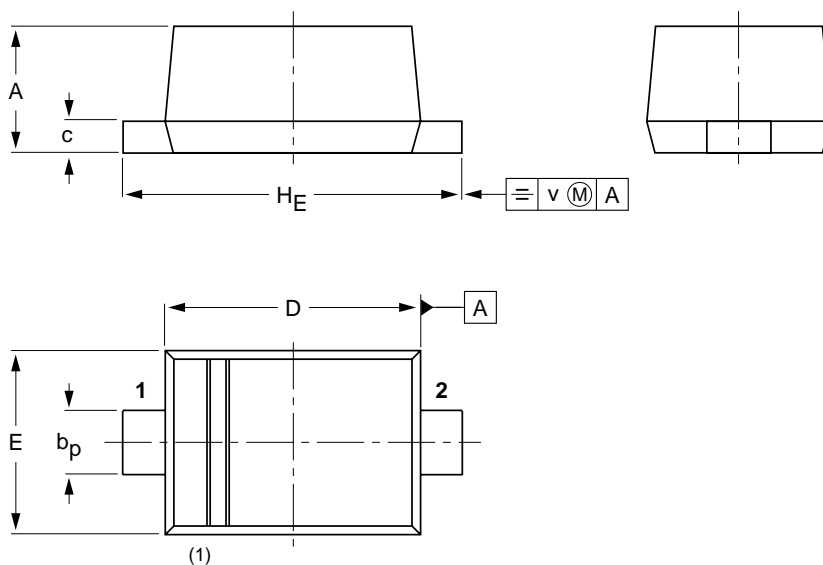


Fig. 2 Typ. Junction Capacitance vs Reverse Voltage

■ SOD-523



**DIMENSIONS (mm are the original dimensions)**

UNIT	A	b <sub>P</sub>	c	D	E	H <sub>E</sub>	v
mm	0.7	0.35	0.2	1.3	0.9	1.7	0.15
	0.5	0.25	0.1	1.1	0.7	1.5	

**Note**

1. The marking bar indicates the cathode.