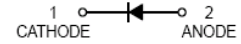


Schottky Barrier Diode

FEATURES

- Low Forward Voltage Drop.
- Guard Ring Construction For Transient Protection.
- Negligible Reverse Recovery Time.
- Low Reverse Capacitance.



SOD-523

APPLICATIONS

- Schottky barrier switching.

ORDERING INFORMATION

Type No.	Marking	Package Code
SD103AX	S4	SOD-523
SD103BX	S5	SOD-523
SD103CX	S6	SOD-523

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Parameter	Symbol	SD103AX	SD103BX	SD103CX	Unit
Peak Repetitive Peak reverse voltage	V_{RR}				
Working Peak DC Reverse Voltage	V_{RWM}	40	30	20	V
	V_R				
RMS Reverse Voltage	$V_{R(RMS)}$	28	21	14	V
Forward Continuous Current	I_F	350			mA
Repetitive Peak Forward Current @t≤1.0s	I_{FRM}	1.5			A
Power Dissipation	P_d	400			mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	300			°C/W
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	$I_R=10\mu A$
		30				$I_R=10\mu A$
		20				$I_R=10\mu A$
Forward voltage	V_F			0.37 0.60	V	$I_F=20mA$ $I_F=200mA$
Reverse current	I_{RM}			5.0	μA	$V_R=30V$ $V_R=20V$ $V_R=10V$
Capacitance between terminals	C_T		50		pF	$V_R=0, f=1MHz$
Reverse Recovery Time	t_{rr}		10		ns	$I_R=I_F=200mA$ $I_{rr}=0.1 \cdot I_R, R_L=100\Omega$

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

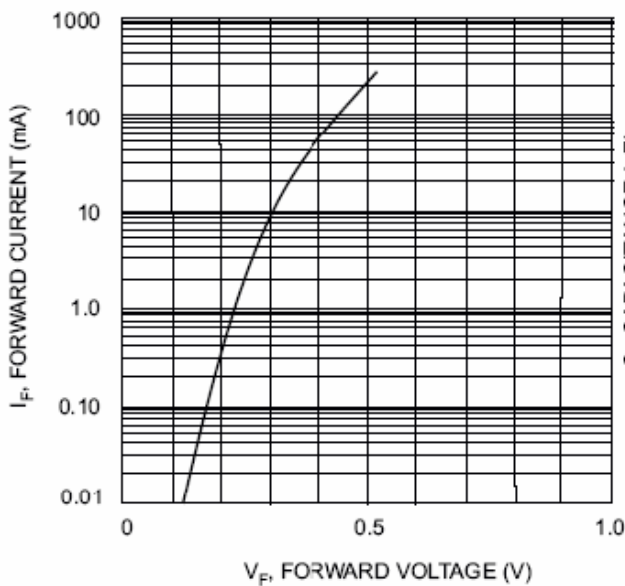


Fig. 1 Typical Forward Characteristics

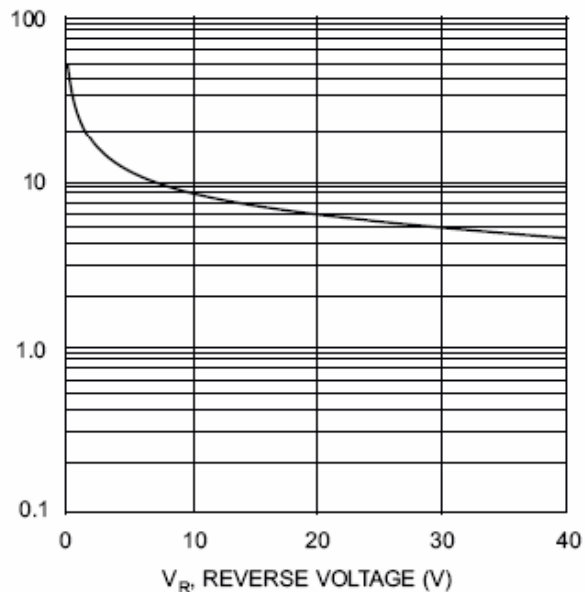
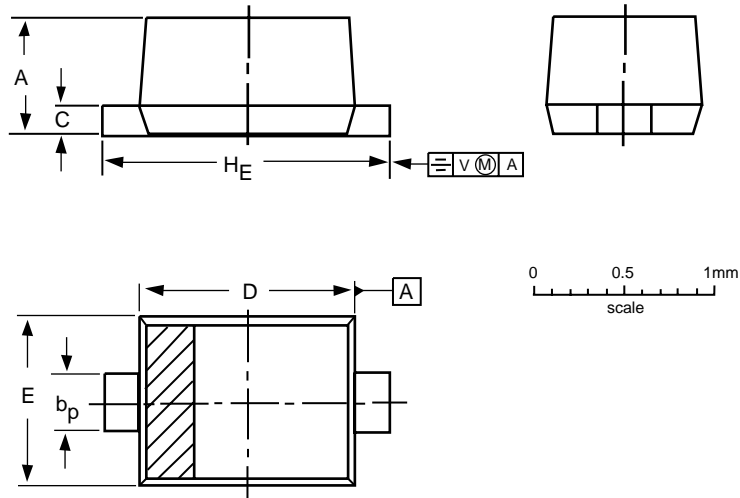


Fig. 2 Typ. Junction Capacitance vs Reverse Voltage

PACKAGE OUTLINE

Plastic surface mounted package


SOD-523



DIMENSIONS (mm are the original dimensions)

UNIT	A	b _p	c	D	E	H _E	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.

OUTLINE VERSION	REFERENCES			EUROPEAN PROJECTION	ISSUE DATE
	IEC	JEDEC	EIAJ		
SOD523					98-11-25