

# SCHOTTKY BARRIER DIODE

## ●Applications

Low current rectification and high speed switching

## ●Features

Extremely small surface mounting type. (SC-79/SOD523)

Low  $I_R$  ( $I_R=0.1\text{mA Typ.}$ )

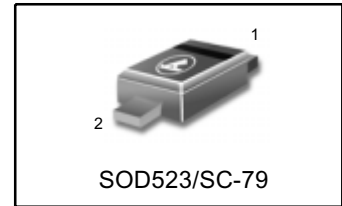
High reliability.

Pb-Free package is available.

## ●Construction

Silicon epitaxial planar

## LRB520S-30T1



## DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
LRB520S-30T1	5J	3000/Tape&Reel
LRB520S-30T1G	5J (Pb-Free)	3000/Tape&Reel

## MAXIMUM RATINGS ( $T_A = 25^\circ\text{C}$ )

Parameter	Symbol	Limits	Unit
DC reverse voltage	$V_R$	30	V
Mean rectifying current	$I_o$	200	mA
Peak forward surge current	$I_{FSM}$	1	A
Junction temperature	$T_j$	125	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-40~+125	$^\circ\text{C}$

## ELECTRICAL CHARACTERISTICS ( $T_A = 25^\circ\text{C}$ )

Parameter	Symbol	Min.	Typ	Max.	Unit	Conditions
Forward voltage	$V_F$	-	-	0.60	V	$I_F=200\text{mA}$
Reverse current	$I_R$	-	-	1.0	$\mu\text{A}$	$V_R=10\text{V}$

LRB520S-30T1

Electrical characteristic curves (Ta=25°C)

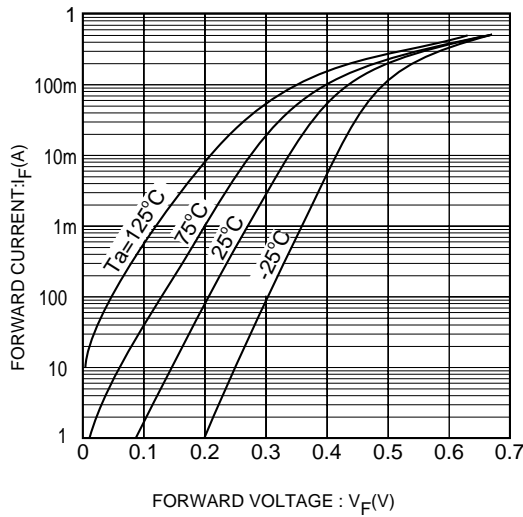


Fig. 1 Forward characteristics

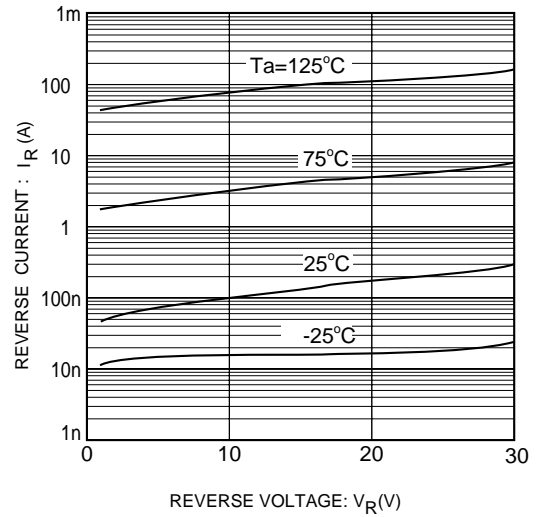


Fig. 2 Reverse characteristics

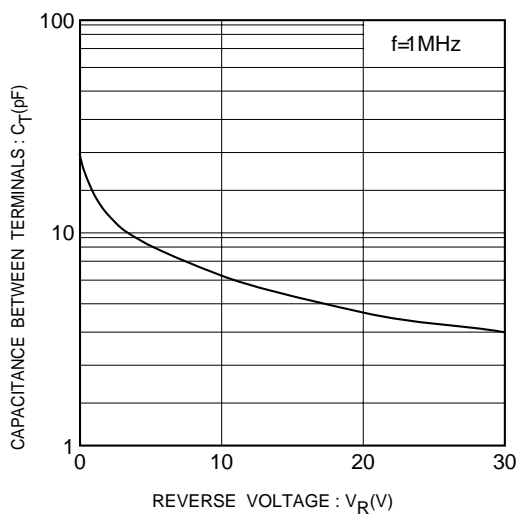


Fig. 3 Capacitance between terminals characteristics

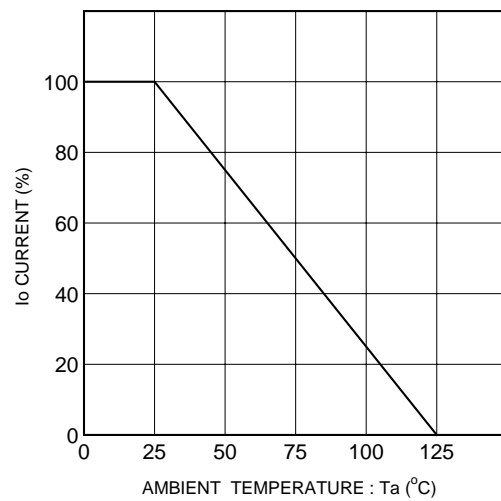
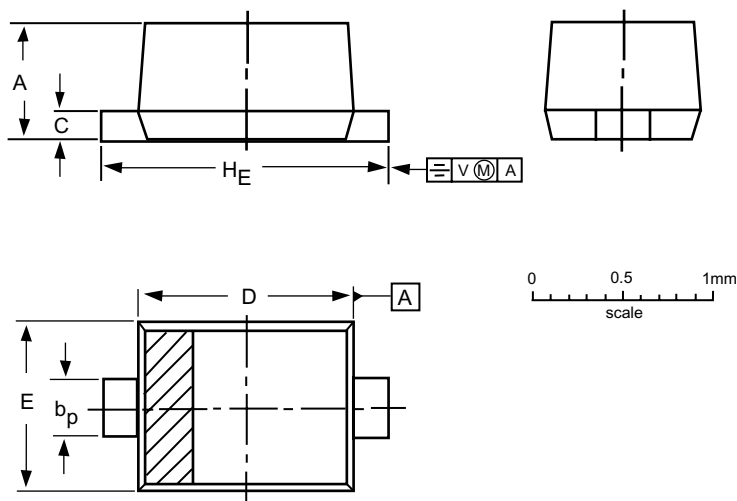


Fig. 4. Derating curve  
(mounting on glass epoxy PCBs)

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SC-79/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.

OUTLINE VERSION	REFERENCES			EUROPEAN PROJECTION	ISSUE DATE
	IEC	JEDEC	EIAJ		
SOD523			SC-79		98-11-25