

# SCHOTTKY BARRIER DIODE

## ●Applications

Low current rectification and high speed switching

## ●Features

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

$I_O=200\text{mA}$  guaranteed despite the size.

Low  $V_F$ . ( $V_F=0.40\text{V}$  Typ. At  $200\text{mA}$ )

## ●Construction

silicon epitaxial planar

**LRB521S-30T1**



## 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	$^\circ\text{C}$

\*60Hz for 1  $\mu\text{s}$

## DEVICE MARKING

LRB521S-30T1=5M

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

Parameter	Symbol	Min.	Typ	Max.	Unit	Conditions
Forward voltage	$V_F$	—	—	0.50	V	$I_F=200\text{mA}$
Reverse current	$I_R$	—	—	30	$\mu\text{A}$	$V_R=10\text{V}$

## LRB521S-30T1

Electrical characteristic curves( $T_a=25^{\circ}\text{C}$ )

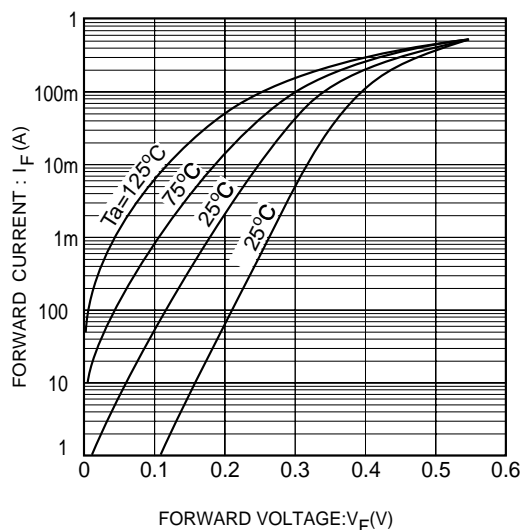


Fig. 1 Forward characteristics

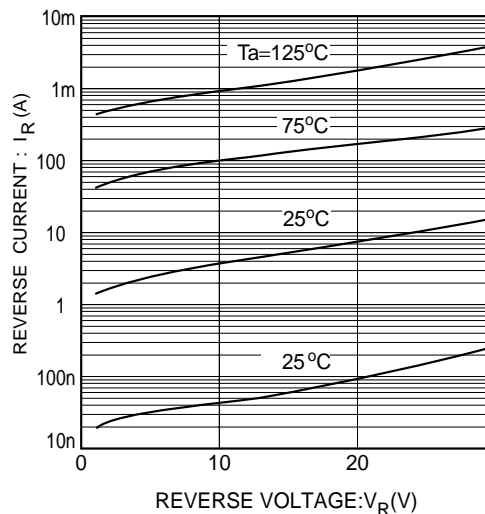


Fig. 2 Reverse characteristics

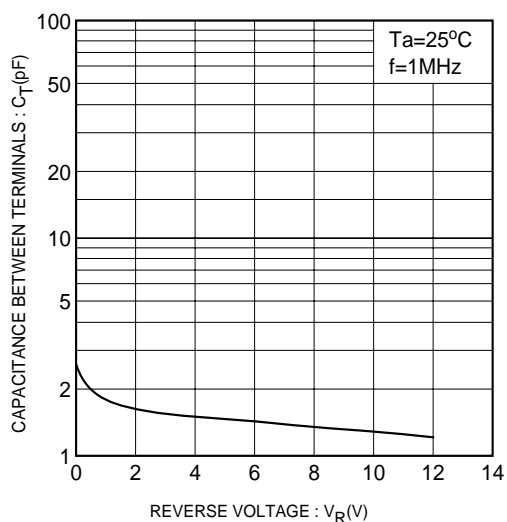


Fig. 3 Capacitance between terminals characteristics

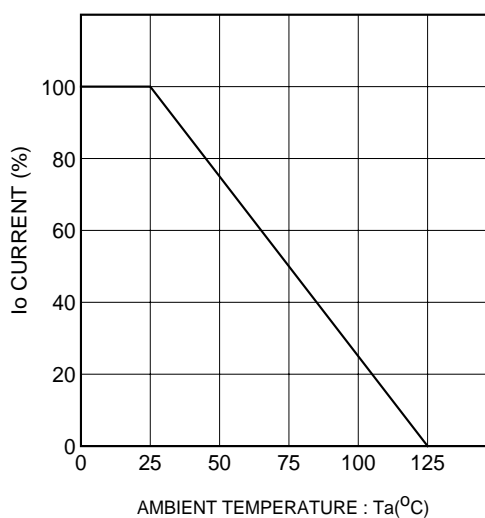
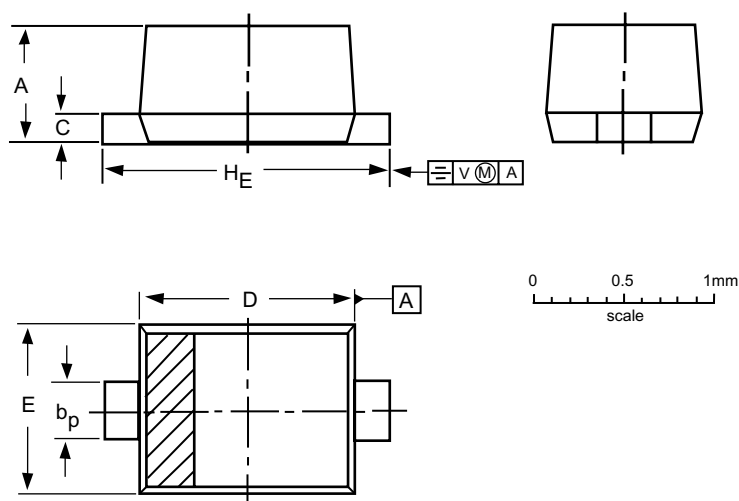


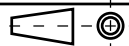
Fig. 4 Derating curve  
(mounting on glass epoxy PCBs)

**LRB521S-30T1**
**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