

# SCHOTTKY BARRIER DIODE

**●Applications**

Low current rectification and high speed switching

**●Features**

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

Low  $I_R$  ( $I_R=0.1mA$  Typ.)

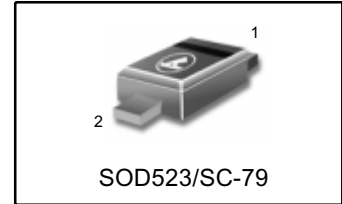
High reliability.

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** ( $T_A = 25^\circ C$ )

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	$^\circ C$
Storage temperature	$T_{stg}$	-40~+125	$^\circ C$

**ELECTRICAL CHARACTERISTICS** ( $T_A = 25^\circ C$ )

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

LRB520S-30T1

Electrical characteristic curves (Ta=25°C)

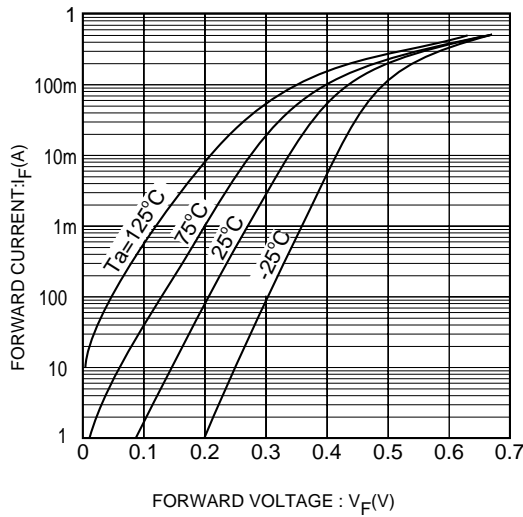


Fig. 1 Forward characteristics

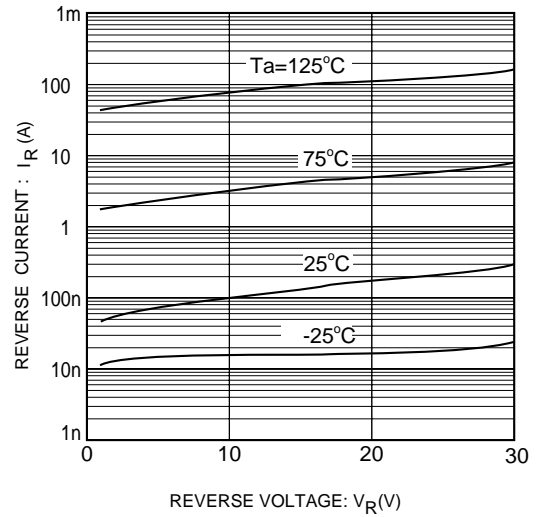


Fig. 2 Reverse characteristics

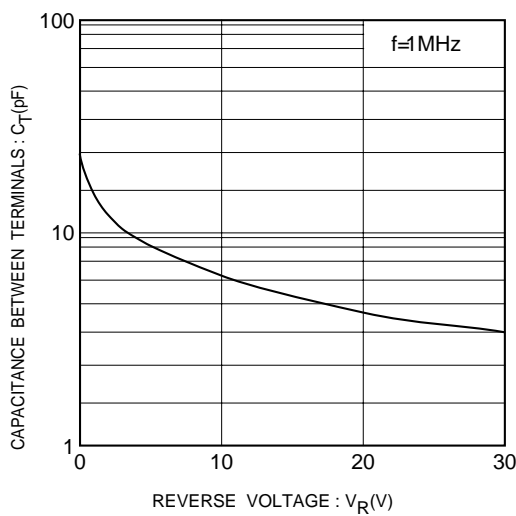


Fig. 3 Capacitance between terminals characteristics

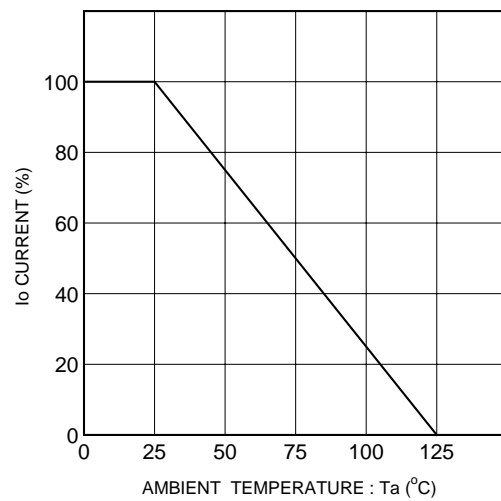
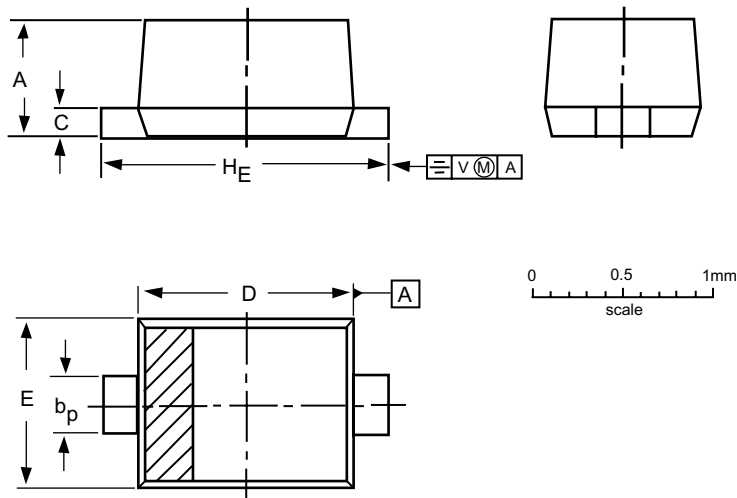



Fig. 4. Derating curve  
(mounting on glass epoxy PCBs)

**LRB520S-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