

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	μA	$V_R=10\text{V}$

LRB520S-30T1

Electrical characteristic curves (Ta=25°C)

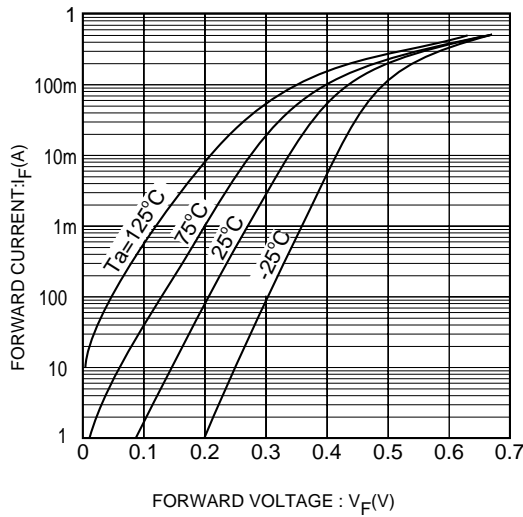


Fig. 1 Forward characteristics

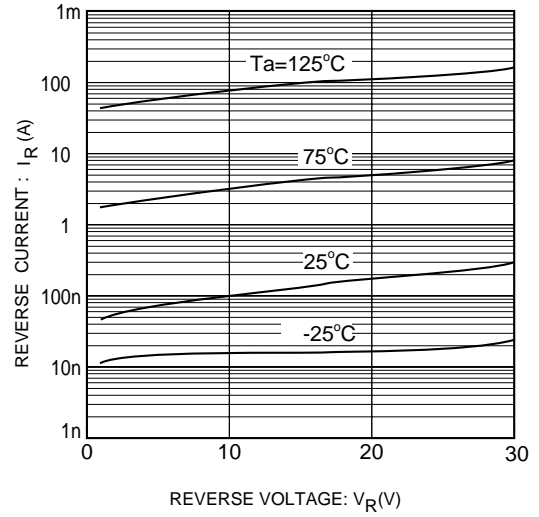


Fig. 2 Reverse characteristics

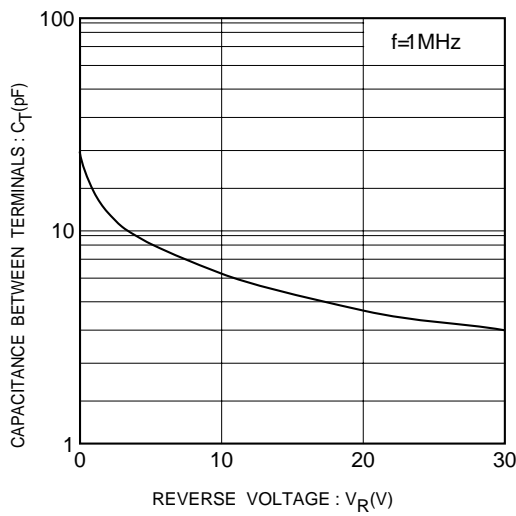


Fig. 3 Capacitance between terminals characteristics

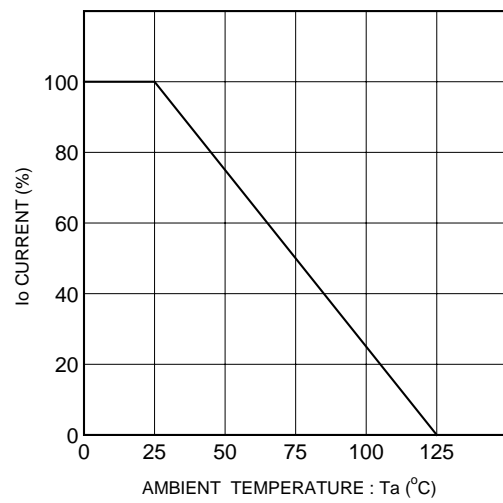
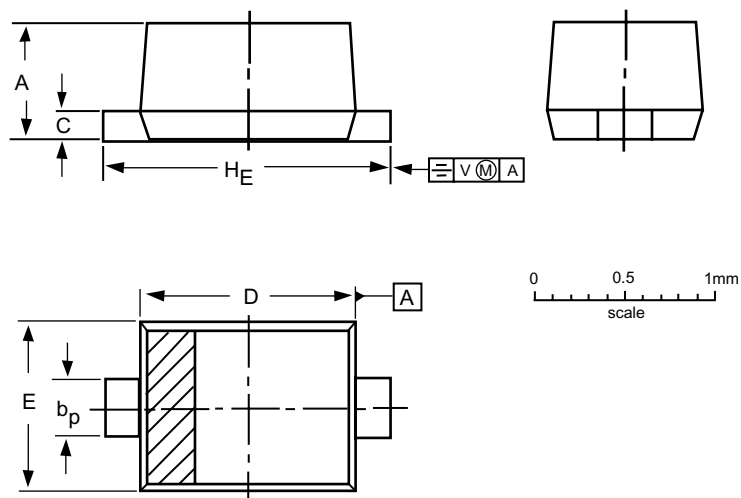



Fig. 4. Derating curve (mounting on glass epoxy PCBs)

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SC-79/SOD-523

DIMENSIONS (mm are the original dimensions)

UNIT	A	b _p	c	D	E	H _E	V
m m	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