

SCHOTTKY BARRIER DIODE

●Applications

Low current rectification and high speed switching

●Features

Extremely small surface mounting type. (SOD523)

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

Low V_F .

●Construction

Silicon epitaxial planar

- We declare that the material of product compliance with RoHS requirements.

Ordering Information

Device	Marking	Shipping
LRB521S-40T1G	S	3000/Tape&Reel
LRB521S-40T3G	S	10000/Tape&Reel

LRB521S-40T1G



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

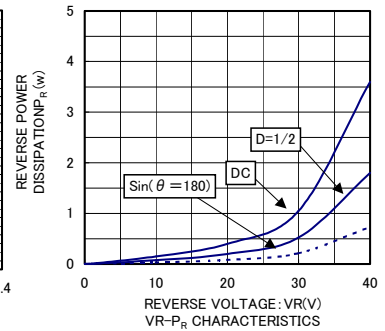
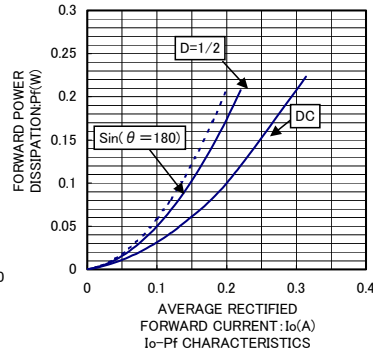
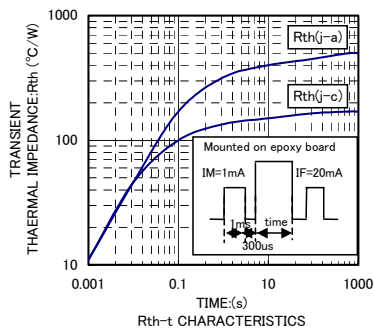
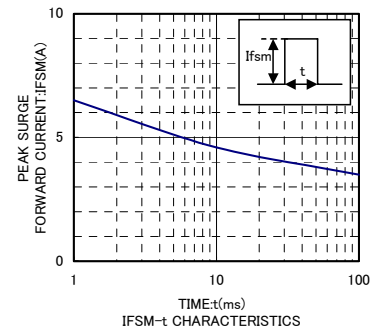
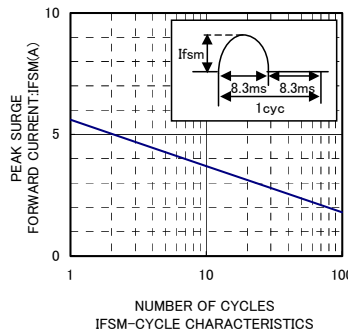
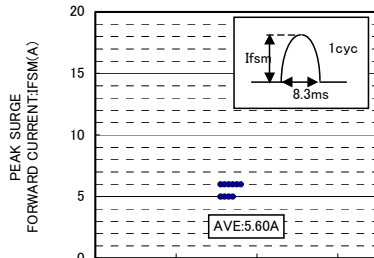
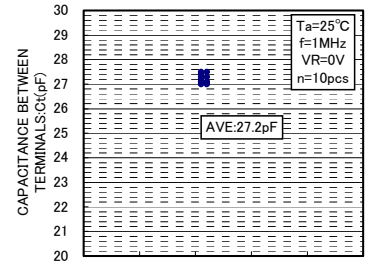
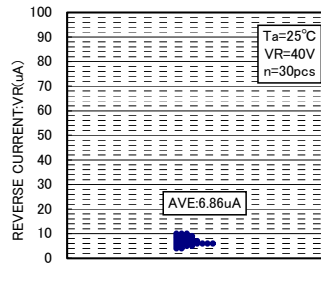
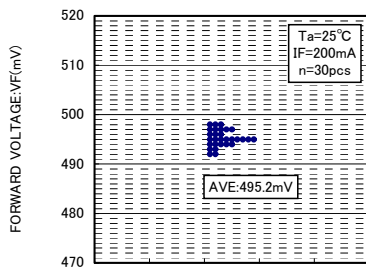
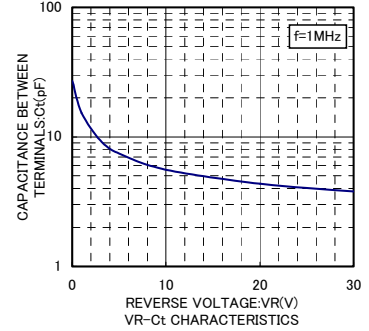
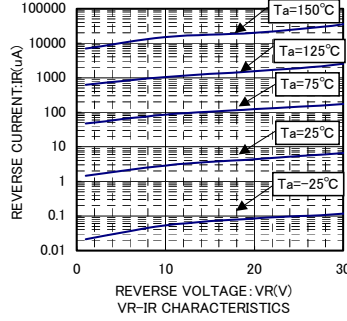
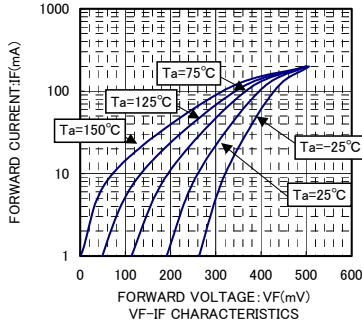
Parameter	Symbol	Limits	Unit
DC reverse voltage	V_R	40	V
Mean rectifying current	I_o	200	mA
Peak forward surge current*	I_{FSM}	4	A
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature	T_{slg}	-55~+125	$^\circ\text{C}$

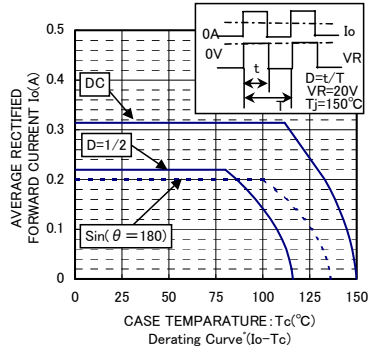
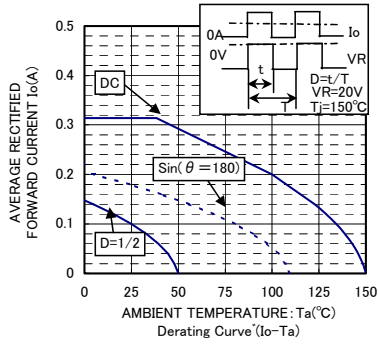
*60Hz for 1

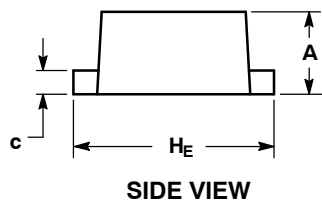
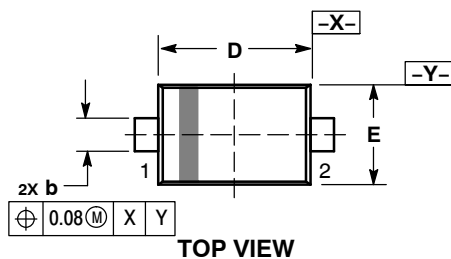
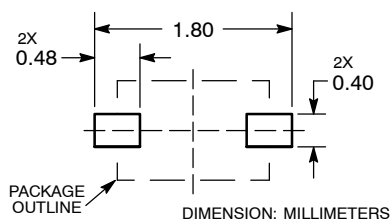
ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$)

Parameter	Symbol	Min.	Max.	Unit	Conditions
Forward voltage	V_F	0.16	0.30	V	$I_F=10\text{mA}$
Forward voltage	V_F	0.31	0.45	V	$I_F=100\text{mA}$
Forward voltage	V_F	0.37	0.52	V	$I_F=200\text{mA}$
Reverse current	I_R	-	20	μA	$V_R=10\text{V}$
Reverse current	I_R	-	90	μA	$V_R=40\text{V}$
ESD break down voltage	ESD	8	-	KV	$C=100\text{pF}$ $R=1.5\text{K}\ \Omega$ forward and reverse 1 time

●Electrical characteristic curves



LRB521S-40T1G


SOD-523

**RECOMMENDED
SOLDERING FOOTPRINT***

NOTES:

1. DIMENSIONING AND TOLERANCING PER ASME Y14.5M, 1994.
2. CONTROLLING DIMENSION: MILLIMETERS.
3. MAXIMUM LEAD THICKNESS INCLUDES LEAD FINISH. MINIMUM LEAD THICKNESS IS THE MINIMUM THICKNESS OF BASE MATERIAL.
4. DIMENSIONS D AND E DO NOT INCLUDE MOLD FLASH, PROTRUSIONS, OR GATE BURRS.

DIM	MILLIMETERS		
	MIN	NOM	MAX
A	0.50	0.60	0.70
b	0.25	0.30	0.35
c	0.07	0.14	0.20
D	1.10	1.20	1.30
E	0.70	0.80	0.90
H_E	1.50	1.60	1.70
L	0.30 REF		
L2	0.15	0.20	0.25