

SCHOTTKY BARRIER DIODE

●Applications

Low current rectification and high speed switching

●Features

Extremely small surface mounting type. (SOD523)

High reliability

Low I_R .

●Construction

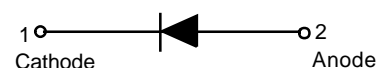
Silicon epitaxial planar

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

Ordering Information

Device	Marking	Shipping
LRB520S-40T1G	D	3000/Tape&Reel
LRB520S-40T3G	D	10000/Tape&Reel

LRB520S-40T1G



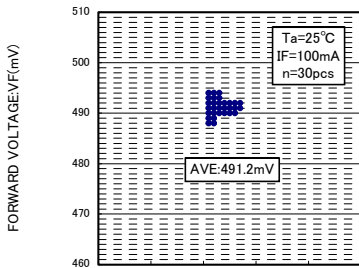
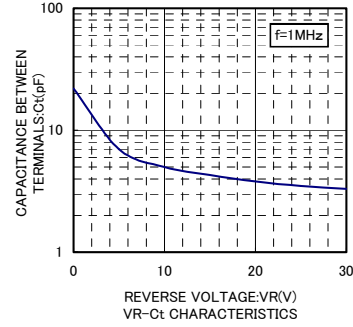
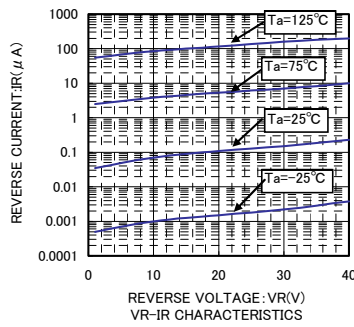
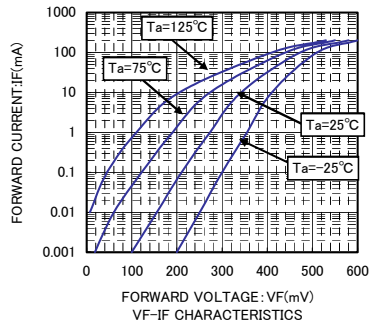
MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$)

Parameter	Symbol	Limits	Unit
Reverse voltage(repetitive peak)	V_R	40	V
DC reverse voltage	V_R	40	V
Average rectified forward 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	$^\circ\text{C}$

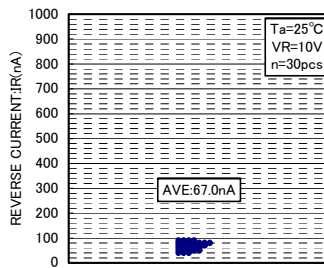
ELECTRICAL CHARACTERISTICS($T_A = 25^\circ\text{C}$)

Parameter	Symbol	Min.	Max.	Unit	Conditions
Forward voltage	V_F	-	0.39	V	$I_F = 10\text{mA}$
Forward voltage	V_F	-	0.55	V	$I_F = 100\text{mA}$
Reverse current	I_R	-	1	μA	$V_R = 10\text{V}$
Reverse current	I_R	-	10	μA	$V_R = 40\text{V}$

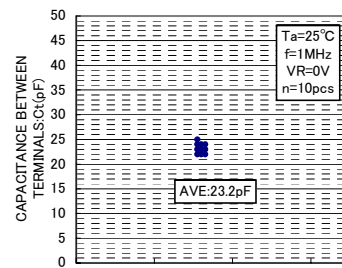
●Electrical characteristic curves



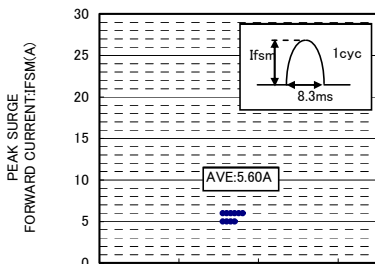
VF DISPERSION MAP



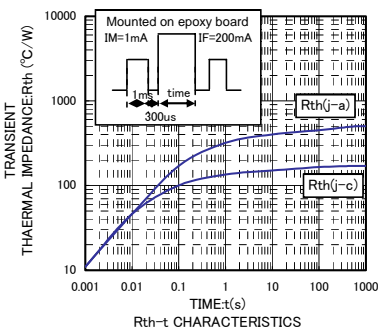
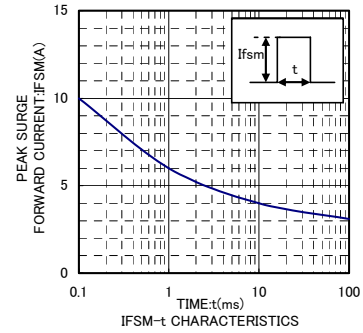
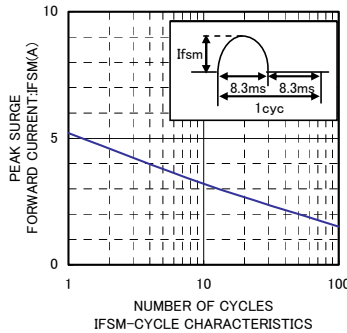
IR DISPERSION MAP



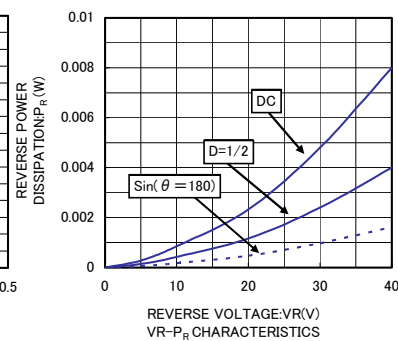
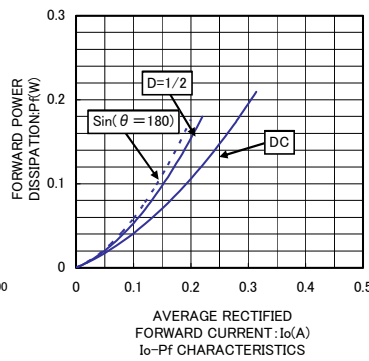
Ct DISPERSION MAP

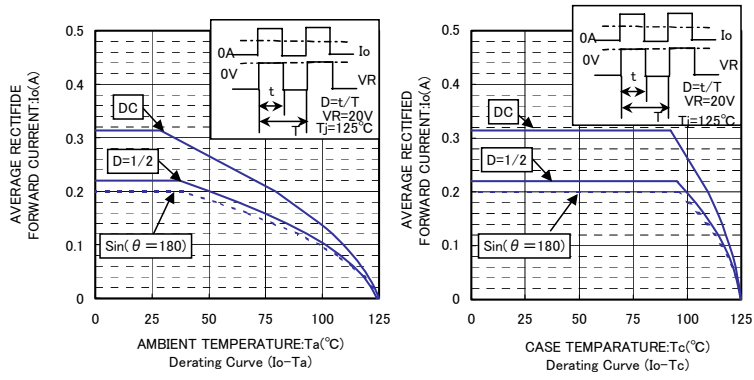


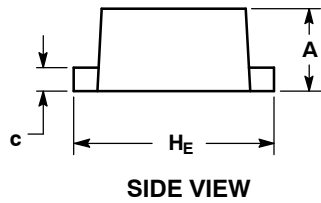
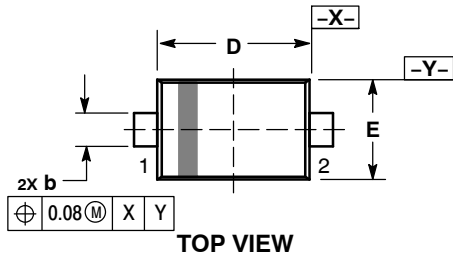
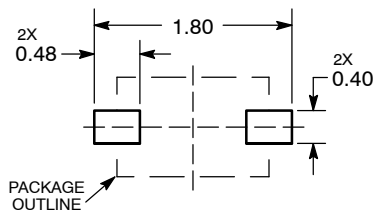
IFSM DISPERSION MAP



Rth-t CHARACTERISTICS



LRB520S-40T1G


SOD-523

**RECOMMENDED
SOLDERING FOOTPRINT***

NOTES:

2. CONTROLLING DIMENSION: MILLIMETERS.
3. MAXIMUM LEAD THICKNESS INCLUDES LEAD FINISH.

BASE MATERIAL.

TRUSIONS, 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