SCHOTTKY BARRIER DIODE

LRB520S–40T1G

SOD-523

- **Applictions**

  Low current rectification and high speed switching

- **Features**

  Extremelysmall surface mounting type. (SOD523)

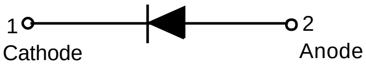
  High reliability

  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

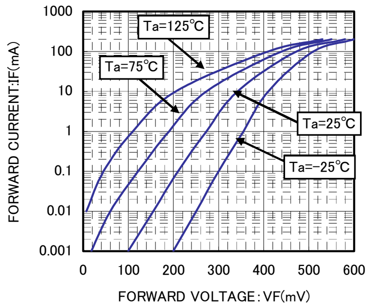
MAXIMUM RATINGS ($T_A = 25°C$)

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	℃
Storage temperature	T_{stg}	-40~+125	℃

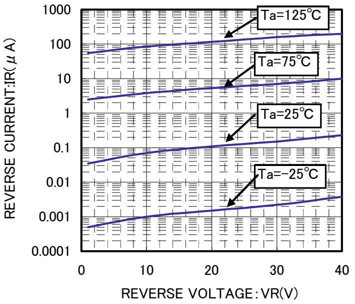
ELECTRICAL CHARACTERISTICS(T_A= 25°C)

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

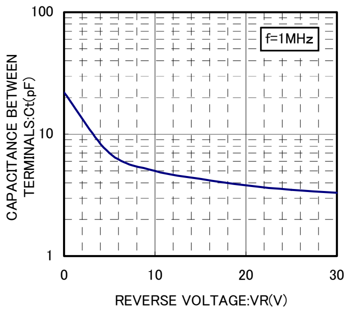
●Electrical characteristic curves



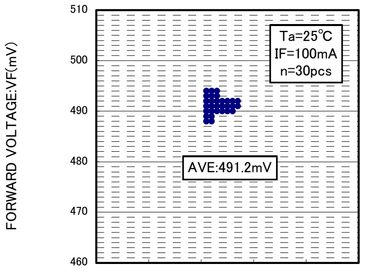
VF-IF CHARACTERISTICS



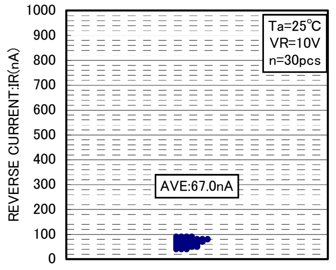
VR-IR CHARACTERISTICS



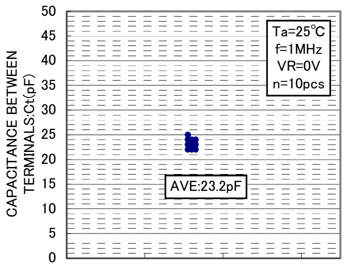
VR-Ct CHARACTERISTICS



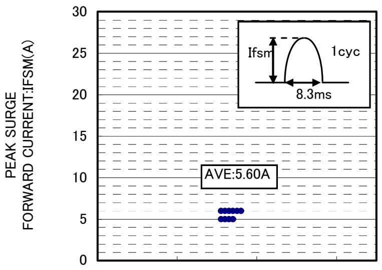
VF DISPERSION MAP



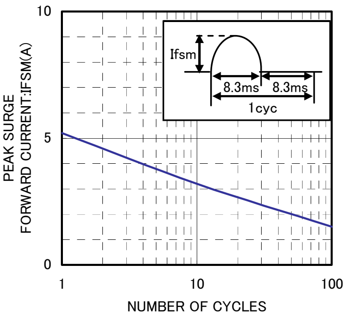
IR DISPERSION MAP



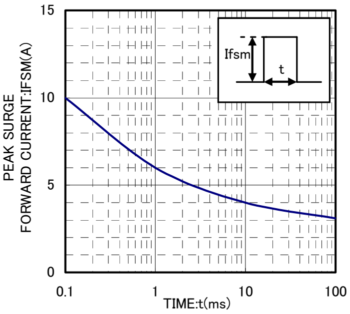
Ct DISPERSION MAP



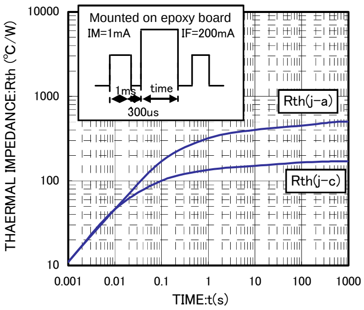
IFSM DISPERSION MAP



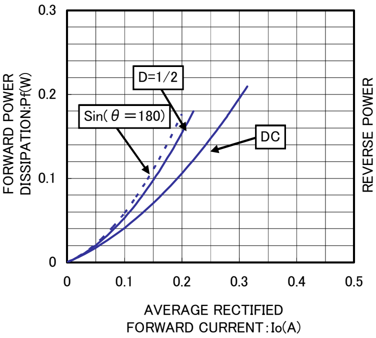
IFSM-CYCLE CHARACTERISTICS



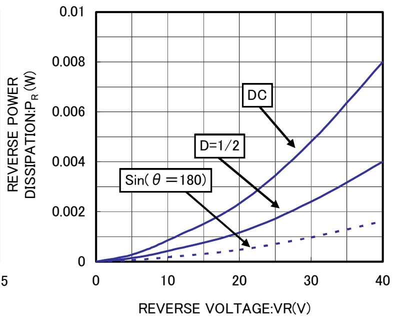
IFSM-t CHARACTERISTICS



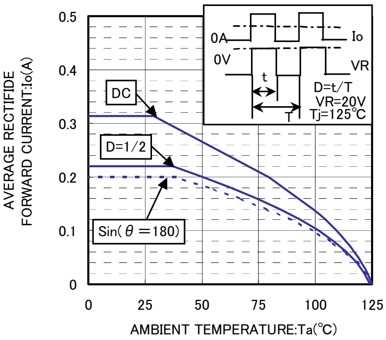
Rth-t CHARACTERISTICS



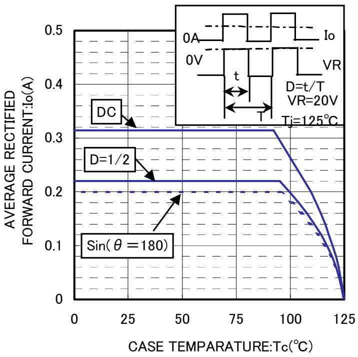
Io-Pf CHARACTERISTICS



VR-P_R CHARACTERISTICS

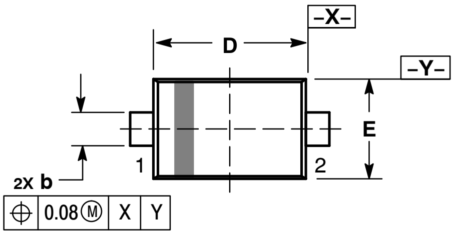


Derating Curve (Io−Ta)

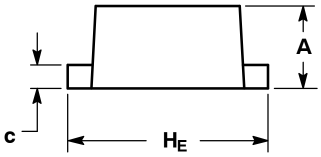


Derating Curve (Io−Tc)

SOD−523



TOP VIEW



SIDE VIEW

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

RECOMMENDED
SOLDERING FOOTPRINT*