

Schottky barrier diode

Pb - free package is available

●Applications

Low current rectification

●Features

- 1) Ultra Small mold type.
- 2) Low I_R .
- 3) High reliability.
- 4) S- Prefix for Automotive and Other Applications Requiring Unique Site and Control Change Requirements; AEC-Q101 Qualified and PPAP Capable.

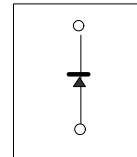
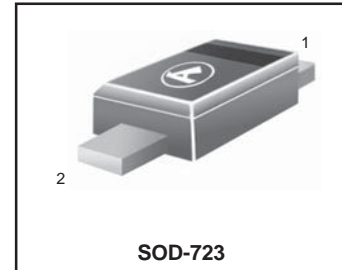
●Construction

Silicon epitaxial planar

●Device Marking

Device	Marking	Shipping
LRB520G-30T1G S-LRB520G-30T1G	E	4000/Tape&Reel

LRB520G-30T1G
S-LRB520G-30T1G



●Absolute maximum ratings (Ta=25°C)

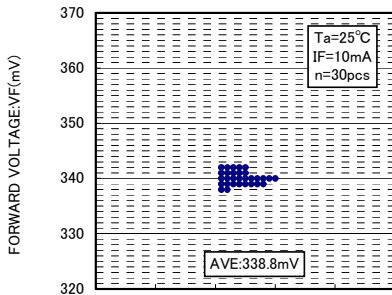
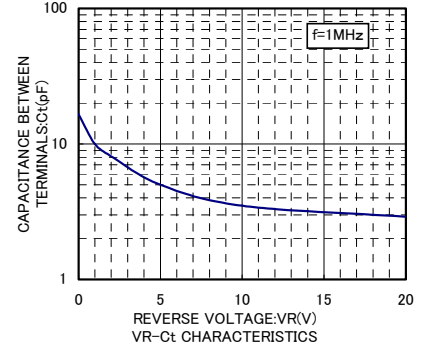
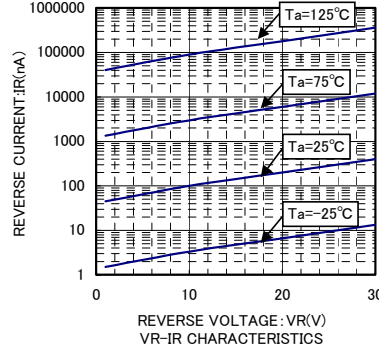
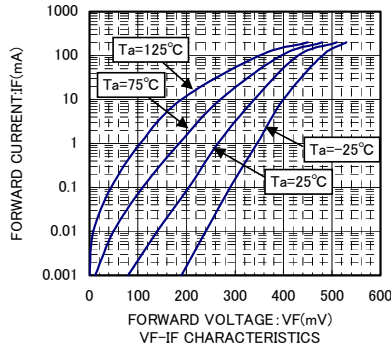
Parameter	Symbol	Limits	Unit
Reverse voltage(DC)	V_R	30	V
Average rectified forward current	I_o	100	mA
Forward current surge peak (60Hz·1cyc)	I_{FSM}	500	mA
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	-40 to +125	°C

●Electrical characteristics (Ta=25°C)

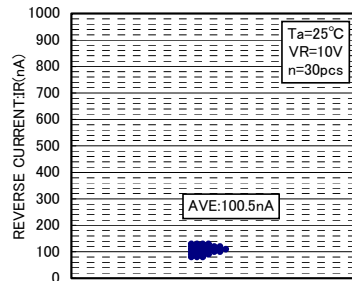
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	-	-	0.45	V	$I_F=10mA$
Reverse current	I_R	-	-	0.5	μA	$V_R=10V$

LRB520G-30T1G , S-LRB520G-30T1G

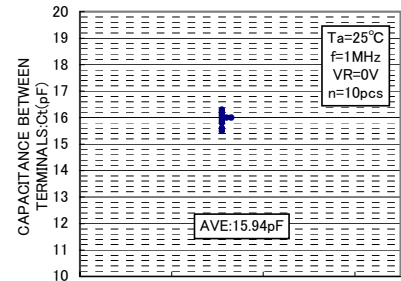
Electrical characteristic curves (Ta=25°C)



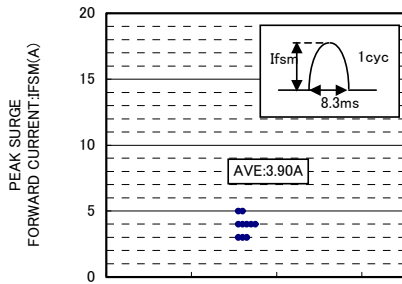
VF DISPERSION MAP



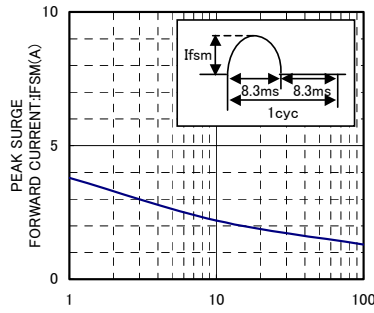
IR DISPERSION MAP



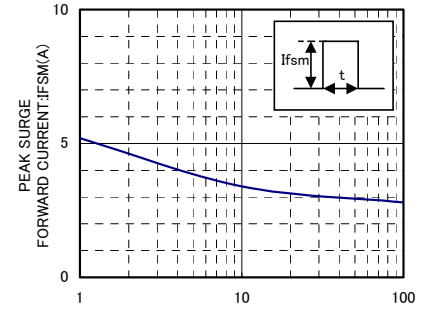
Ct DISPERSION MAP



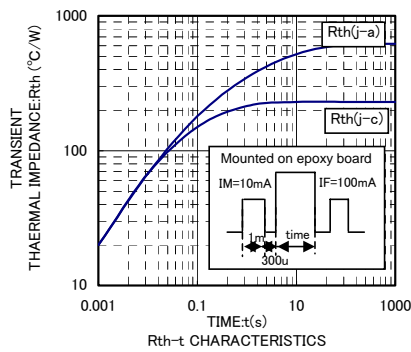
IFSM DISREION MAP



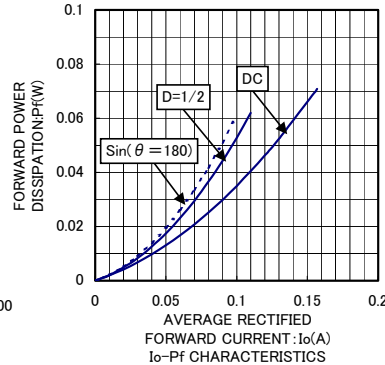
IFSM-CYCLE CHARACTERISTICS



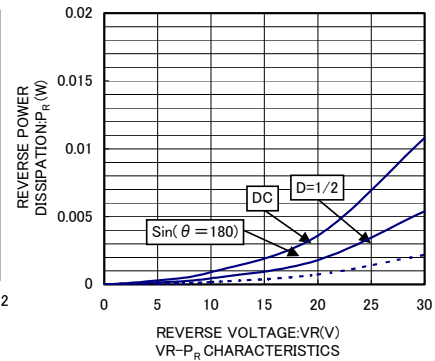
IFSM-t CHARACTERISTICS



Rth-t CHARACTERISTICS

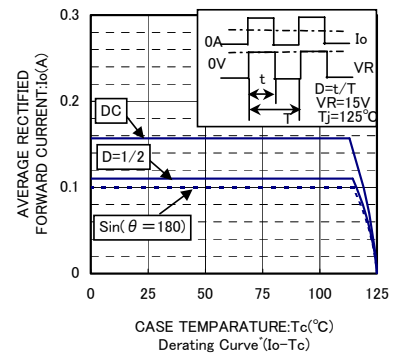
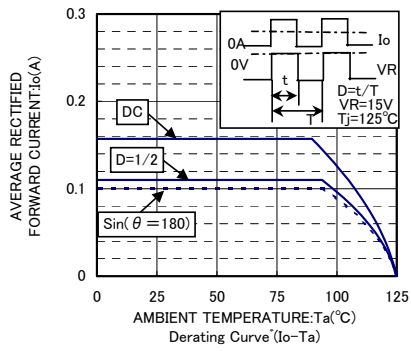


Io-PF CHARACTERISTICS



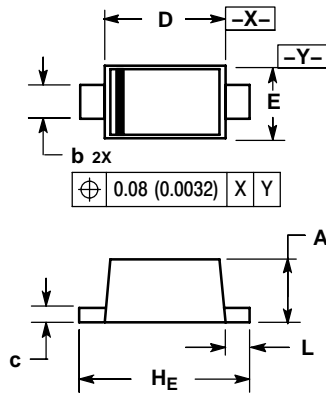
VR-PR CHARACTERISTICS

LRB520G-30T1G , S-LRB520G-30T1G



LRB520G-30T1G , S-LRB520G-30T1G

SOD-723



NOTES:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: MILLIMETER.
3. MAXIMUM LEAD THICKNESS INCLUDES LEAD FINISH THICKNESS. MINIMUM LEAD THICKNESS IS THE MINIMUM THICKNESS OF BASE MATERIAL.

DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.49	0.52	0.55	0.019	0.020	0.022
b	0.25	0.28	0.32	0.0098	0.011	0.013
c	0.08	0.12	0.15	0.0032	0.0047	0.0059
D	0.95	1.00	1.05	0.037	0.039	0.041
E	0.55	0.60	0.65	0.022	0.024	0.026
HE	1.35	1.40	1.45	0.053	0.055	0.057
L	0.15	0.20	0.25	0.006	0.0079	0.010

SOLDERING FOOTPRINT*

