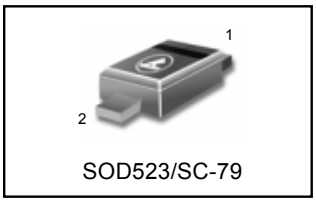
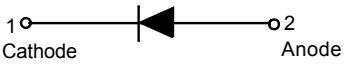
SCHOTTKY BARRIER DIODE

LRB520S–30T1G



SOD523/SC-79



- **Applications**

  Low current rectification and high speed switching

- **Features**

  Extremelysmall surface mounting type. (SC-79/SOD523)
  Extremely Fast Switching Speed
  Extremely Low Forward Voltage 0.6 V (max) @ IF = 200mA
  Low Reverse Current

- **Construction**

  Silicon epitaxial planar

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

DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
LRB520S-30T1G	5J	3000/Tape&Reel
LRB520S-30T3G	5J	10000/Tape&Reel

MAXIMUM RATINGS (T_A = 25°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	℃
Storage temperature	T_{stg}	-40~+125	℃

ELECTRICAL CHARACTERISTICS(T_A = 25°C)

Parameter	Symbol	Min.	Typ	Max.	Unit	Conditions
Forward voltage	V_F	–	–	0.60	V	I_F=200mA
Reverse current	I_R	–	–	1.0	A	V_R=10V

LRB520S–30T1G

Electrical characteristic curves (Ta=25°C)

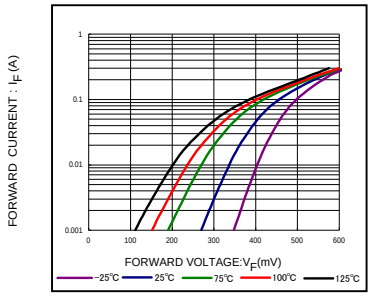


Fig. 1 Forward characteristics

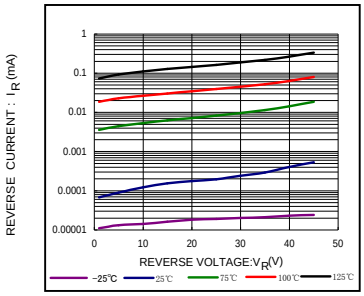
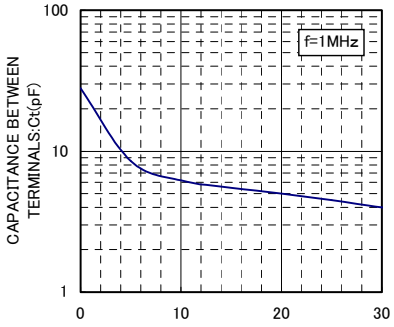


Fig. 2 Reverse characteristics



VR–Ct CHARACTERISTICS

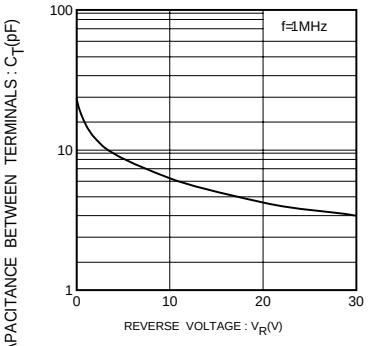


Fig. 3 Capacitance between terminals characteristics

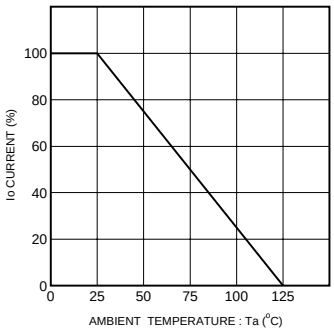
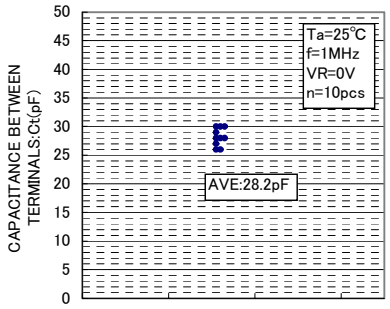
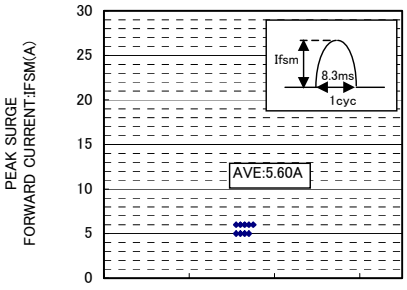


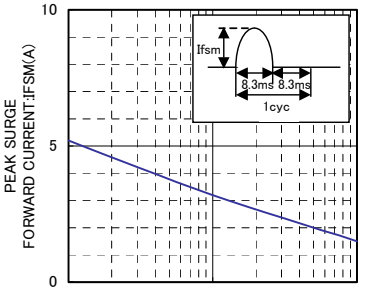
Fig 4. Derating curve
(mounting on glass epoxy PCBs)



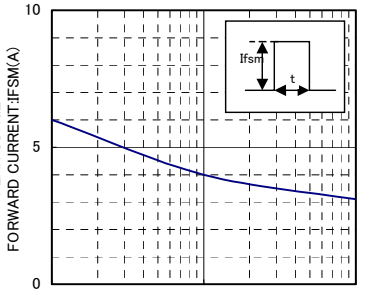
Ct DISPERSION MAP



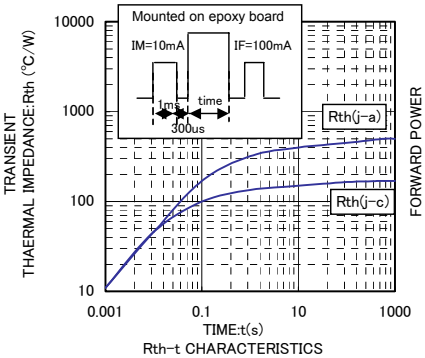
IFSM DISRESION MAP



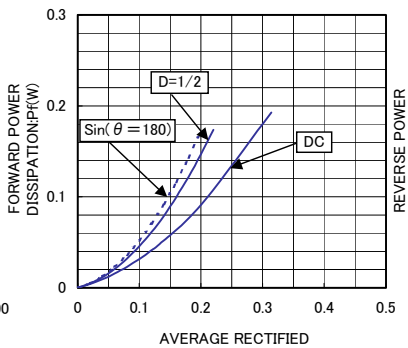
IFSM–CYCLE CHARACTERISTICS



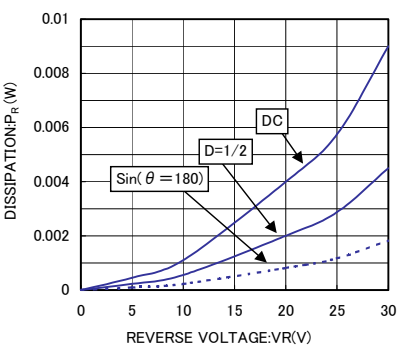
IFSM–t CHARACTERISTICS



Rth–t CHARACTERISTICS



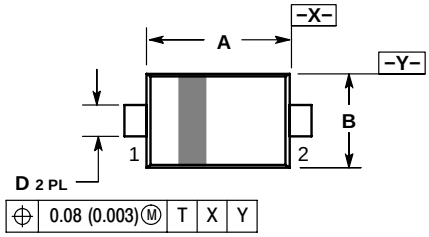
Io–Pf CHARACTERISTICS

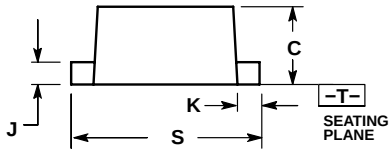


VR–P_R CHARACTERISTICS

LRB520S-30T1G

SC−79/SOD−523





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.

	MILLIMETERS			INCHES		
DIM	MIN	NOM	MAX	MIN	NOM	MAX
A	1.10	1.20	1.30	0.043	0.047	0.051
B	0.70	0.80	0.90	0.028	0.032	0.035
C	0.50	0.60	0.70	0.020	0.024	0.028
D	0.25	0.30	0.35	0.010	0.012	0.014
J	0.07	0.14	0.20	0.0028	0.0055	0.0079
K	0.15	0.20	0.25	0.006	0.008	0.010
S	1.50	1.60	1.70	0.059	0.063	0.067

SOLDERING FOOTPRINT*