

SCHOTTKY BARRIER DIODE

●Applications

Low current rectification and high speed switching

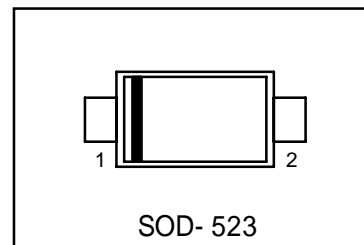
●Features

- Extremely small surface mounting type. (SC- 79/SOD- 523)
- Extremely Fast Switching Speed
- Extremely Low Forward Voltage 0.5 V (max) @ IF = 200 mA
- 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
FDR521E	5M	3000/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	°C
Storage temperature	T _{stg}	- 40~ +125	°C

*60Hz for 1cycle.

ELECTRICAL CHARACTERISTICS(T_A = 25°C)

Parameter	Symbol	Min.	Typ	Max.	Unit	Conditions
Forward voltage	V _F	-	-	0.50	V	I _F =200mA
Reverse current	I _R	-	-	30	μA	V _R =10V

Electrical characteristic curves(Ta=25°C)

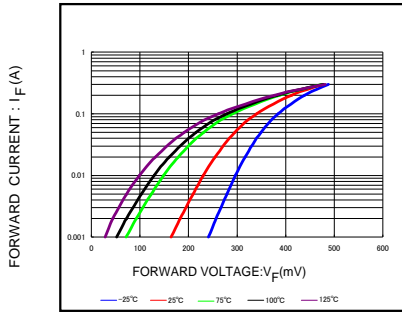


Fig. 1 Forward characteristics

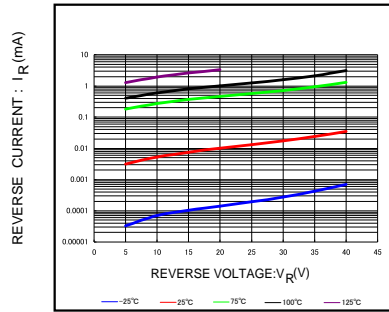


Fig. 2 Reverse characteristics

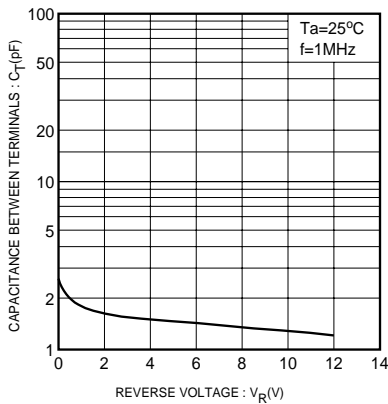
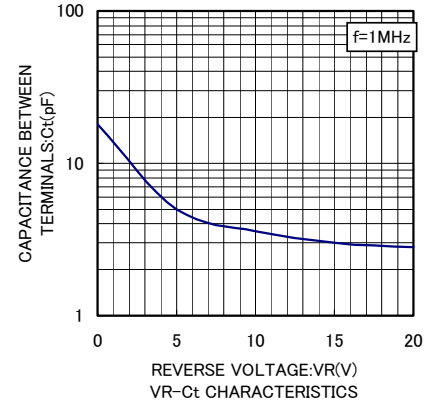


Fig. 3 Capacitance between terminals characteristics

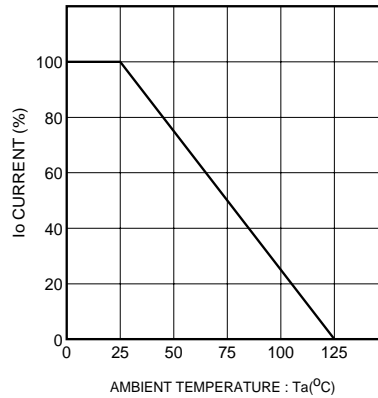
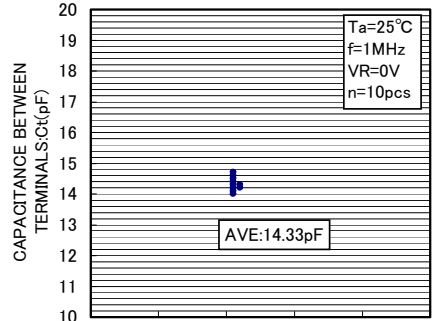
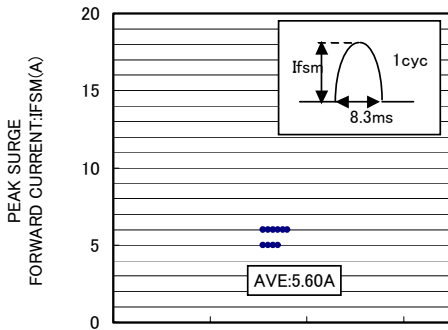


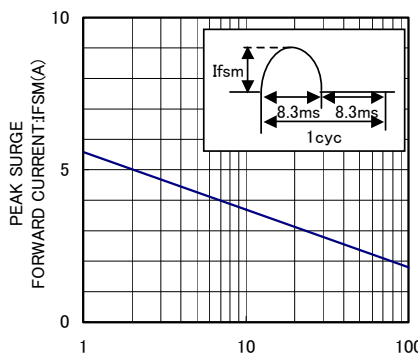
Fig. 4 Derating curve (mounting on glass epoxy PCBs)



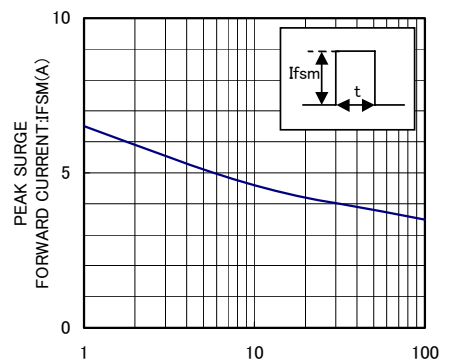
Ct DISPERSION MAP



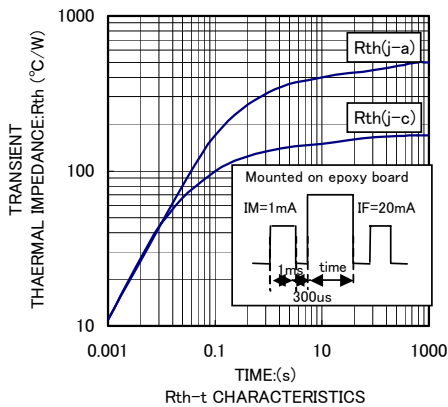
IFSM DISPERSION MAP



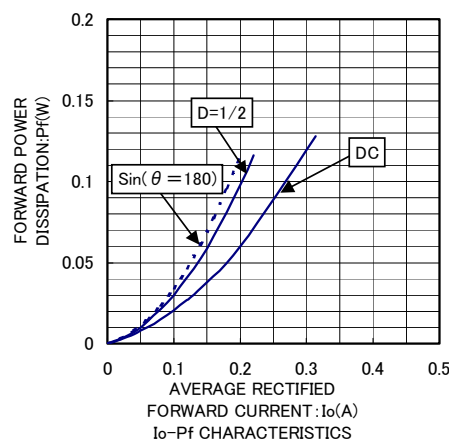
IFSM-CYCLE CHARACTERISTICS



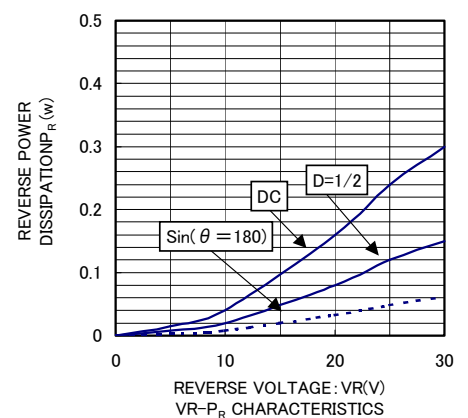
IFSM-t CHARACTERISTICS



Rth-t CHARACTERISTICS

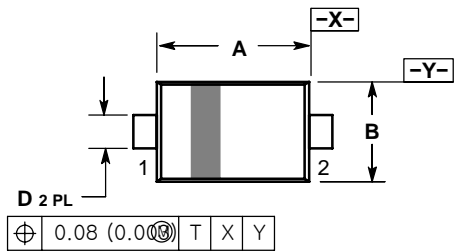


Io-Pf CHARACTERISTICS



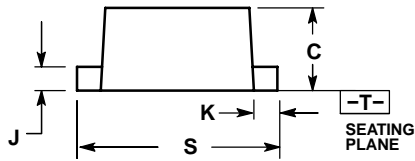
VR-Pr CHARACTERISTICS

SC-79/SOD-523



- NOTES:
1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
 2. CONTROLLED DIMENSION: MILL METER.
 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	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*

