

HSB83

Silicon Epitaxial Planar Diode for High Voltage Switching

REJ03G0187-0200Z
(Previous: ADE-208-489A)
Rev.2.00
Mar.22.2004

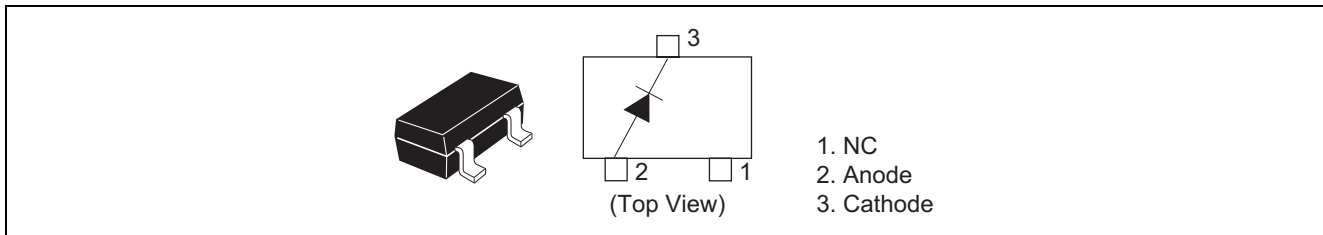
Features

- High reverse voltage. ($V_R = 250\text{ V}$)
- CMPAK package is suitable for high density surface mounting and high speed assembly.

Ordering Information

Type No.	Laser Mark	Package Code
HSB83	F7	CMPAK

Pin Arrangement



Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Peak reverse voltage	V_{RM}	300	V
Reverse voltage	V_R	250	V
Peak forward current	I_{FM}	300	mA
Non-Repetitive peak forward surge current	I_{FSM}^{*1}	2	A
Average rectified current	I_O	100	mA
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	-55 to +125	°C

Note: 1. Value at duration of 10 ms.

Electrical Characteristics

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_F	—	—	1.2	V	$I_F = 100$ mA
Reverse current	I_{R1}	—	—	0.2	μA	$V_R = 250$ V
	I_{R2}	—	—	100		$V_R = 300$ V
Capacitance	C	—	—	3.0	pF	$V_R = 0$ V, $f = 1$ MHz
Reverse recovery time	t_{rr}	—	—	100	ns	$I_F = I_R = 30$ mA, $I_{rr} = 3$ mA, $R_L = 100$ Ω

Main Characteristics

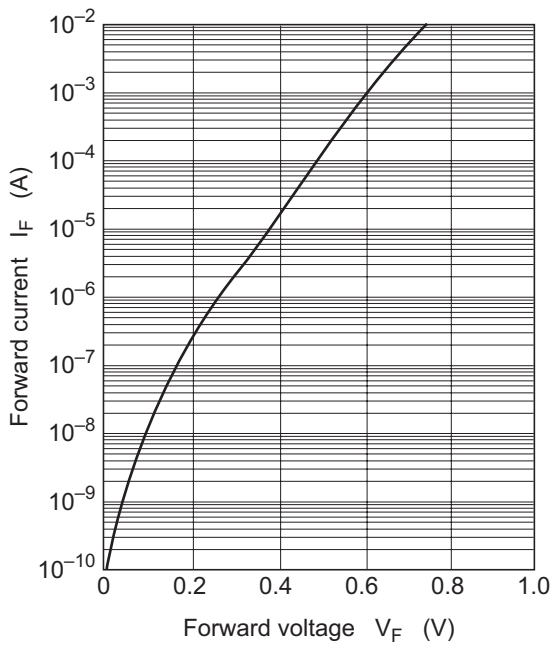


Fig.1 Forward current vs. Forward voltage

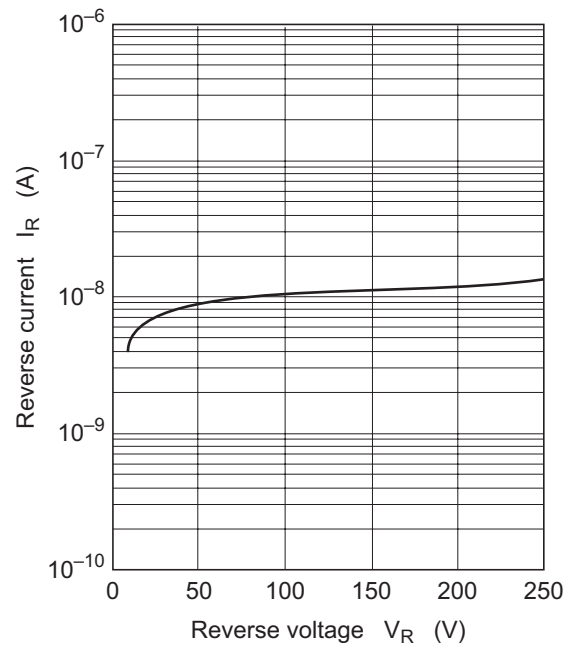


Fig.2 Reverse current vs. Reverse voltage

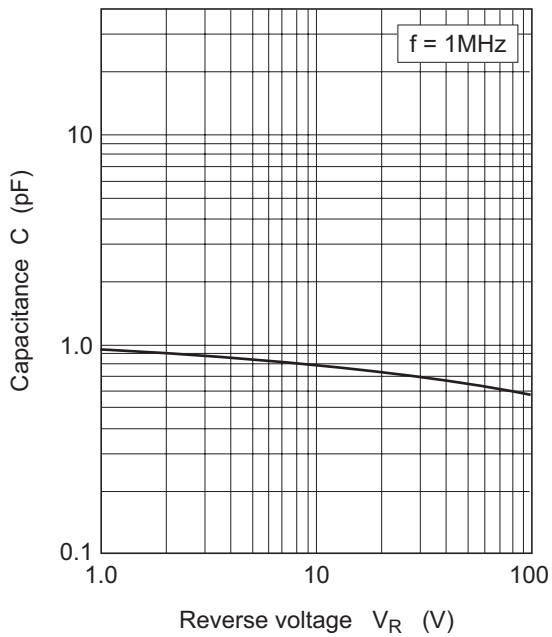
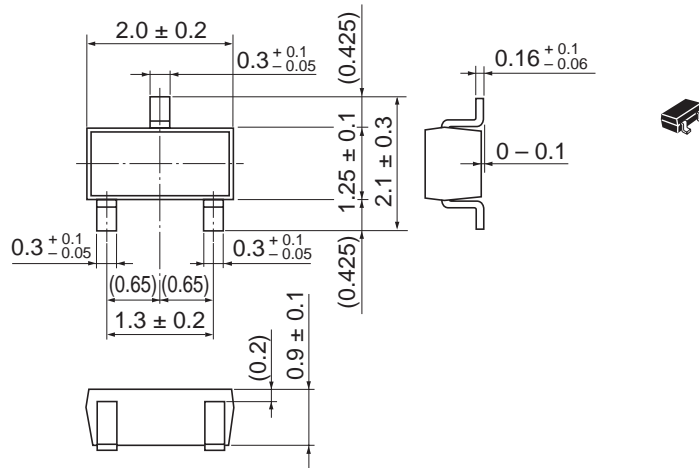


Fig.3 Capacitance vs. Reverse voltage

Package Dimensions

As of January, 2003
Unit: mm



Package Code	CMPAK
JEDEC	—
JEITA	Conforms
Mass (reference value)	0.006 g

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