

HSB83YP

Silicon Epitaxial Planar Diode for High Voltage Switching

REJ03G0545-0100
(Previous: ADE-208-843)
Rev.1.00
Mar 04, 2005

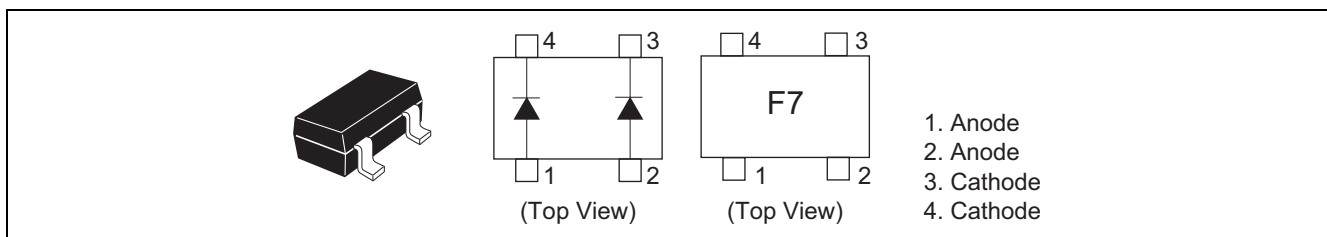
Features

- High reverse voltage. ($V_R = 250\text{ V}$)
- CMPAK-4 package which has two devices parallel connection, is suitable for high density surface mounting.

Ordering Information

Type No.	Laser Mark	Package Name	Package Code (Previous Code)
HSB83YP	F7	CMPAK-4	PTSP0004ZB-A (CMPAK-4)

Pin Arrangement



Absolute Maximum Ratings *²

(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

- Notes: 1. Value at duration of 10 ms.
 2. Two device total.

Electrical Characteristics *

(Ta = 25°C)

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

Note: Per one device.

Main Characteristic

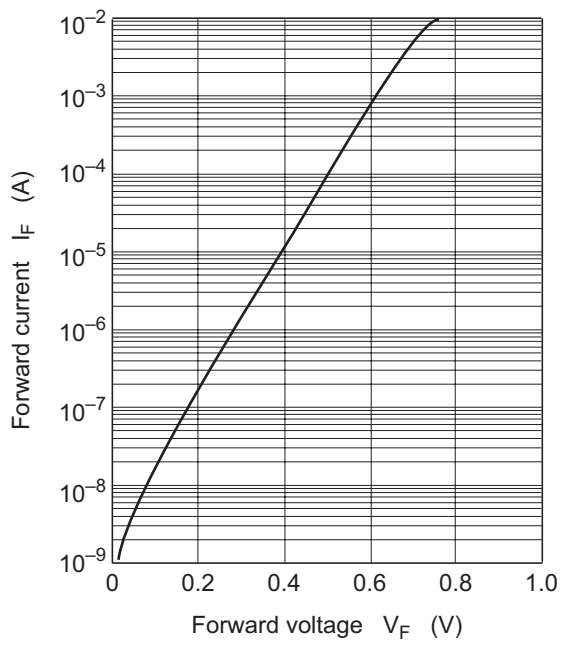


Fig.1 Forward current vs. Forward voltage

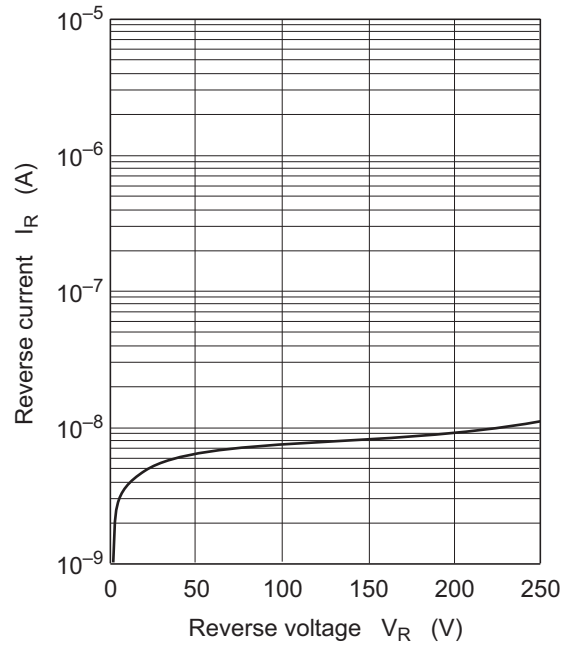


Fig.2 Reverse current vs. Reverse voltage

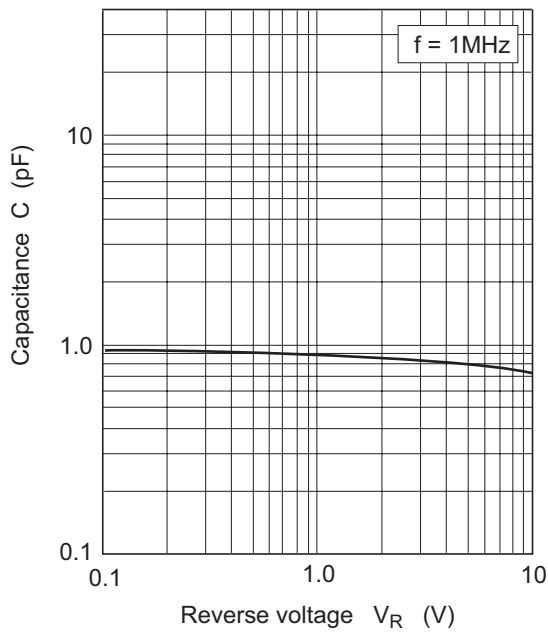
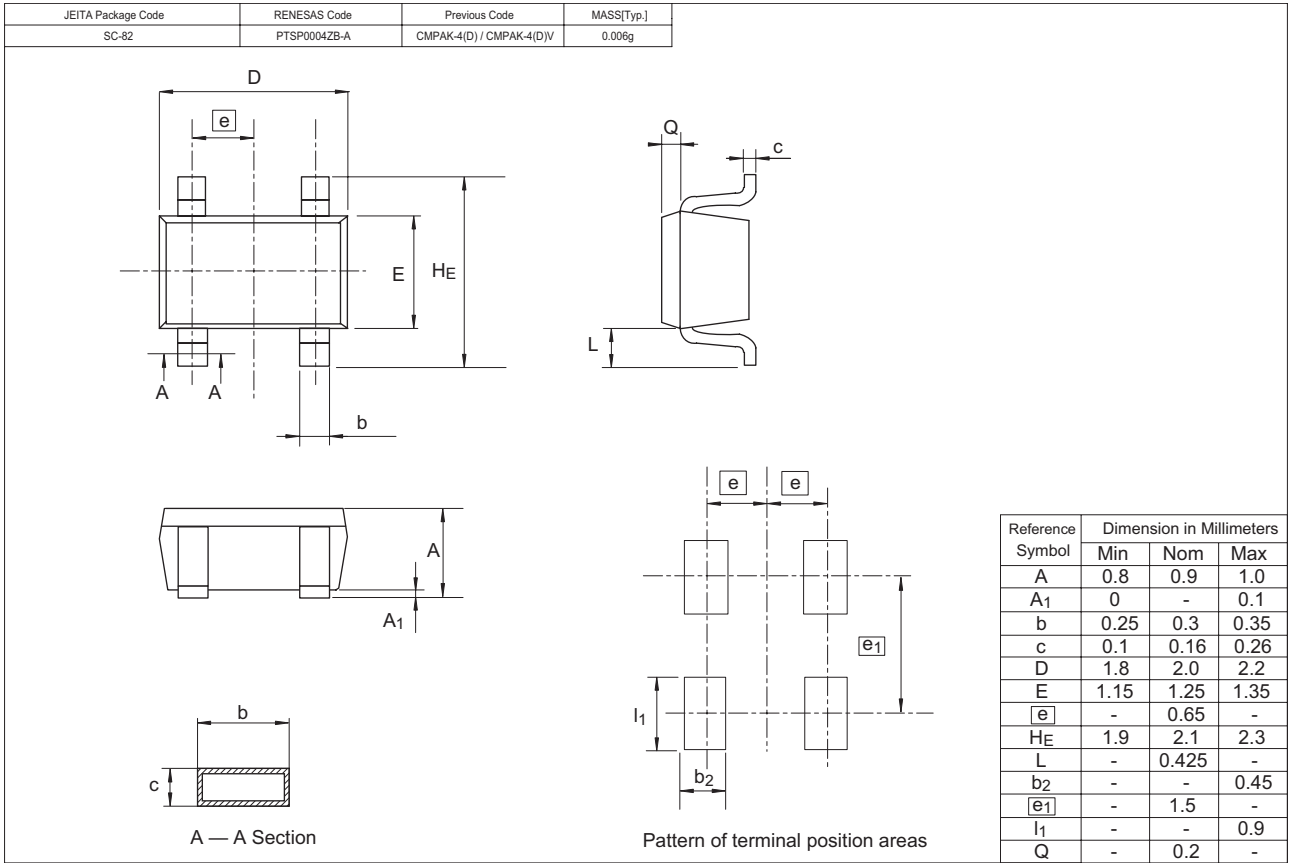


Fig.3 Capacitance vs. Reverse voltage

Package Dimensions



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