

HSB123

Silicon Epitaxial Planar Diode for High Speed Switching

REJ03G0546-0200
(Previous: ADE-208-487A)
Rev.2.00
Mar 04, 2005

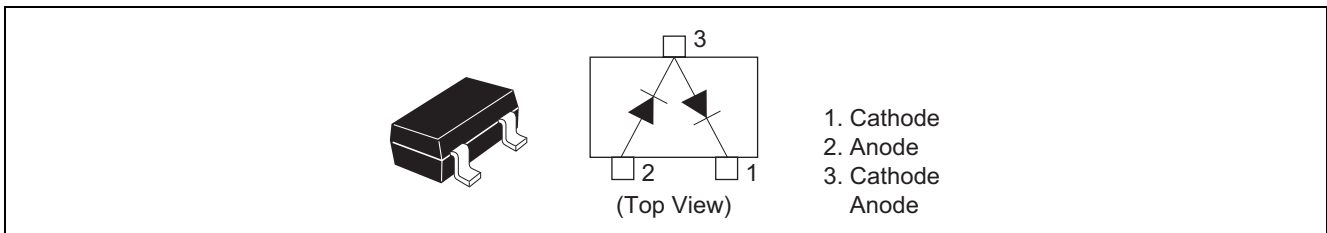
Features

- Low capacitance, proof against high voltage.
- Fast recovery time.
- CMPAK package is suitable for high density surface mounting and high speed assembly.

Ordering Information

Type No.	Laser Mark	Package Name	Package Code (Previous Code)
HSB123	A9	CMPAK	PTSP0003ZB-A (CMPAK)

Pin Arrangement



Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Peak reverse voltage	V_{RM}	85	V
Reverse voltage	V_R	80	V
Peak forward current	I_{FM}^{*1}	300	mA
Non-Repetitive peak forward surge current	I_{FSM}^{*2}	4	A
Average rectified current	I_O^{*1}	100	mA
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	-55 to +125	°C

Notes: 1. Two device total.

2. Value at duration of 1 μ s, two device total.

Electrical Characteristics *

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_{F1}	—	—	1.0	V	$I_F = 10$ mA
	V_{F2}	—	—	1.0		$I_F = 50$ mA
	V_{F3}	—	—	1.2		$I_F = 100$ mA
Reverse current	I_R	—	—	0.1	μ A	$V_R = 80$ V
Capacitance	C	—	—	2.0	pF	$V_R = 0$ V, $f = 1$ MHz
Reverse recovery time	t_{rr}	—	—	3.0	ns	$I_F = 10$ mA, $V_R = 6$ V, $R_L = 50$ Ω

Note: Per one device.

Main Characteristic

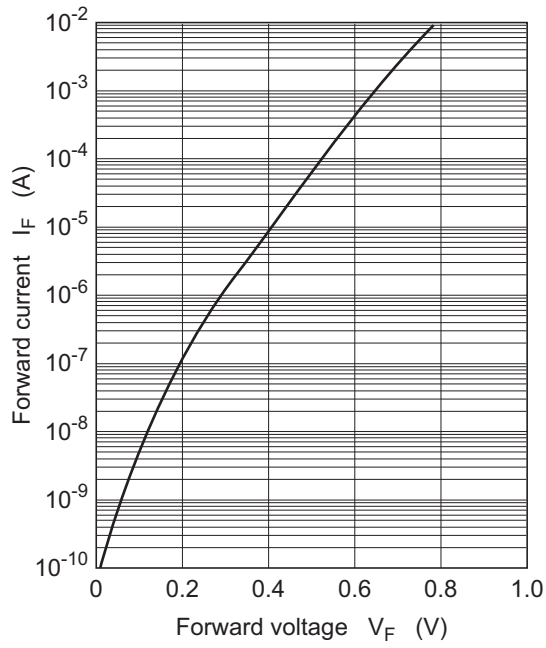


Fig.1 Forward current vs. Forward voltage

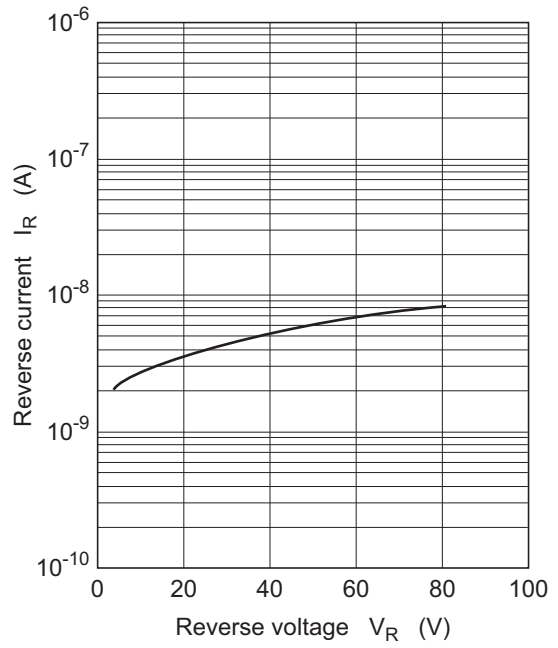


Fig.2 Reverse current vs. Reverse voltage

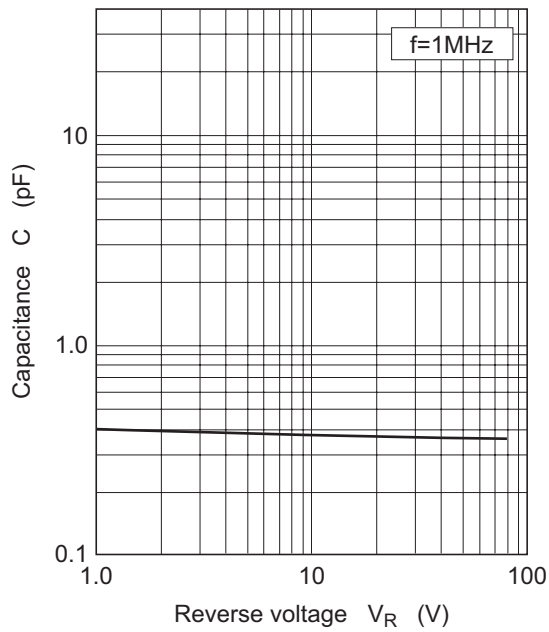
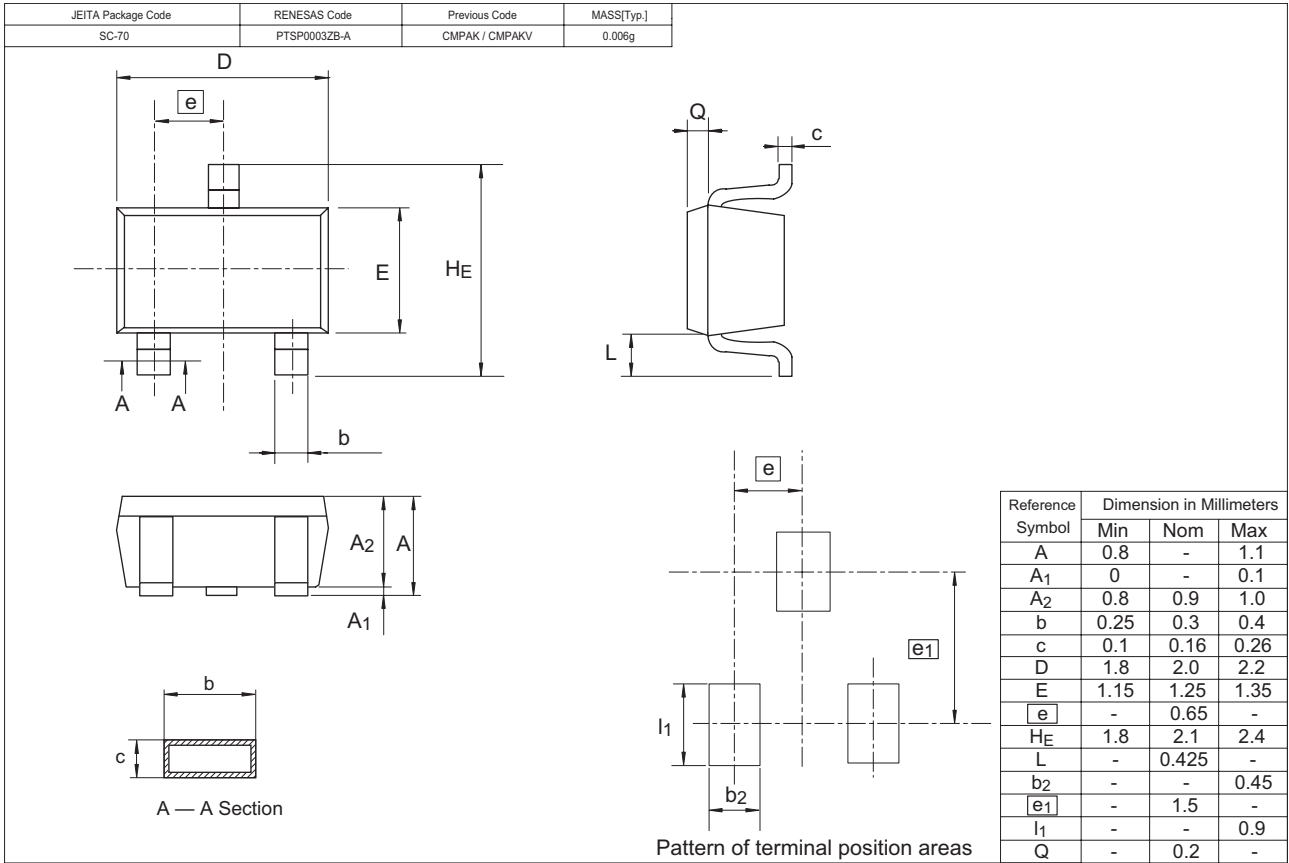


Fig.3 Capacitance vs. Reverse voltage

Package Dimensions



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