

# HSB124S

Silicon Epitaxial Planar Diode for High Speed Switching

# HITACHI

ADE-208-488A(Z)

Rev 1

Dec. 1999

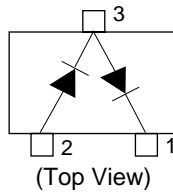
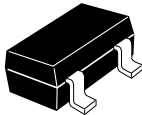
## Features

- Low reverse current. ( $I_R = 0.01 \mu A_{max}$ )
- CMPAK package is suitable for high density surface mounting and high speed assembly.

## Ordering Information

Type No.	Laser Mark	Package Code
HSB124S	A1	CMPAK

## Outline



- 1 Cathode
- 2 Anode
- 3 Cathode  
Anode

**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

Note: 1. Two device total.

Note: 2. Value at duration of 1μsec, two device total.

**Electrical Characteristics (Ta = 25°C) \*<sup>1</sup>**

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	$V_F$	—	—	1.2	V	$I_F = 100 \text{ mA}$
Reverse current	$I_R$	—	—	0.01	μA	$V_R = 80V$
Capacitance	C	—	—	4.0	pF	$V_R = 0V, f = 1 \text{ MHz}$
Reverse recovery time	$t_{rr}$	—	—	100	ns	$I_F = 10 \text{ mA}, V_R = 6V, R_L = 50\Omega$

Note: 1. Per one device.

Main Characteristic

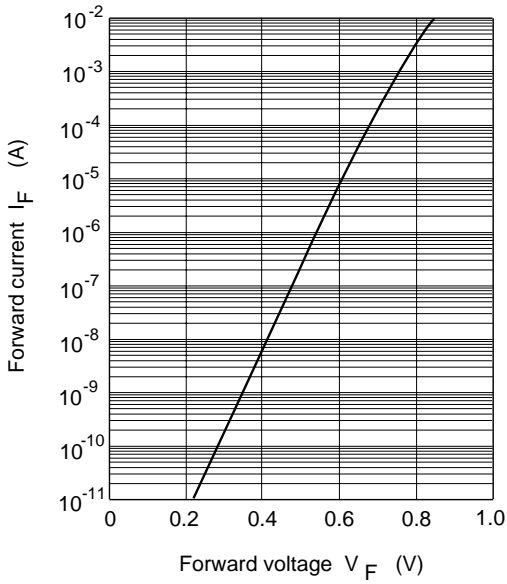


Fig.1 Forward current Vs. Forward voltage

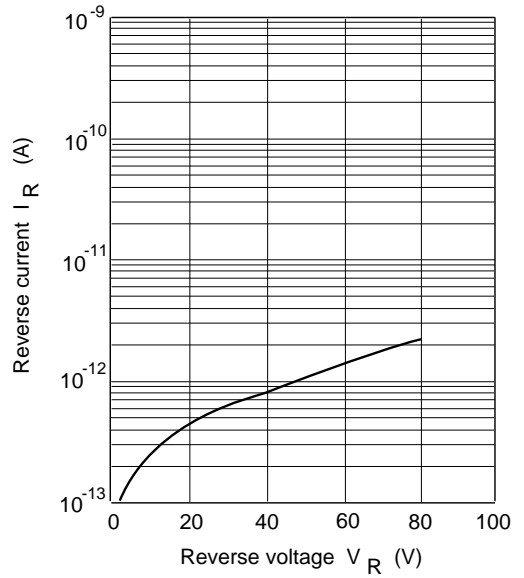


Fig.2 Reverse current Vs. Reverse voltage

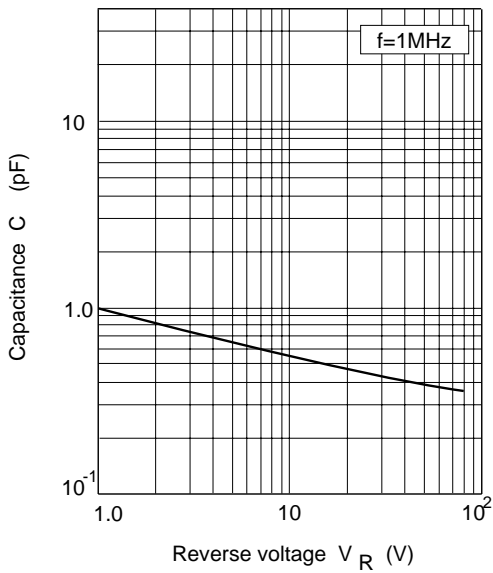
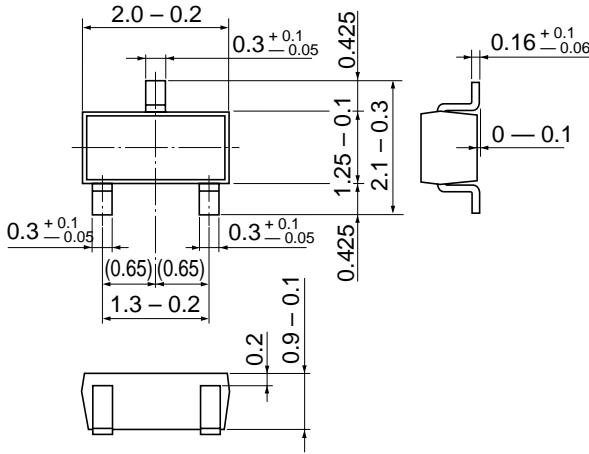


Fig.3 Capacitance Vs. Reverse voltage

## Package Dimensions

Unit: mm



Hitachi Code	CMPAK
JEDEC	
EIAJ	Conforms
Mlass	0.006 g

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