

HSB124S

Silicon Epitaxial Planar Diode for High Speed Switching

HITACHI

ADE-208-488A(Z)

Rev 1

Dec. 1999

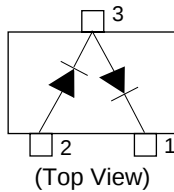
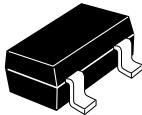
Features

- 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) *¹

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	$V_R = 80\text{V}$
Capacitance	C	—	—	4.0	pF	$V_R = 0\text{V}$, $f = 1\text{ MHz}$
Reverse recovery time	t_{rr}	—	—	100	ns	$I_F = 10\text{ mA}$, $V_R = 6\text{V}$, $R_L = 50\Omega$

Note: 1. Per one device.

Main Characteristic

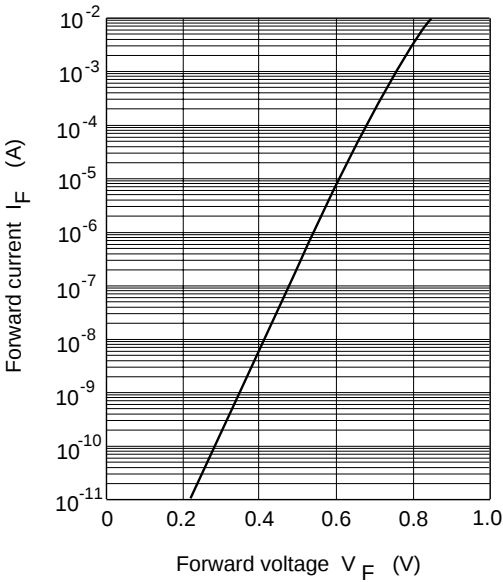


Fig.1 Forward current Vs. Forward voltage

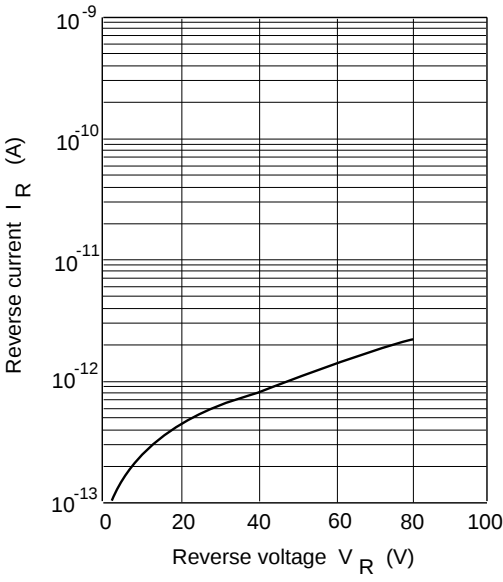


Fig.2 Reverse current Vs. Reverse voltage

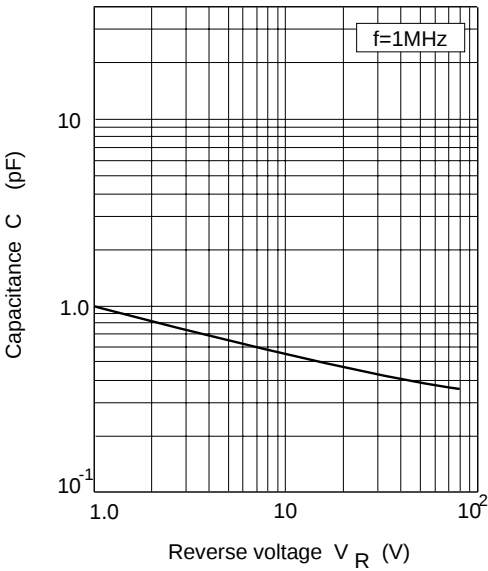


Fig.3 Capacitance Vs. Reverse voltage

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