HVB14S

Silicon Epitaxial Planar PIN Diode for High Frequency Attenuator

HITACHI

ADE-208-484(Z)
Rev 0
December 1996

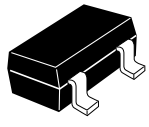
Features

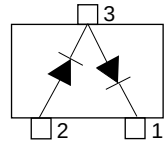
- Low forward resistance. (rf =7.0Ωmax)
- Low capacitance. (C=0.25pF typ)
- CMPAK package is suitable for high density surface mounting and high speed assembly.

Ordering Information

Type No.	Laser Mark	Package Code
HVB14S	H6	CMPAK

Outline





(Top View)

1 Cathode
2 Anode
3 Cathode
Anode

Hitachi semiconductor

Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	V_R	50	V
Forward current	I_F	50	mA
Power dissipation	P_d *1	100	mW
Junction temperature	Tj	125	°C
Storage temperature	Tstg	-55Å`+125	°C

Note: 1. Two device total.

Electrical Characteristics (Ta = 25°C) *2

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_F	Å\	Å\	1.0	V	I_F = 50 mA
Reverse current	I_R	Å\	Å\	100	nA	V_R = 50V
Capacitance	C	Å\	0.25	Å\	pF	V_R = 50V, f = 1 MHz
Forward resistance	r_f	Å\	Å\	7	Ω	I_F = 10 mA, f = 100 MHz
ESD-Capability *1	Å\	200	Å\	Å\	V	C=200pF, Both forward and reverse direction 1 pulse

Note: 1. Failure criterion ; $I_R \geq 200$nA at VR =50 V

Note: 2. Per one device.

Main Characteristic

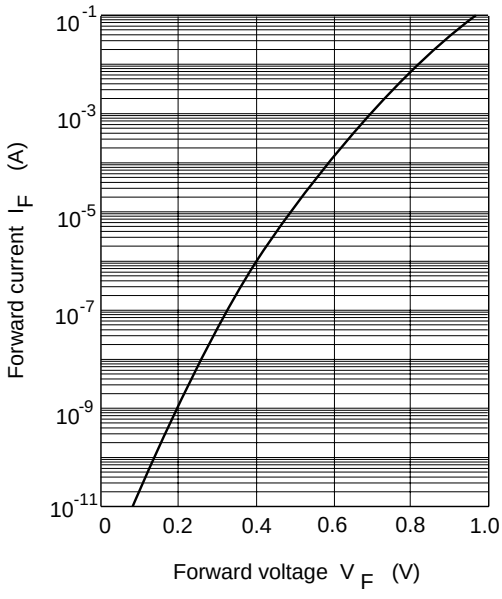


Fig.1 Forward current Vs. Forward voltage

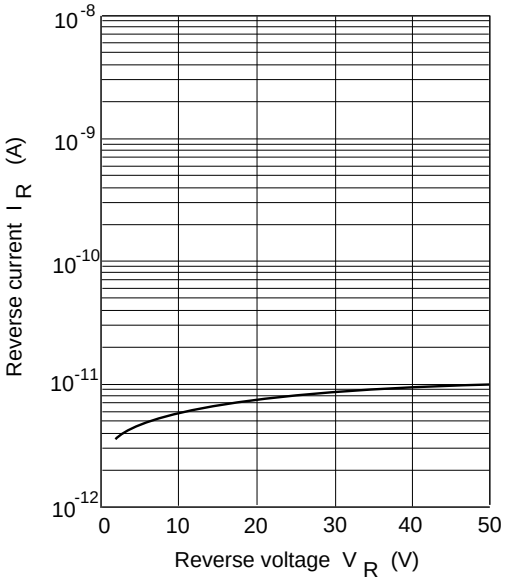


Fig.2 Reverse current Vs. Reverse voltage

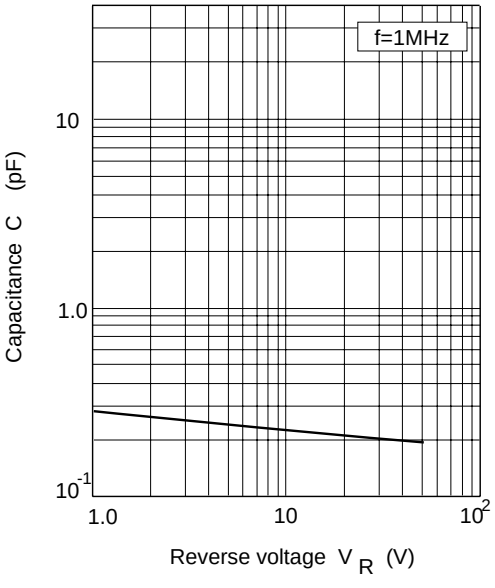


Fig.3 Capacitance Vs. Reverse voltage

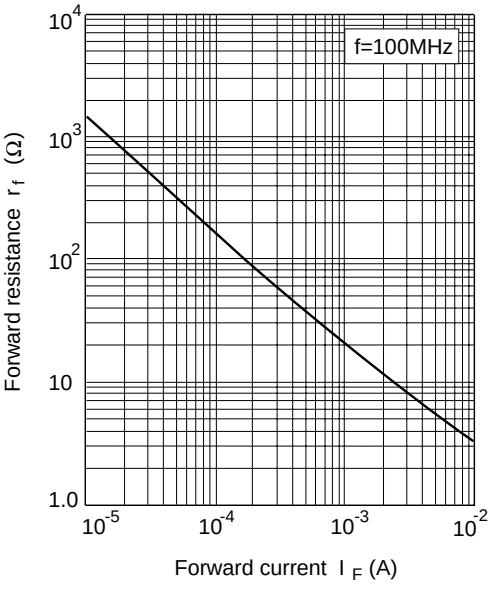
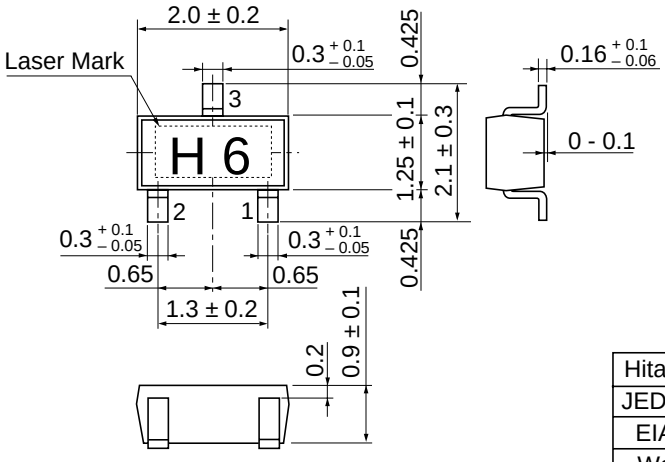


Fig.4 Forward resistance Vs. Forward current

Package Dimensions

Unit : mm





1 Cathode
2 Anode
3 Cathode
Anode

Hitachi Code	CMPAK
JEDEC Code	—
EIAJ Code	SC-70
Weight (g)	0.006

Cautions

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