

HVB14S

Silicon Epitaxial Planar PIN Diode for High Frequency Attenuator

REJ03G0438-0200

(Previous: ADE-208-484A)

Rev.2.00 Dec 15, 2004

Features

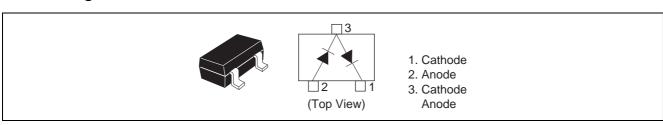
• Low forward resistance. (rf = $7.0 \Omega \text{ max}$)

- Low capacitance. (C = 0.25 pF 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	

Pin Arrangement



Absolute Maximum Ratings *1

 $(Ta = 25^{\circ}C)$

Item	Symbol	Value	Unit
Reverse voltage	V _R	50	V
Forward current	I _F	50	mA
Power dissipation	Pd	100	mW
Junction temperature	Tj	125	°C
Storage temperature	Tstg	−55 to +125	°C

Note: 1. Absolute maximum ratings are described each unit separately.

Electrical Characteristics

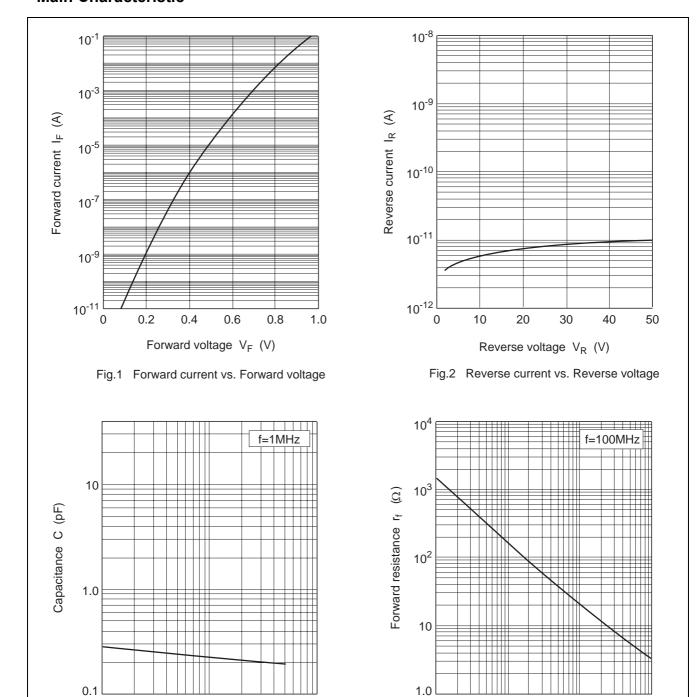
 $(Ta = 25^{\circ}C)$

Item	Symbol	Min	Тур	Max	Unit	Test Condition
Reverse current	I _R	_	_	100	nA	V _R = 50 V
Forward voltage	V _F	_	_	1.0	V	I _F = 50 mA
Capacitance	С	_	0.25	_	pF	V _R = 50 V, f = 1 MHz
Forward resistance	r _f	_	_	7	Ω	I _F = 10 mA, f = 100 MHz
ESD-Capability *1	_	200	_	_	V	C = 200 pF, R = 0 Ω , Both forward
						and reverse direction 1 pulse.

Notes: 1. Per one device.

2. Failure criterion; $I_R \geq 200 \ nA$ at V_R = 50 V

Main Characteristic



1.0

10

Reverse voltage V_R (V)

Fig.3 Capacitance vs. Reverse voltage

100

10⁻⁵

10⁻⁴

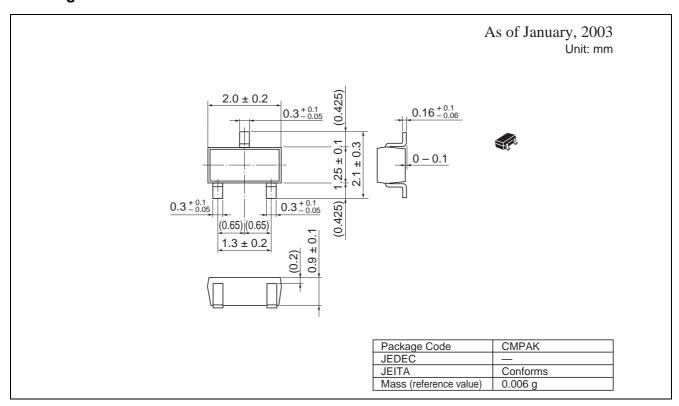
Forward current I_F (A)

Fig.4 Forward resistance vs. Forward current

10⁻³

10⁻²

Package Dimensions



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