

# HVM14S

Silicon Epitaxial Planar PIN Diode for High Frequency Attenuator

# HITACHI

ADE-208-083D(Z)

Rev.4

Feb.1999

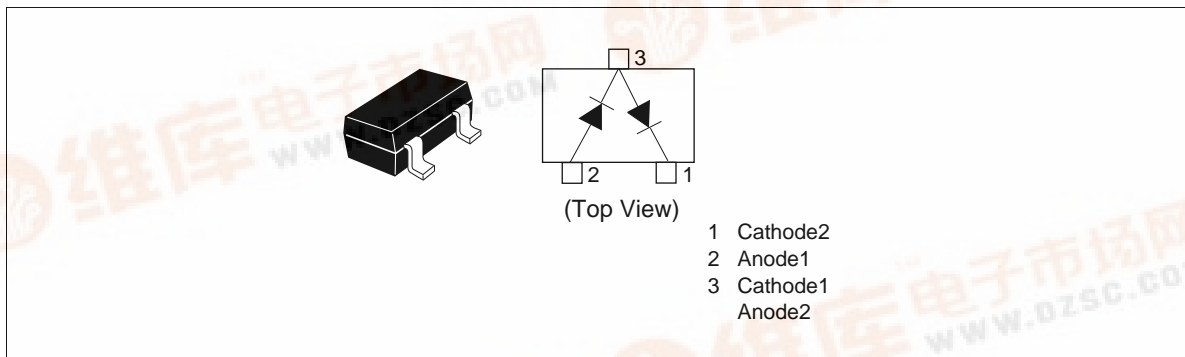
## Features

- Low forward resistance. ( $r_f = 7.0\Omega_{\max}$ )
- Low capacitance. ( $C = 0.25\text{pF typ}$ )
- MPAK package is suitable for high density surface mounting and high speed assembly.

## Ordering Information

Type No.	Laser Mark	Package Code
HVM14S	H6	MPAK

## Outline



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## HVM14S

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### 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	$T_j$	125	°C
Storage temperature	Tstg	-55to+125	°C

Note: 1. Two device total.

### Electrical Characteristics (Ta = 25°C) \*2

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

Note: 1. Failure criterion ;  $I_R \geq 200 \text{ nA}$  at  $V_R = 50 \text{ V}$

Note: 2. Per one device.

## Main Characteristic

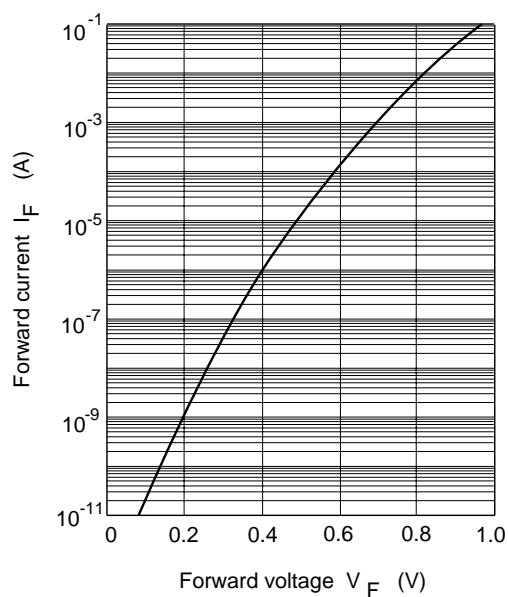


Fig.1 Forward current Vs. Forward voltage

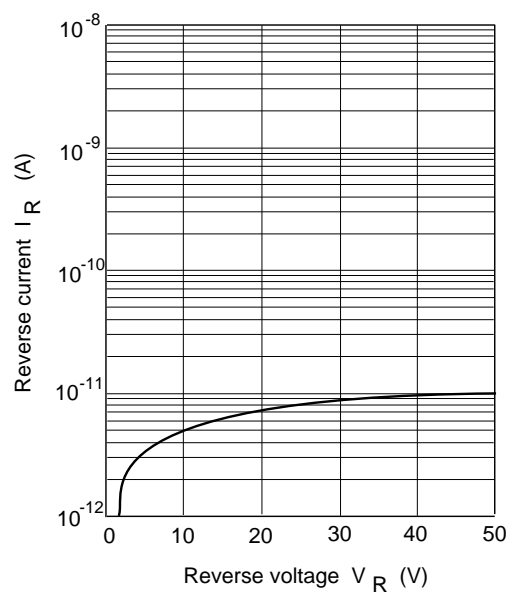


Fig.2 Reverse current Vs. Reverse voltage

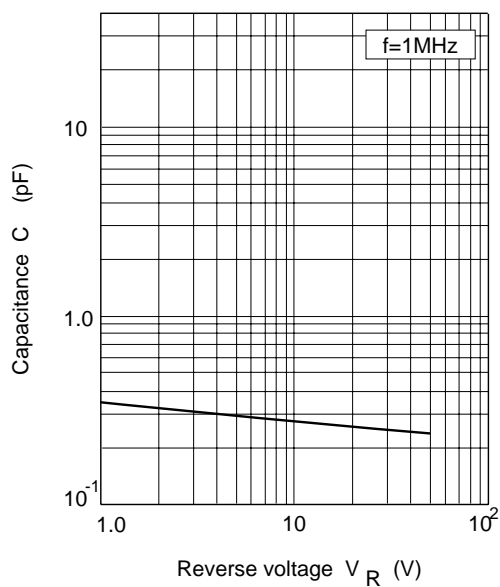


Fig.3 Capacitance Vs. Reverse voltage

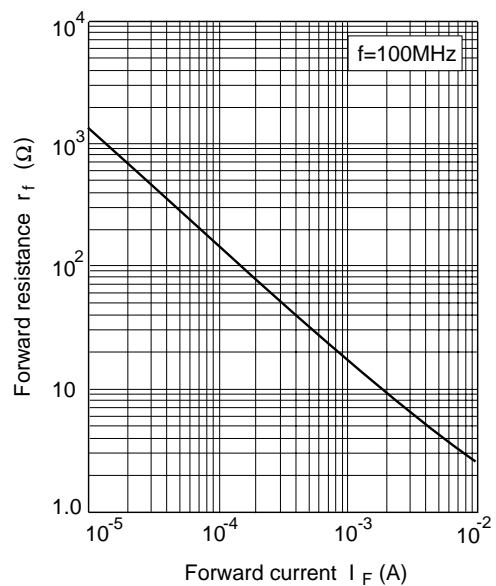
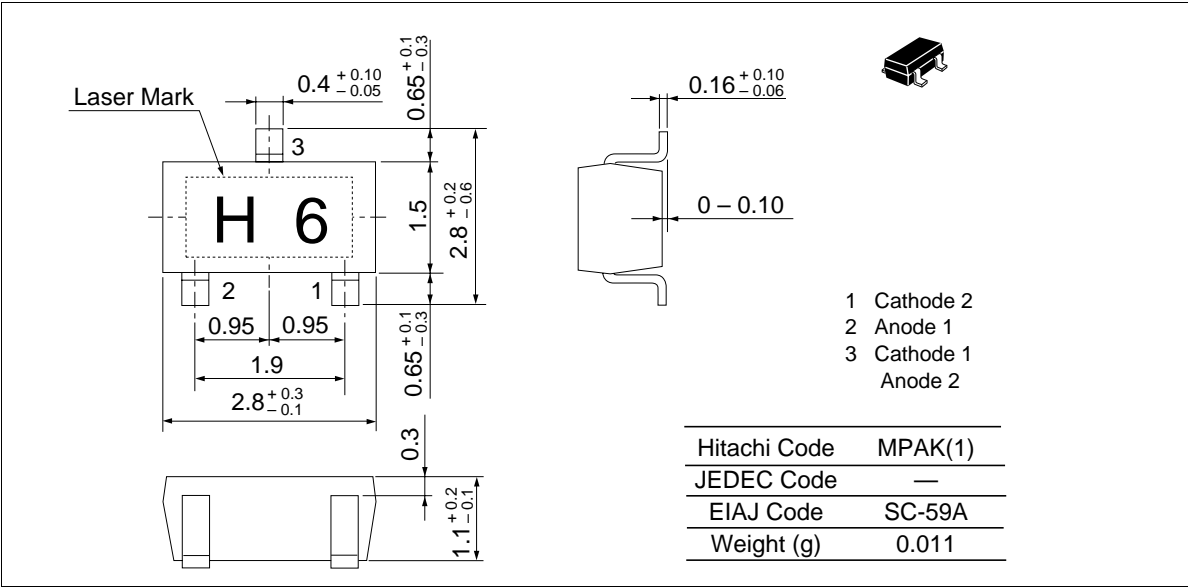


Fig.4 Forward resistance Vs. Forward current

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Package Dimensions

Unit : mm



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