

# HVM187S

Silicon Epitaxial Planar PIN Diode for High Frequency Attenuator

# HITACHI

ADE-208-055C (Z)

Rev. 3

Jun. 1993

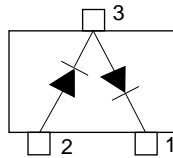
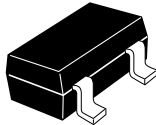
## Features

- Low forward resistance. ( $r_f = 5.5$  max)
- MPAK package is suitable for high density surface mounting and high speed assembly.

## Ordering Information

Type No.	Laser Mark	Package Code
HVM187S	H3	MPAK

## Pin Arrangement



(Top View)

- 1 Cathode 2
- 2 Anode 1
- 3 Cathode 1  
Anode 2

## Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	$V_R$	60	V
Forward current	$I_F$	50	mA
Power dissipation	$Pd^*$	100	mW
Junction temperature	$T_j$	125	°C
Storage temperature	$T_{stg}$	-55 to +125	°C

Note: Per one device

## Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	$V_F$	—	—	1.0	V	$I_F = 10\text{mA}$
Reverse current	$I_R$	—	—	100	nA	$V_R = 60\text{V}$
Capacitance	C	—	—	2.4	pF	$V_R = 0\text{V}, f = 1\text{MHz}$
Forward resistance	$r_f$	3.5	—	5.5	$\Omega$	$I_F = 10\text{mA}, f = 100\text{MHz}$
ESD-Capability	—	200	—	—	V	*C = 200pF, Both forward and reverse direction 1 pulse.

Note: Failure criterion;  $I_R \geq 100\text{nA}$  at  $V_R = 60\text{V}$

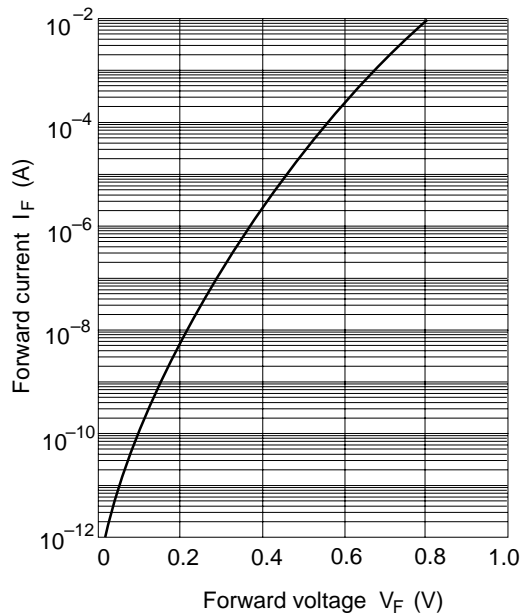


Fig.1 Forward current Vs. Forward voltage

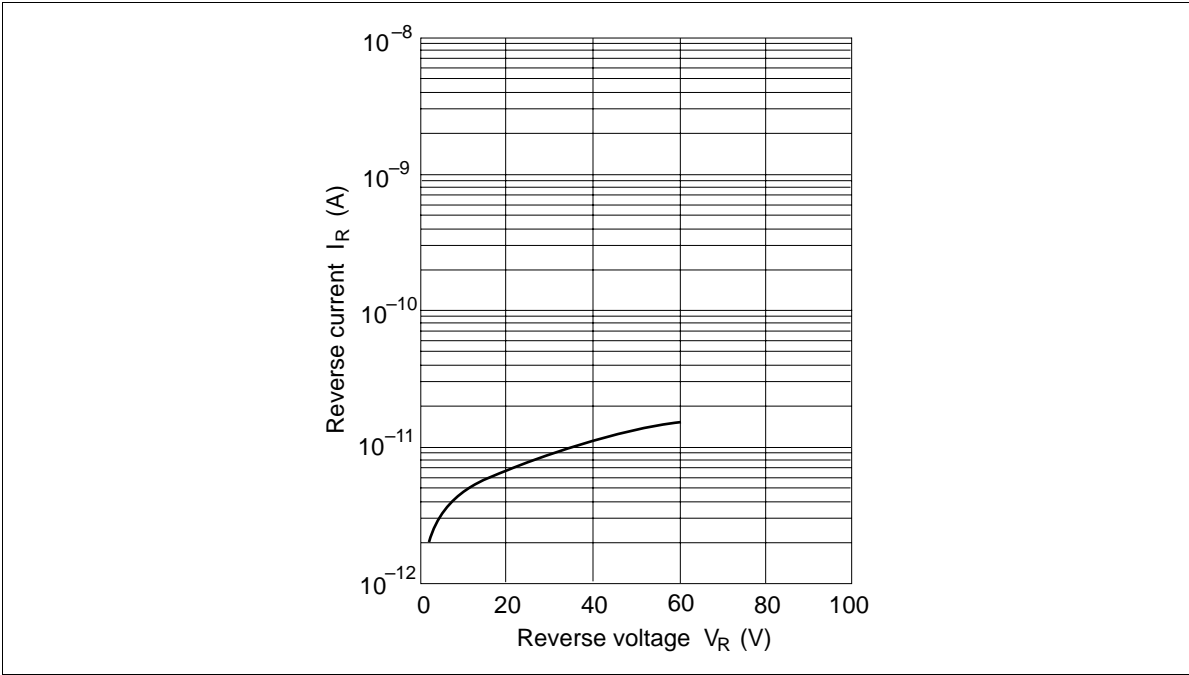


Fig.2 Reverse current Vs. Reverse voltage

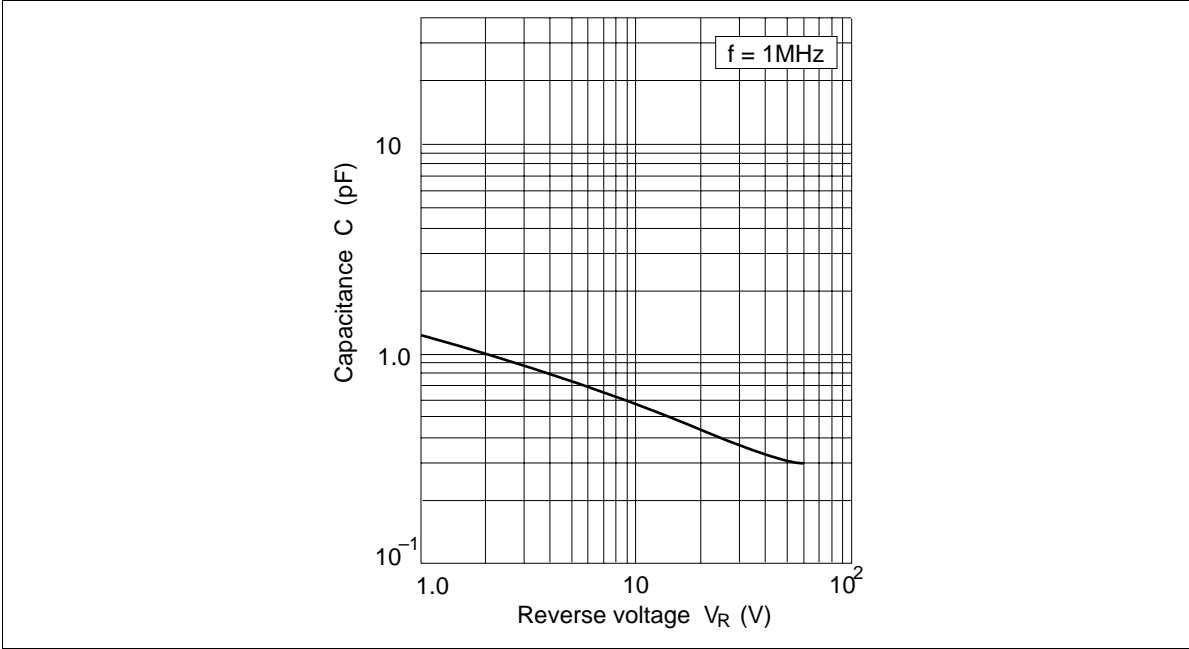


Fig.3 Capacitance Vs. Reverse voltage

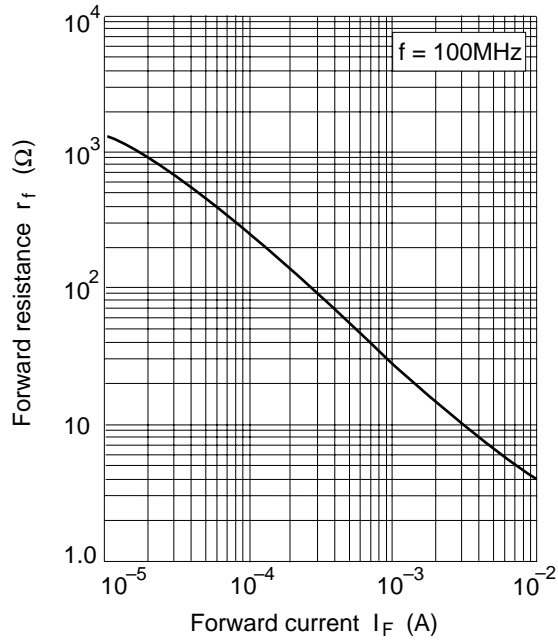
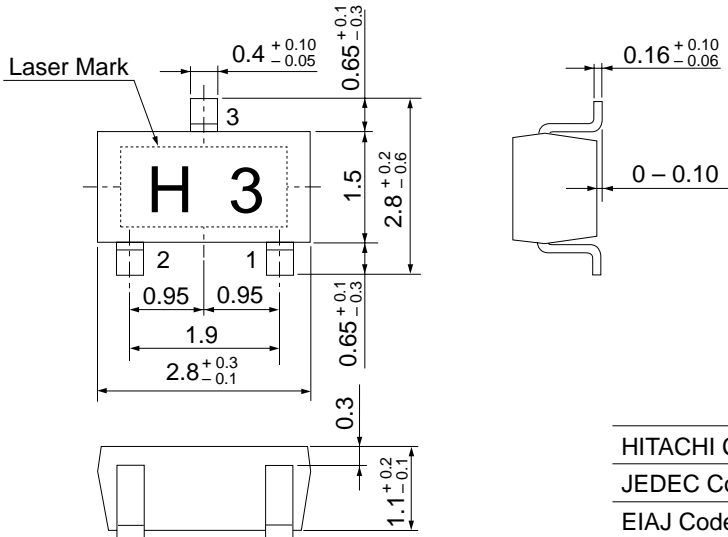


Fig.4 Forward resistance Vs. Forward current

Package Dimensions

Unit: mm



- 1 Cathode 2
- 2 Anode 1
- 3 Cathode 1  
Anode 2

HITACHI Code	MPAK(1)
JEDEC Code	—
EIAJ Code	SC-59A
Weight (g)	0.011

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