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Renesas Technology Corp.
Customer Support Dept.
April 1, 2003

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Keep safety first in your circuit designs!

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Remember to give due consideration to safety when making your circuit designs, with appropriate measures such as (i) placement of substitutive, auxiliary circuits, (ii) use of nonflammable material or (iii) prevention against any malfunction or mishap.

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HVM187WK

Silicon Epitaxial Planar PIN Diode for High Frequency Attenuator



ADE-208-056E (Z)

Rev. 5
Jun. 1993

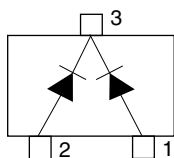
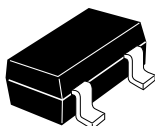
Features

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

Ordering Information

Type No.	Laser Mark	Package Code
HVM187WK	H1	MPAK

Pin Arrangement



(Top View)

- 1 Anode
- 2 Anode
- 3 Cathode

Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	V_R	60	V
Forward current	I_F	50	mA
Power dissipation	P_d^*	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	Ω	$I_F = 10\text{mA}$, $f = 100\text{MHz}$
ESD-Capability	—	200	—	—	V	*C = 200pF, Both forward and reverse direction 1 pulse.

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

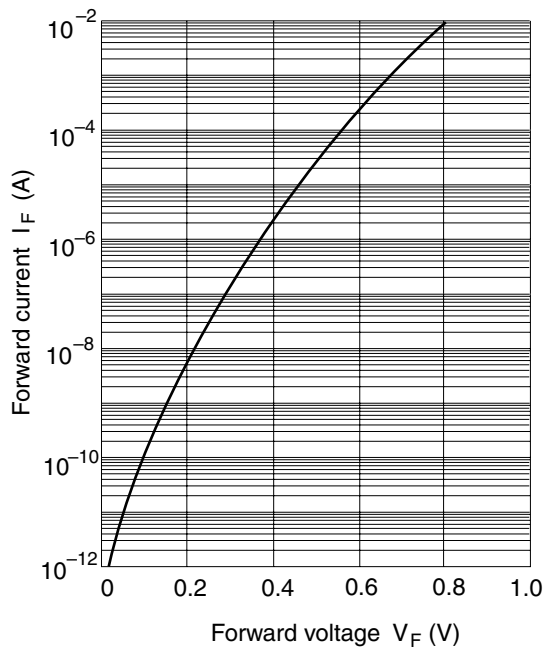


Fig.1 Forward current Vs. Forward voltage

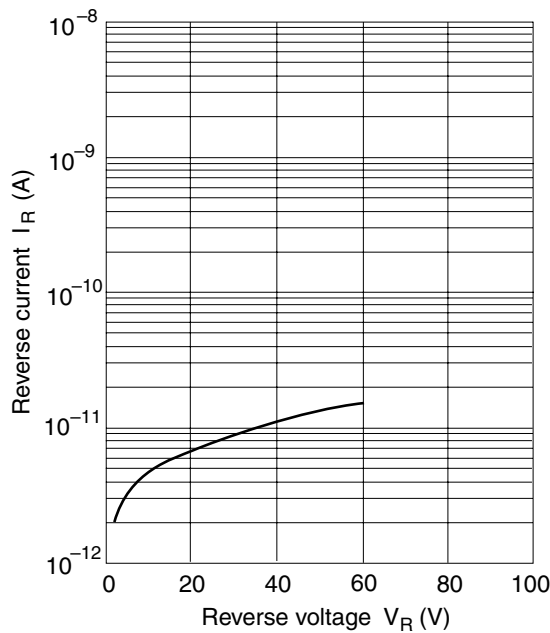


Fig.2 Reverse current Vs. Reverse voltage

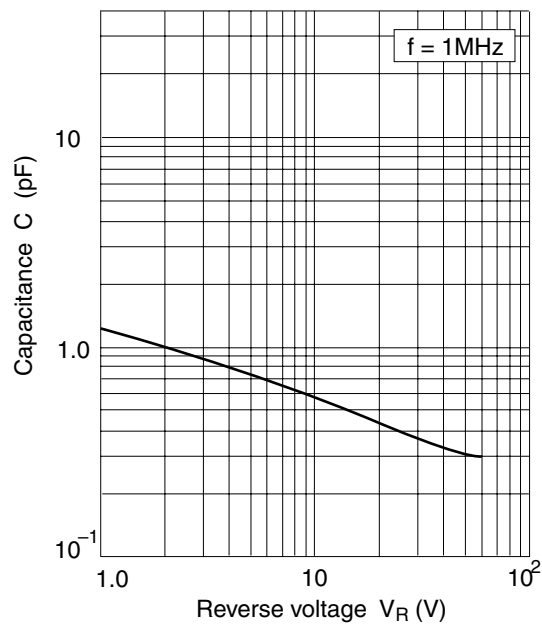


Fig.3 Capacitance Vs. Reverse voltage

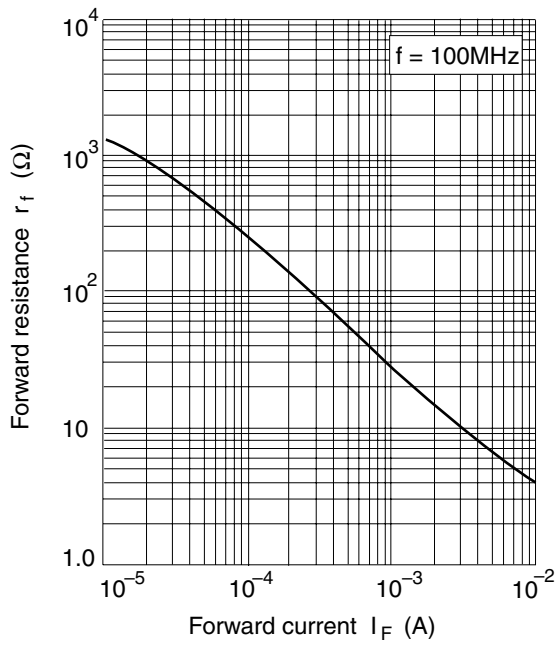
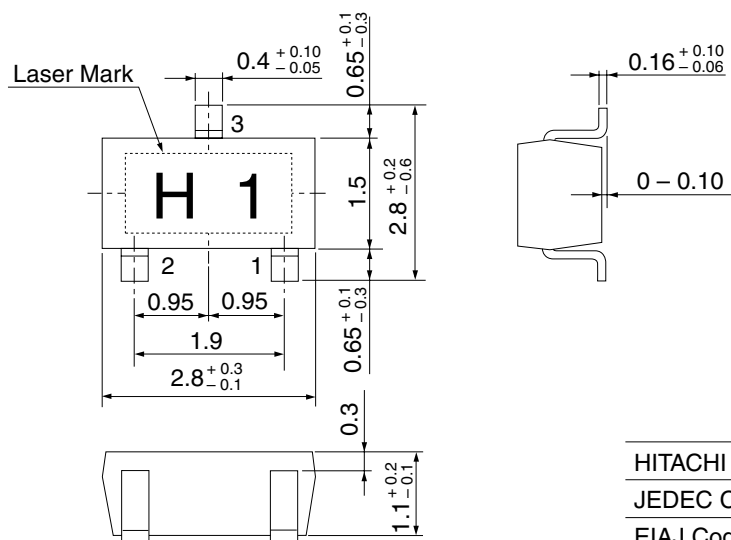


Fig.4 Forward resistance Vs. Forward current

Package Dimensions

Unit: mm



- 1 Anode
2 Anode
3 Cathode

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

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Sales Offices**HITACHI****Hitachi, Ltd.**

Semiconductor & Integrated Circuits

Nippon Bldg., 2-6-2, Ohte-machi, Chiyoda-ku, Tokyo 100-0004, Japan

Tel: (03) 3270-2111 Fax: (03) 3270-5109

URL	NorthAmerica	: http://semiconductor.hitachi.com/
	Europe	: http://www.hitachi-eu.com/hel/ecg
	Asia	: http://sicapac.hitachi-asia.com
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For further information write to:

Hitachi Semiconductor (America) Inc.	Hitachi Europe Ltd.
179 East Tasman Drive	Electronic Components Group
San Jose, CA 95134	Whitebrook Park
Tel: <1> (408) 433-1990	Lower Cookham Road
Fax: <1> (408) 433-0223	Maidenhead
	Berkshire SL6 8YA, United Kingdom
	Tel: <44> (1628) 585000
	Fax: <44> (1628) 585200

Hitachi Europe GmbH
Electronic Components Group
Dornacher Straße 3
D-85622 Feldkirchen, Munich
Germany
Tel: <49> (89) 9 9180-0
Fax: <49> (89) 9 29 30 00

Hitachi Asia Ltd.
Hitachi Tower
16 Collyer Quay #20-00
Singapore 049318
Tel: <65>-538-6533/538-8577
Fax: <65>-538-6933/538-3877
URL: http://www.hitachi.com.sg

Hitachi Asia Ltd.
(Taipei Branch Office)
4/F, No. 167, Tun Hwa North Road
Hung-Kuo Building
Taipei (105), Taiwan
Tel: <886>-(2)-2718-3666
Fax: <886>-(2)-2718-8180
Telex: 23222 HAS-TP
URL: http://www.hitachi.com.tw

Hitachi Asia (Hong Kong) Ltd.
Group III (Electronic Components)
7/F., North Tower
World Finance Centre,
Harbour City, Canton Road
Tsim Sha Tsui, Kowloon
Hong Kong
Tel: <852>-(2)-735-9218
Fax: <852>-(2)-730-0281
URL: http://semiconductor.hitachi.com.hk

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