

# HRF32

Silicon Schottky Barrier Diode for Rectifying

# HITACHI

ADE-208-164D(Z)

Rev 4

Jul. 1997

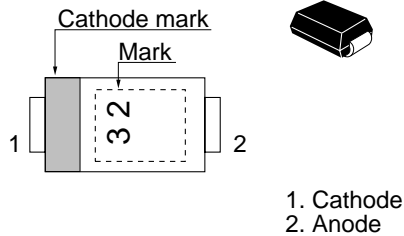
## Features

- Good for high-frequency rectify.
- LRP structure ensures higher reliability.

## Ordering Information

Type No.	Laser Mark	Package Code
HRF32	32	LRP

## Outline



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

Item	Symbol	Value	Unit
Repetitive peak reverse voltage	$V_{RRM}^{*1}$	90	V
Average rectified current	$I_o^{*1}$	1.0	A
Non-Repetitive peak forward surge current	$I_{FSM}^{*2}$	20	A
Junction temperature	Tj	125	°C
Storage temperature	Tstg	-40 to +125	°C

Note: 1. See from Fig.4 to Fig.7

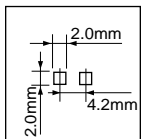
Note: 2. 10msec half sine wave 1 pulse

## Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	$V_F$	—	—	0.8	V	$I_F = 1.0A$
Reverse current	$I_R$	—	—	1.0	mA	$V_R = 90V$
ESD-Capability	—	150	—	—	V	C=200pF, R=0Ω, Both forward and reverse direction 1 pulse.
Thermal resistance	Rth(j-a)	—	—	108	°C/W	Alumina board <sup>*1</sup>
		—	—	157		Print board <sup>*2</sup>

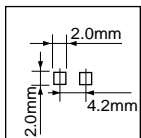
Note: 1. Alumina board

(25mm ~25mm ~0.64t)



Note: 2. Print board

(25mm ~25mm ~1.64t)



Main Characteristic

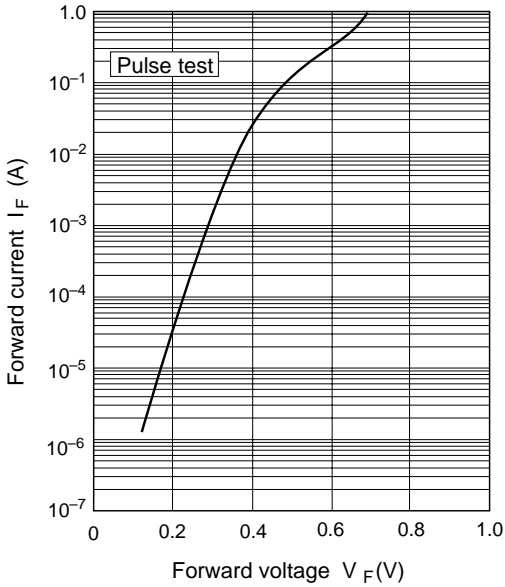


Fig.1 Forward current Vs. Forward voltage

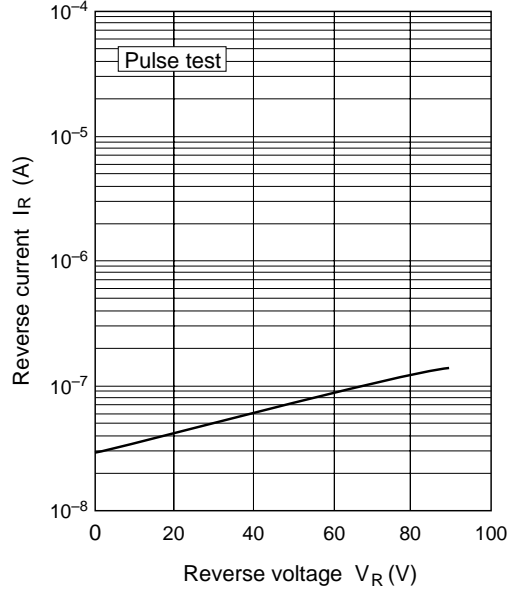


Fig.2 Reverse current Vs. Reverse voltage

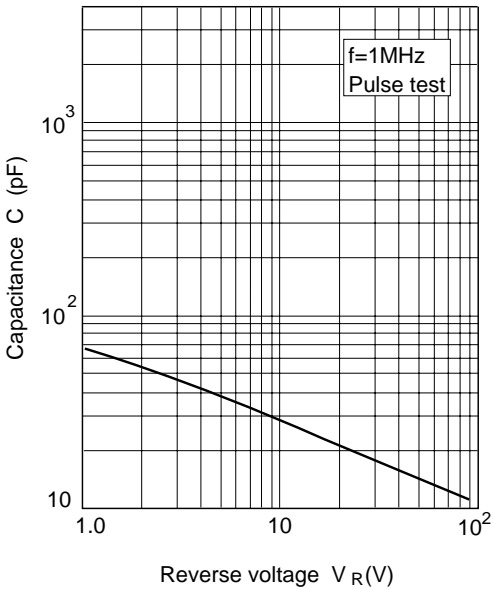


Fig.3 Capacitance Vs. Reverse voltage

Main Characteristic

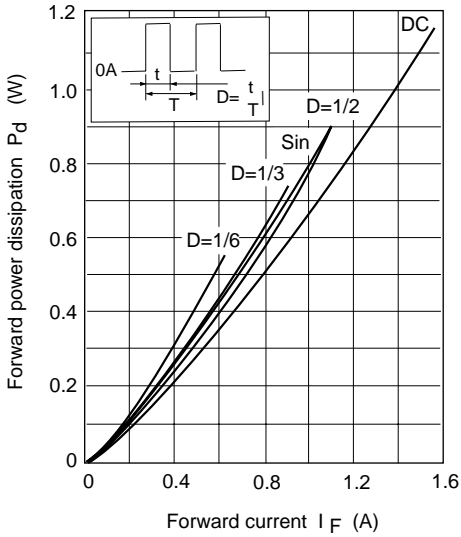


Fig.4 Forward power dissipation Vs. Forward current

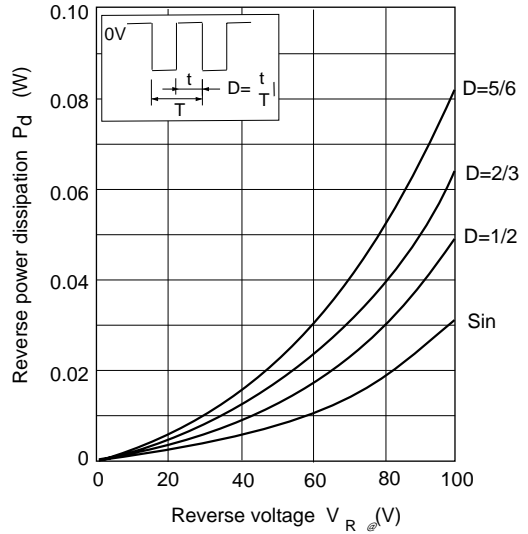


Fig.5 Reverse power dissipation Vs. Reverse voltage

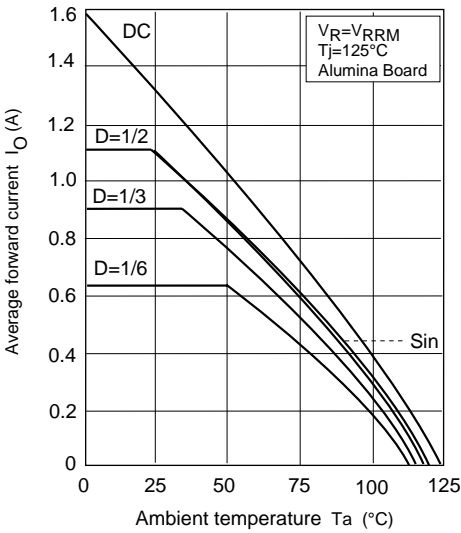


Fig.6 Average forward current Vs. Ambient temperature

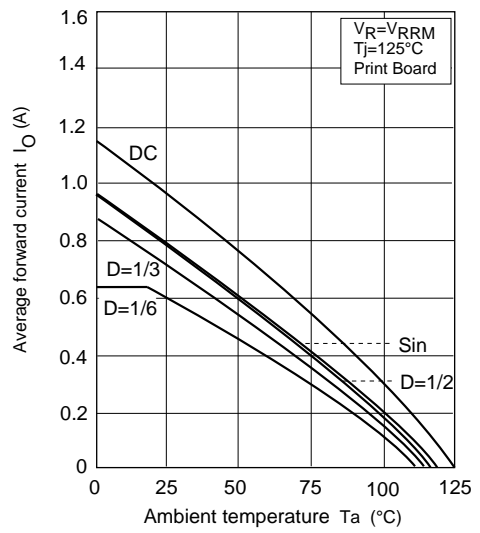
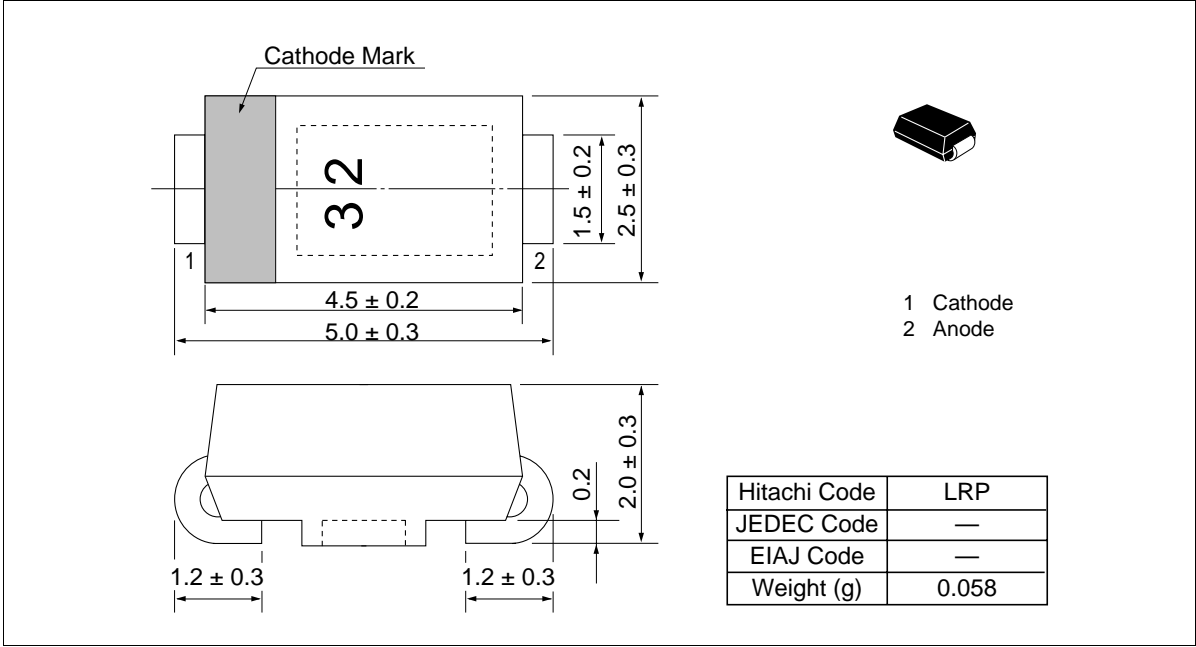


Fig.7 Average forward current Vs. Ambient temperature

Package Dimensions

Unit : mm



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# HITACHI

## Hitachi, Ltd.

Semiconductor & Integrated Circuits.  
Nippon Bldg., 2-6-2, Ohte-machi, Chiyoda-ku, Tokyo 100-0004, Japan  
Tel: Tokyo (03) 3270-2111 Fax: (03) 3270-5109

URL      North America      : <http://semiconductor.hitachi.com/>  
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## For further information write to:

Hitachi Semiconductor  
(America) Inc.  
179 East Tasman Drive,  
San Jose, CA 95134  
Tel: <1> (408) 433-1990  
Fax: <1> (408) 433-0223

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 Europe Ltd.  
Electronic Components Group.  
Whitebrook Park  
Lower Cookham Road  
Maidenhead  
Berkshire SL6 8YA, United Kingdom  
Tel: <44> (1628) 585000  
Fax: <44> (1628) 778322

Hitachi Asia Pte. Ltd.  
16 Collyer Quay #20-00  
Hitachi Tower  
Singapore 049318  
Tel: 535-2100  
Fax: 535-1533

Hitachi Asia Ltd.  
Taipei Branch Office  
3F, Hung Kuo Building, No.167,  
Tun-Hwa North Road, Taipei (105)  
Tel: <886> (2) 2718-3666  
Fax: <886> (2) 2718-8180

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  
Telex: 40815 HITEC HX

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