
HRF22

Silicon Schottky Barrier Diode for Rectifying

HITACHI

ADE-208-163D(Z)

Rev 4

Jul. 1997

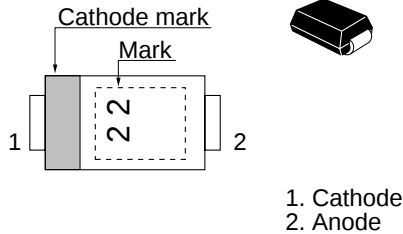
Features

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

Ordering Information

Type No.	Laser Mark	Package Code
HRF22	22	LRP

Outline



Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Value	Unit
Repetitive peak reverse voltage	V_{RRM}^{*1}	40	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

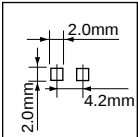
Note: 1. See from Fig.4 to Fig.7
Note: 2. 10msec half sine wave 1 pulse

Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_F	—	—	0.55	V	$I_F = 1.0A$
Reverse current	I_R	—	—	1.0	mA	$V_R = 40V$
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 ^{*1}
		—	—	157		Print board ^{*2}

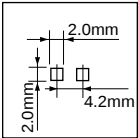
Note: 1. Alumina board

(25mm ~25mm ~0.64mm)



Note: 2. Print board

(25mm ~25mm ~1.64mm)



Main Characteristic

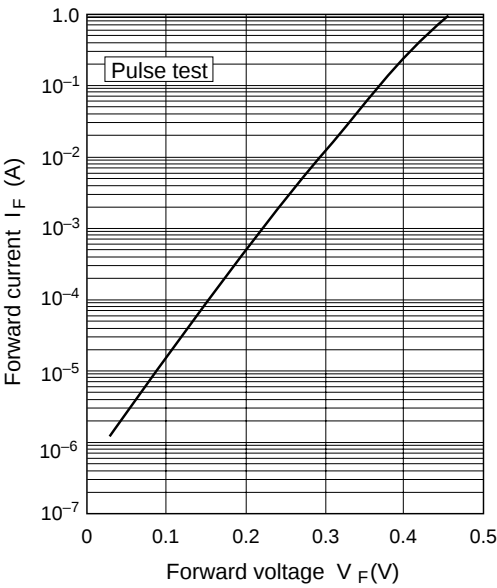


Fig.1 Forward current Vs. Forward voltage

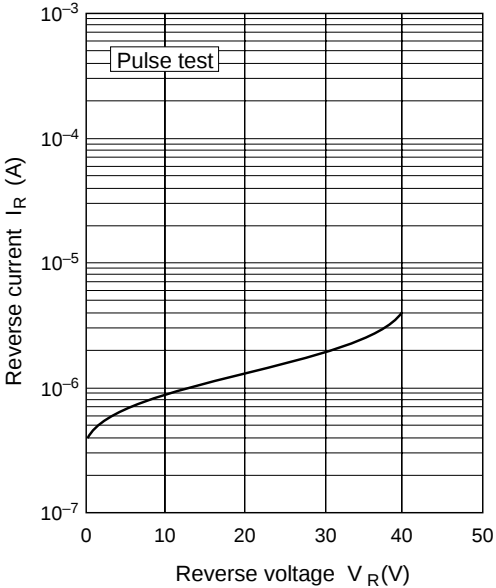


Fig.2 Reverse current Vs. Reverse voltage

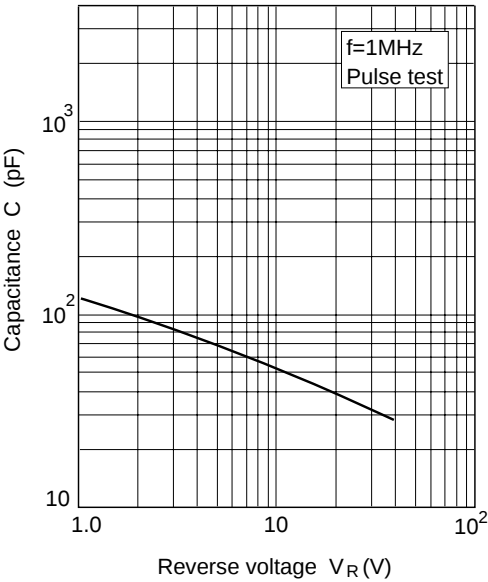


Fig.3 Capacitance Vs. Reverse voltage

Main Characteristic

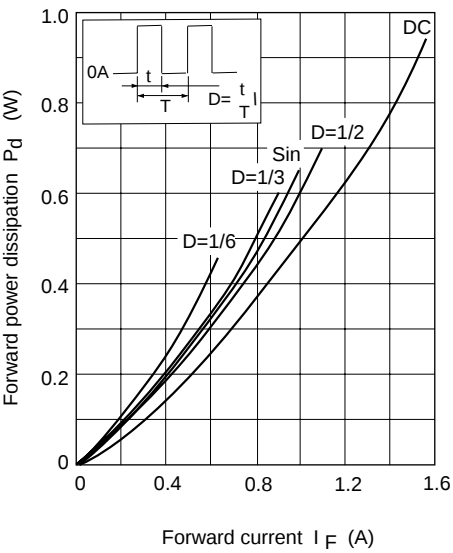


Fig.4 Forward p over dissipation Vs. Forward current

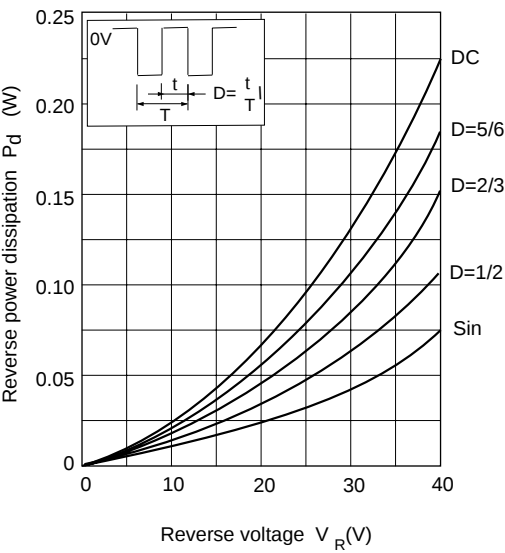


Fig.5 Reverse power dissipation Vs. Reverse voltage

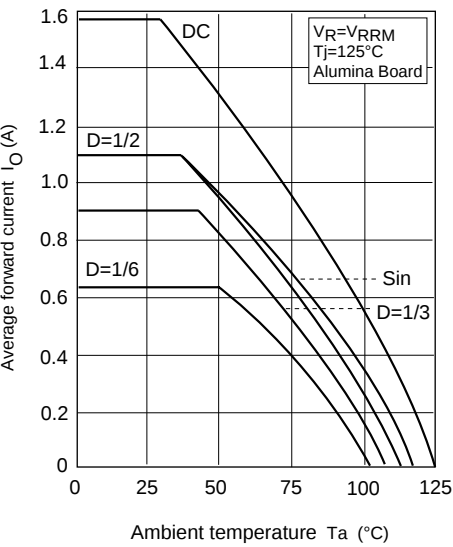


Fig.6 Average forward current Vs. Ambient temperature

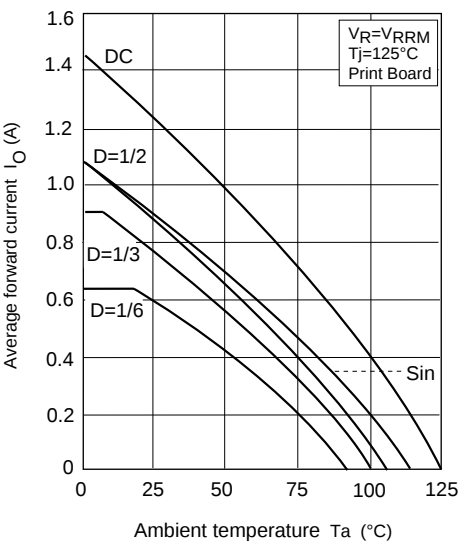
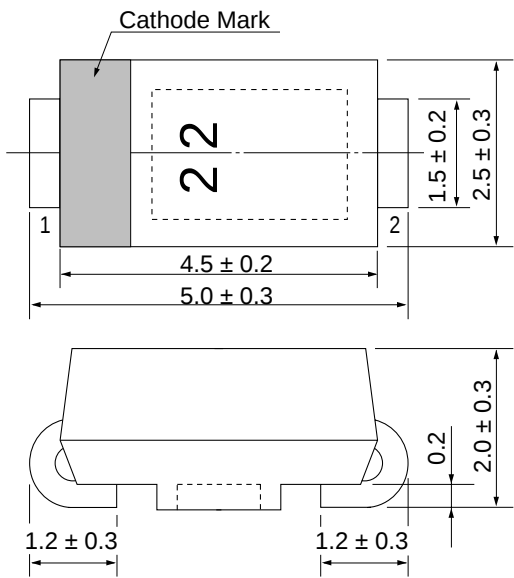


Fig.7 Average forward current Vs. Ambient temperature

Package Dimensions

Unit : mm



- 1 Cathode
- 2 Anode

Hitachi Code	LRP
JEDEC Code	—
EIAJ Code	—
Weight (g)	0.058

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