
HRW37F

Silicon Schottky Barrier Diode for High Frequency Rectifying

HITACHI

ADE-208-161D (Z)

Rev. 4

Jan. 1995

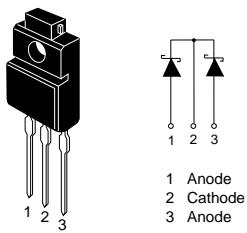
Features

- Low forward voltage drop. ($V_F = 0.85V$ max)
- High reverse voltage. ($V_R = 90V$ max)
- Full molded fin enables easy insulation from heat sink.

Ordering Information

Type No.	Laser Mark	Package Code
HRW37F	HRW37F	TO-220FM

Pin Arrangement



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Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)^{*1}

Item	Symbol	Value	Unit
Repetitive peak reverse voltage	V_{RRM}	90	V
Average forward current	I_o^{*2}	20	A
Non-Repetitive peak forward surge current	I_{FSM}^{*3}	120	A
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature	T_{STG}	-40 to +125	$^\circ\text{C}$

- Notes:
1. Per one device
 2. Square wave, Duty (1/2), $T_c = 95^\circ\text{C}$, Sum of two devices
 3. Half sine wave 10msec

Electrical Characteristics ($T_a = 25^\circ\text{C}$)^{*}

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_F	—	—	0.85	V	$I_F = 10\text{A}$
Reverse current	I_R	—	—	4.0	mA	$V_R = 90\text{V}$
Thermal resistance	$R_{th} (\text{j-c})$	—	2.5	—	$^\circ\text{C/W}$	

Note: Per one device

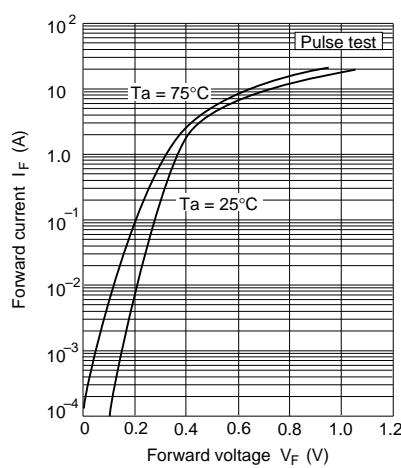


Fig.1 Forward current Vs. Forward voltage

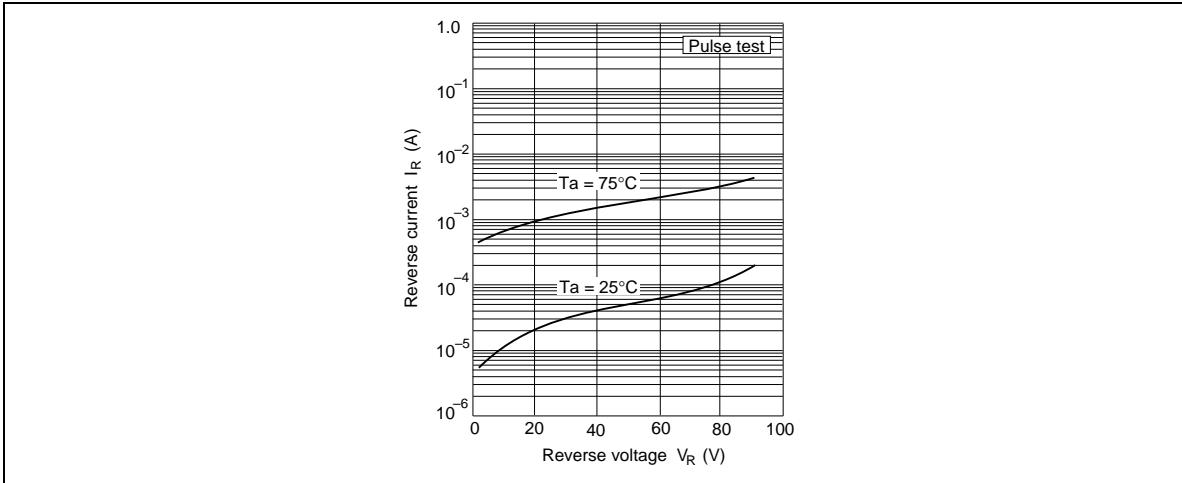


Fig.2 Reverse current Vs. Reverse voltage

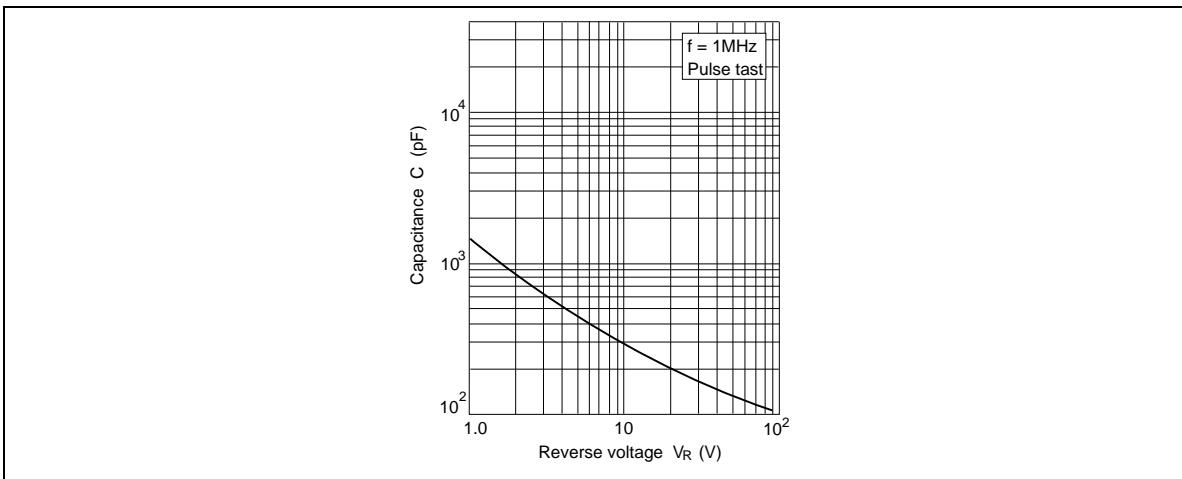


Fig.3 Capacitance Vs. Forward current

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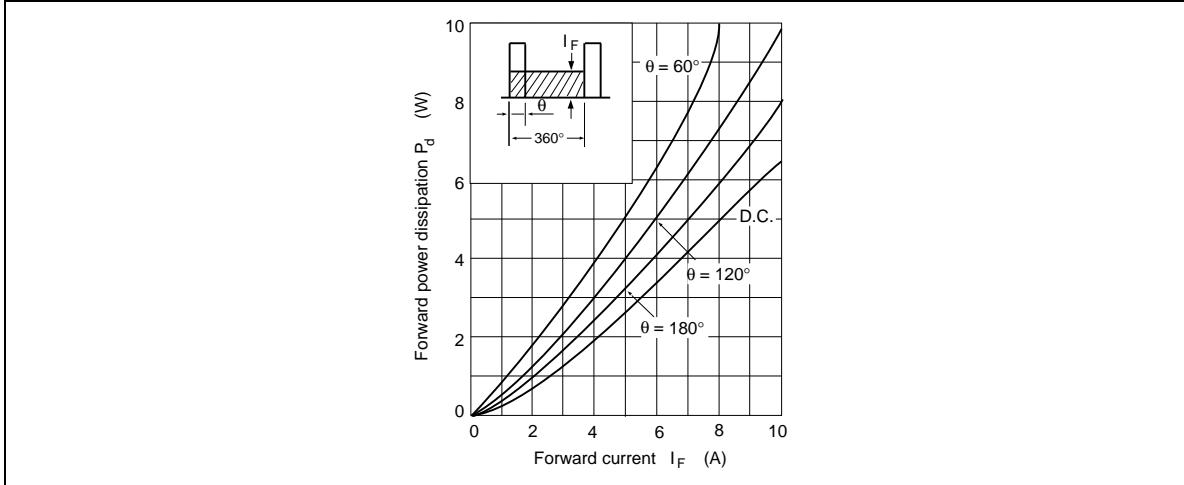


Fig.4 Forward power dissipation Vs. Forward current

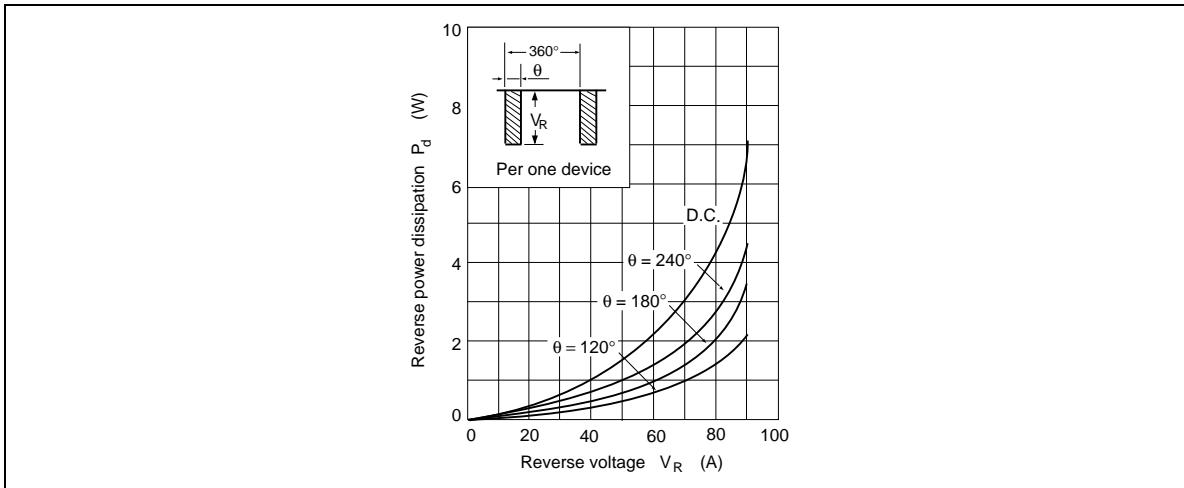


Fig.5 Reverse power dissipation Vs. Reverse voltage

Package Dimensions