
HRW37F

Silicon Schottky Barrier Diode for High Frequency Rectifying

HITACHI

ADE-208-161D (Z)

Rev. 4

Jan. 1995

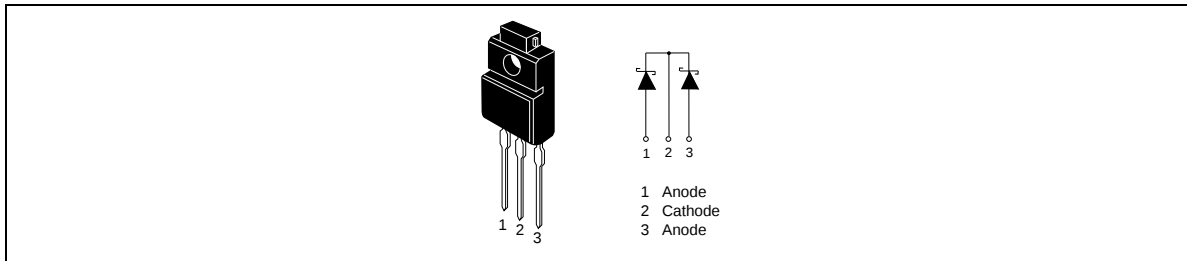
Features

- 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



HRW37F

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	$R_{th(j-c)}$	—	2.5	—	$^\circ\text{C/W}$	

Note: Per one device

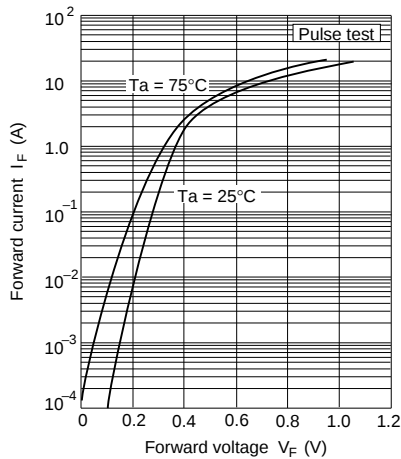


Fig.1 Forward current Vs. Forward voltage

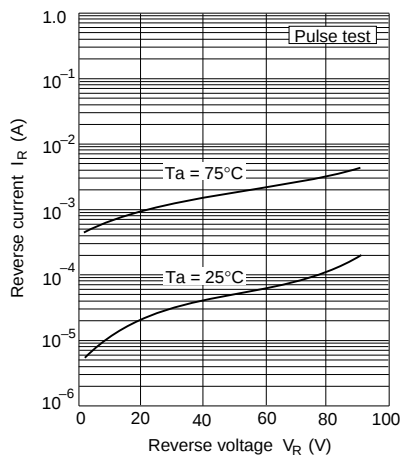


Fig.2 Reverse current Vs. Reverse voltage

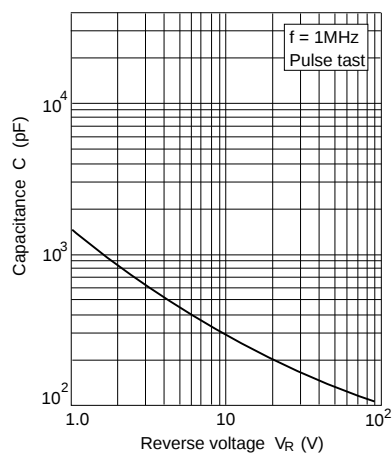


Fig.3 Capacitance Vs. Forward current

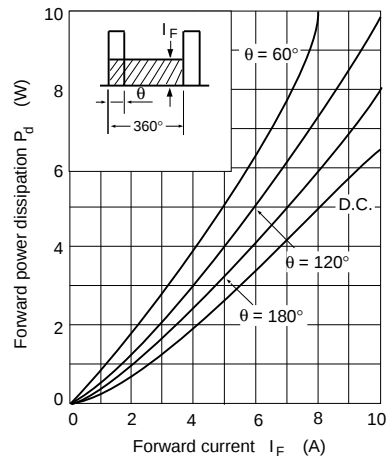


Fig.4 Forward power dissipation Vs. Forward current

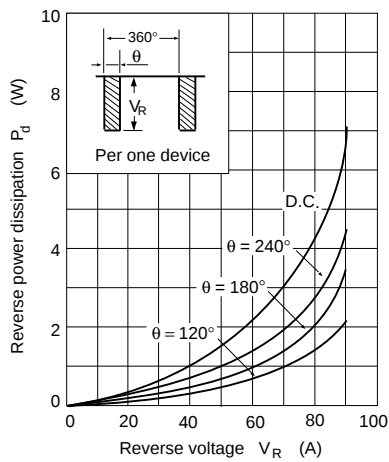


Fig.5 Reverse power dissipation Vs. Reverse voltage

Package Dimensions

