

# HRW37F

## Silicon Schottky Barrier Diode for High Frequency Rectifying

# HITACHI

 Rev.4  
 Jan. 1995

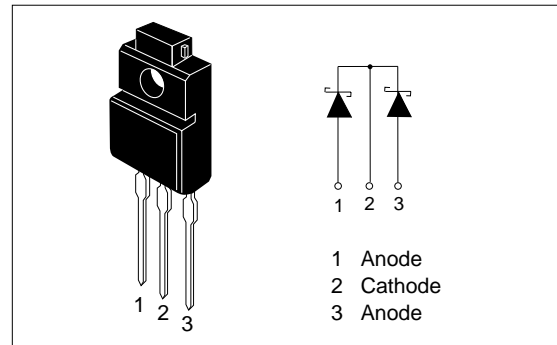
### Features

- 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



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

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

\* Per one device

\*\* Square wave, Duty (1/2),  $T_c=95^\circ\text{C}$ , Sum of two devices

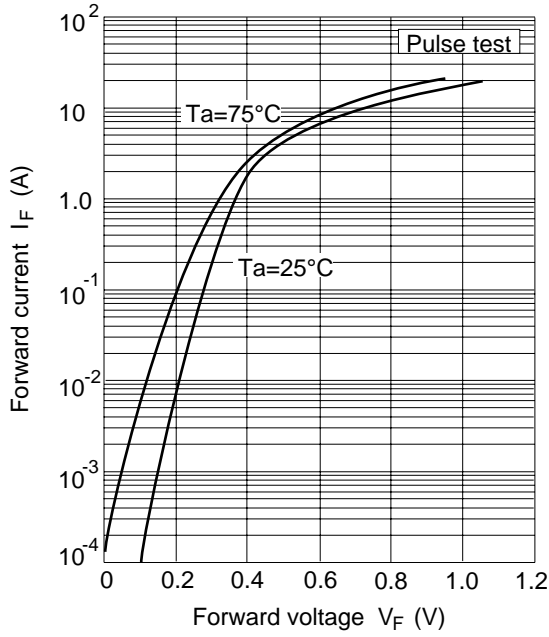
\*\*\* Half sine wave 10msec

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

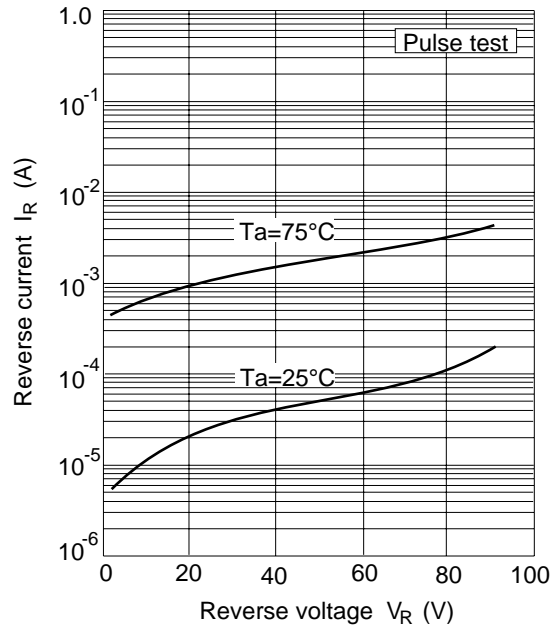
Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	$V_F$	—	—	0.85	V	$I_F = 10\text{ A}$
Reverse current	$I_R$	—	—	4.0	mA	$V_R = 90\text{ V}$
Thermal resistance	$R_{th(j-c)}$	—	2.5	—	$^\circ\text{C/W}$	

\* Per one device

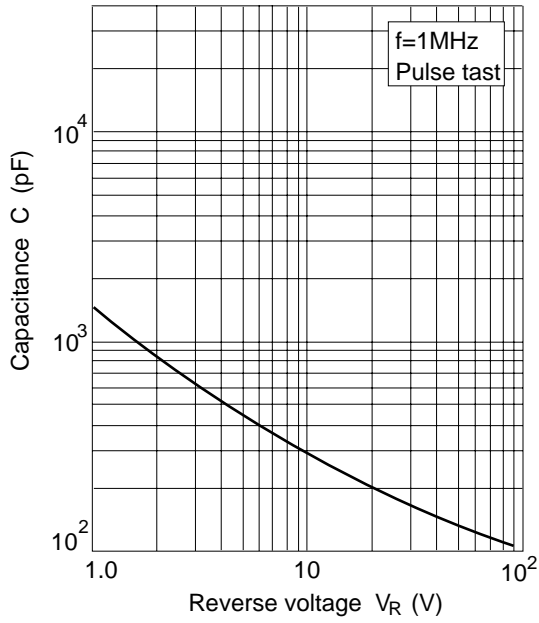
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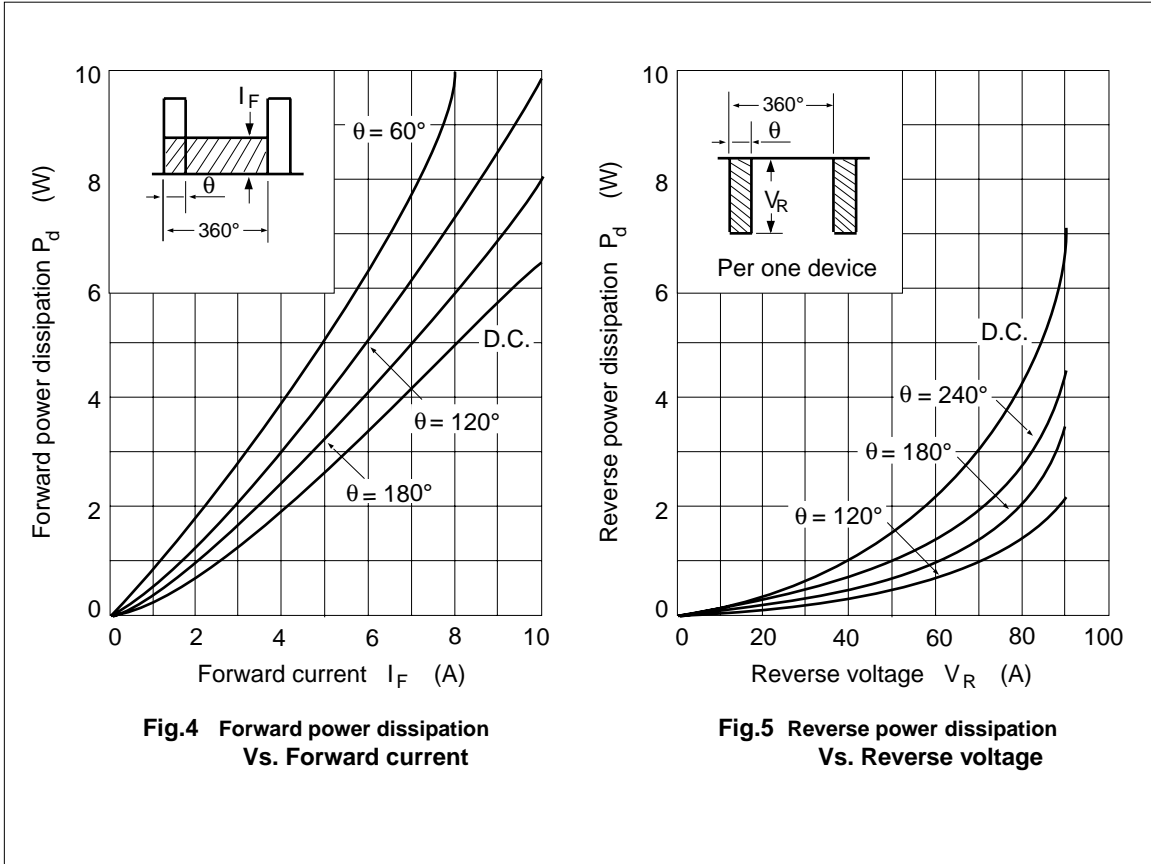
**Fig.1 Forward current Vs. Forward voltage**



**Fig.2 Reverse current Vs. Reverse voltage**



**Fig.3 Capacitance Vs. Forward current**



### Package Dimensions

Unit: mm

