HRW1002B

Silicon Schottky Barrier Diode for Rectifying

HITACHI

ADE-208-241A (Z)
Rev. 1
Aug. 1994

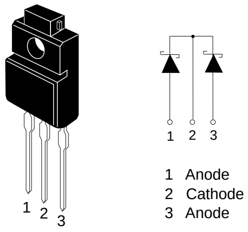
Features

- Low forward voltage drop and suitable for high effifiency rectifying.
- Full molded fin enables easy insulation from heat sink.

Ordering Information

Type No.	Laser Mark	Package Code
HRW1002B	W1002B	TO-220FM

Pin Arragement



1 Anode
2 Cathode
3 Anode

Absolute Maximum Ratings (Ta = 25°C)*[1]

Item	**Symbol**	**Value**	**Unit**
Repetitive peak reverse voltage	V_{RRM}*[2]	20	V
Average forward current	I_O*[3]	10	A
Non-Repetitive peak forward surge current	I_{FSM}*[4]	75	A
Junction temperature	Tj	125	°C
Storage temperature	Tstg	–40 to +125	°C

Notes: 1. Per one device
2. See Fig.5
3. Square wave, Duty (1/2), Sum of two devices See Fig.4
4. Sine wave 10msec

Electrical Characteristics (Ta = 25°C)*

Item	**Symbol**	**Min**	**Typ**	**Max**	**Unit**	**Test Condition**
Forward voltage	V_F	—	—	0.42	V	I_F = 5.0A
Reverse current	I_R	—	—	1.0	mA	V_R = 20V
ESD-capability	—	500	—	—	V	C = 200pF Both forward and reverse direction 1 pulse
Thermal resistance	Rth (j-c)	—	3.0	—	°C/W	

Note: Per one device

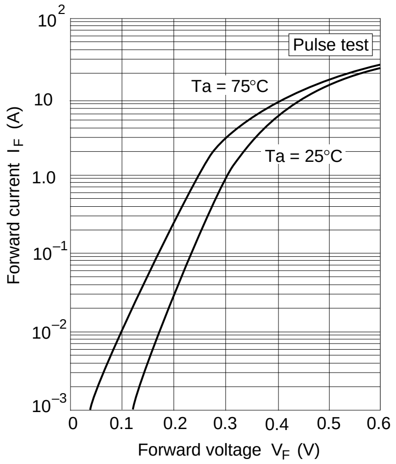


Fig.1 Forward current Vs. Forward voltage

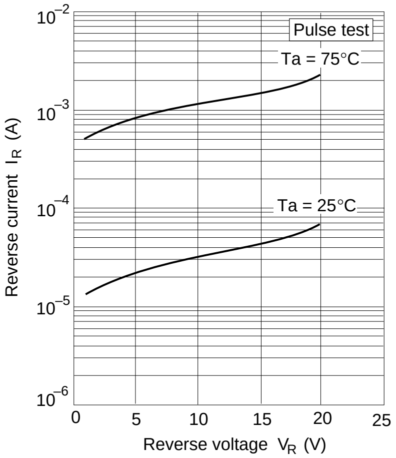


Fig.2 Reverse current Vs. Reverse voltage

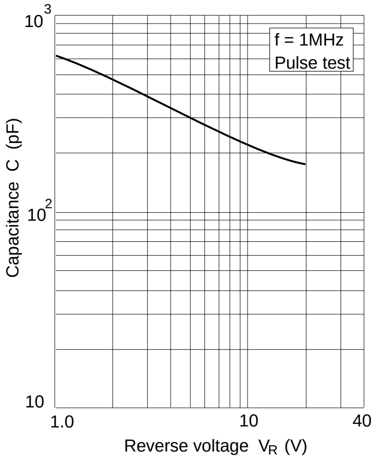


Fig.3 Capacitance Vs. Reverse voltage

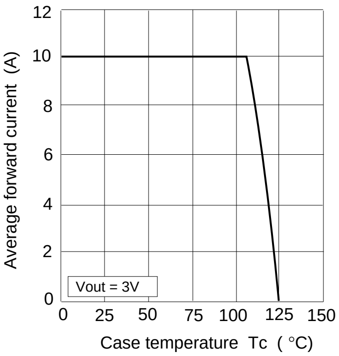


Fig.4 Average forward current Vs. Case temperature

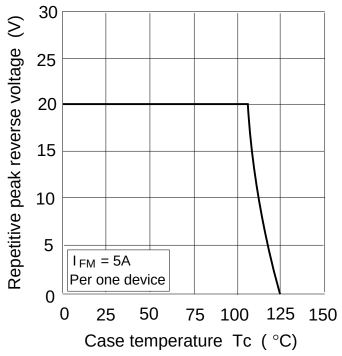
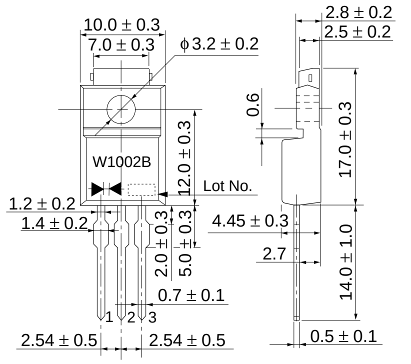


Fig.5 Repetitive peak reverse voltage Vs. Case temperature

Package Dimensions

Unit: mm



1 Anode
2 Cathode
3 Anode

HITACHI Code	TO-220FM
JEDEC Code	—
EIAJ Code	—
Weight (g)	1.8