

HRW1002A

Silicon Schottky Barrier Diode for Rectifying

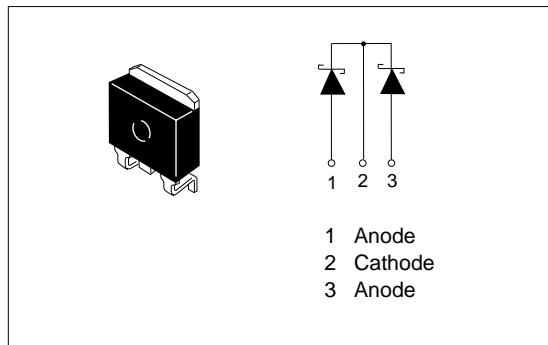
HITACHI

Rev. 1
Aug. 1994

Features

- Low forward voltage drop and suitable for high efficiency rectifying.
- Same power as TO-220AB.
- Small outline compared with TO-220AB.
- LDPAK package is suitable for high density surface mounting.

Pin Arrangement



Ordering Information

Type No.	Laser Mark	Package Code
HRW1002A	W1002A	LDPAK

Absolute Maximum Ratings (Ta = 25°C) *

Item	Symbol	Value	Unit
Repetitive peak reverse voltage	V_{RRM}^{**}	20	V
Average forward current	I_O^{***}	10	A
Non-Repetitive peak forward surge current	I_{FSM}^{****}	75	A
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	-40 to +125	°C

* Per one device

** See Fig.5

*** Square wave, Duty (1/2), Sum of two devices, See Fig.4

**** Sine wave 10msec

Electrical Characteristics (Ta = 25°C) *

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_F	—	—	0.42	V	$I_F = 5.0 \text{ A}$
Reverse current	I_R	—	—	1.0	mA	$V_R = 20 \text{ V}$
ESD-capability	—	500	—	—	V	$C = 200 \text{ pF}$ Both forward and reverse direction 1 pulse
Thermal resistance	$R_{th(j-c)}$	—	1.5	—	°C/W	

* Per one device

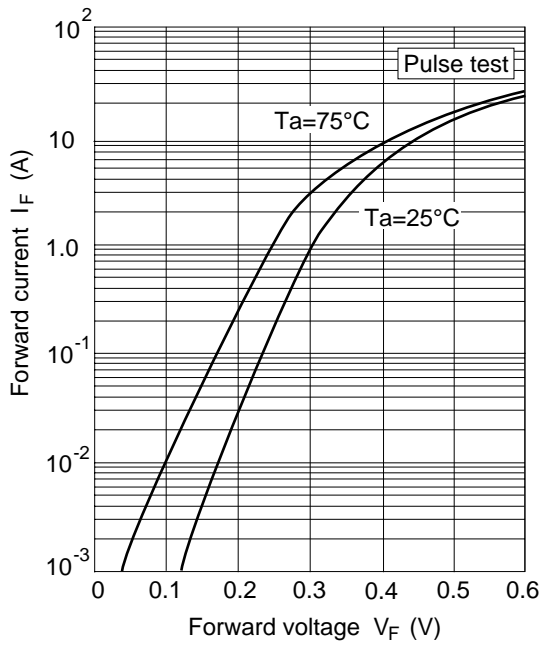


Fig.1 Forward current Vs. Forward voltage

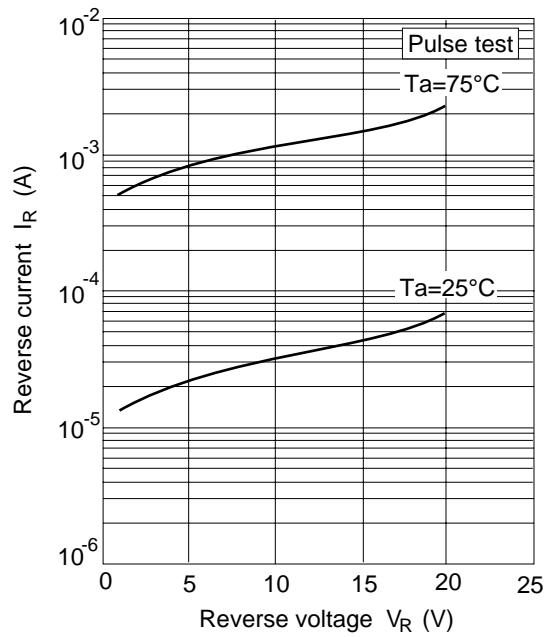


Fig.2 Reverse current Vs. Reverse voltage

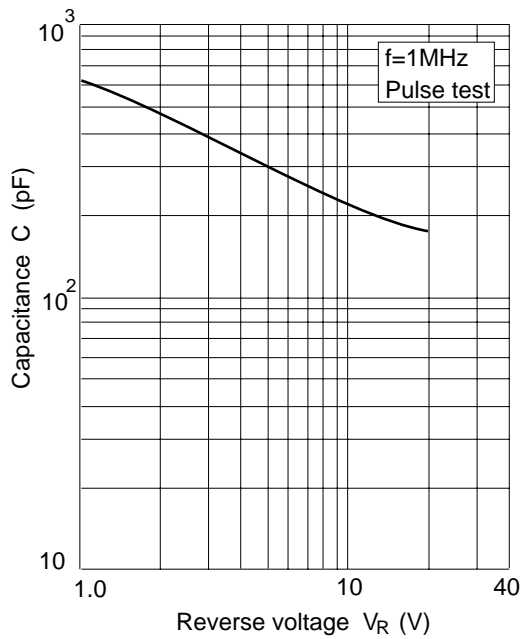


Fig.3 Capacitance Vs. Reverse voltage

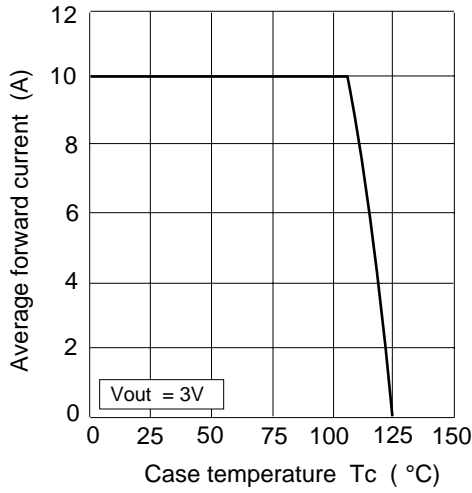


Fig.4 Average forward current Vs. Case temperature

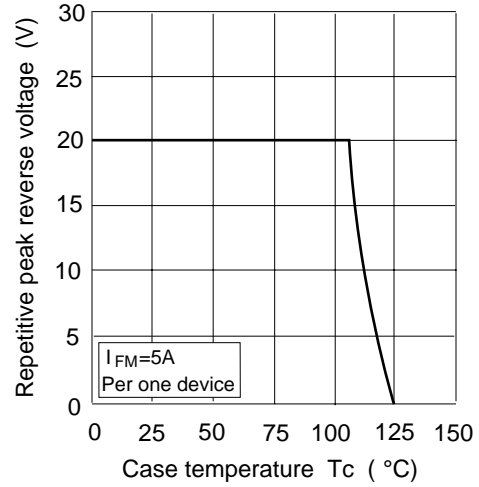
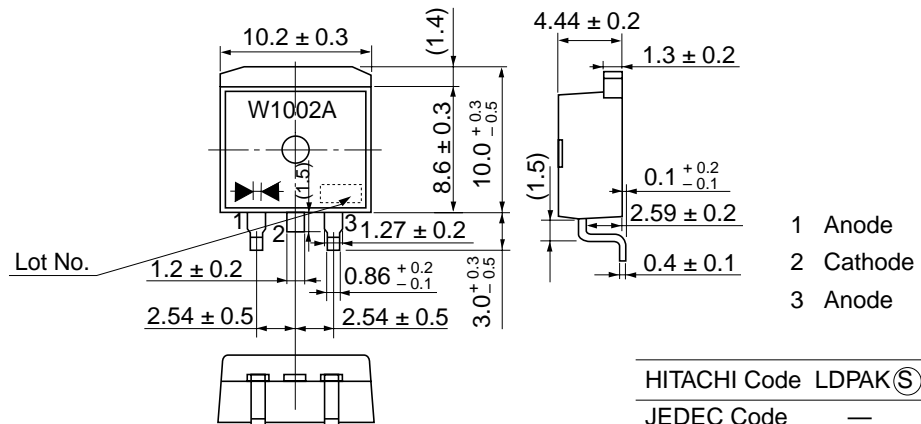



Fig.5 Repetitive peak reverse voltage Vs. Case temperature

Package Dimensions

Unit: mm



HITACHI Code	LDPAK 
JEDEC Code	—
EIAJ Code	—
Weight (g)	1.3