HITACHI

ADE-208-245B(Z)

HRF502A
Silicon Schottky Barrier Diode for Rectifying

HITACHI

Rev. 2
Nov.1994

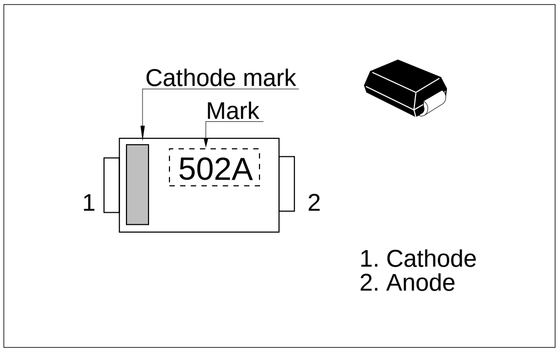
Features

- Low forward voltage drop and suitable for high effifiency rectifying.
- DO-214 is suitable for high density surface mounting and high speed assembly.

Ordering Information

Type No.	Laser Mark	Package Code
HRF502A	502A	DO-214

Outline



Absolute Maximum Ratings (Ta = 25°C)

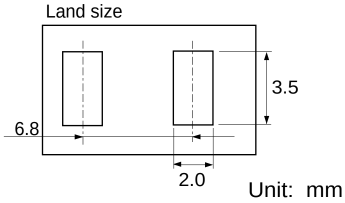
Item	Symbol	Value	Unit
Repetitive peak reverse voltage	V_{RRM} *	20	V
Average forward current	I_o **	5	A
Non-Repetitive peak forward surge current	I_{FSM}***	100	A
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	-40 to +125	°C

* See Fig.5 & Fig.7
** See Fig.4 & Fig.6
*** 10msec sine wave 1 pulse

Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_F	—	—	0.4	V	I_F = 5 A
Reverse current	I_R	—	—	1.0	mA	V_R = 20 V
Thermal resistance	$R_{th(j-a)}$	—	90	—	°C/W	Glass epoxy substrate *
	$R_{th(j-c)}$	—	42	—	°C/W	
ESD-capability	—	250	—	—	V	C=200pF,R=0Ω Both forward and reverse direction 1 pulse

* Glass epoxy PCB



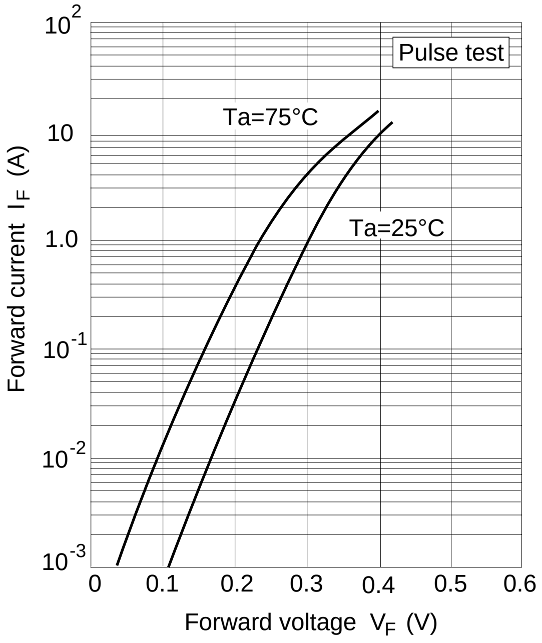


Fig.1 Forward current Vs. Forward voltage

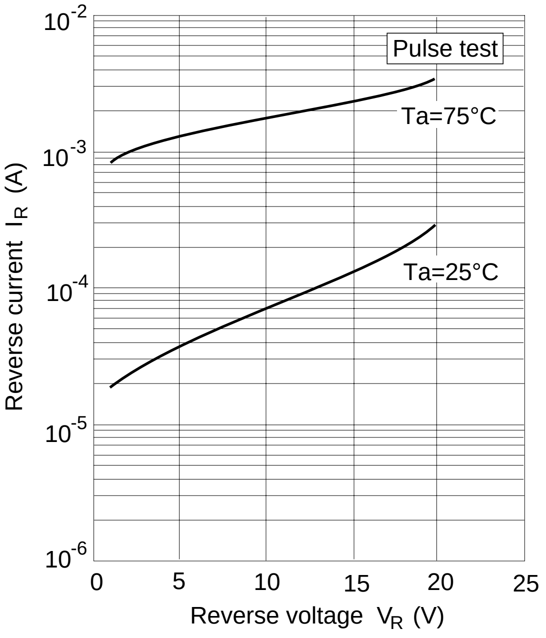


Fig.2 Reverse current Vs. Reverse voltage

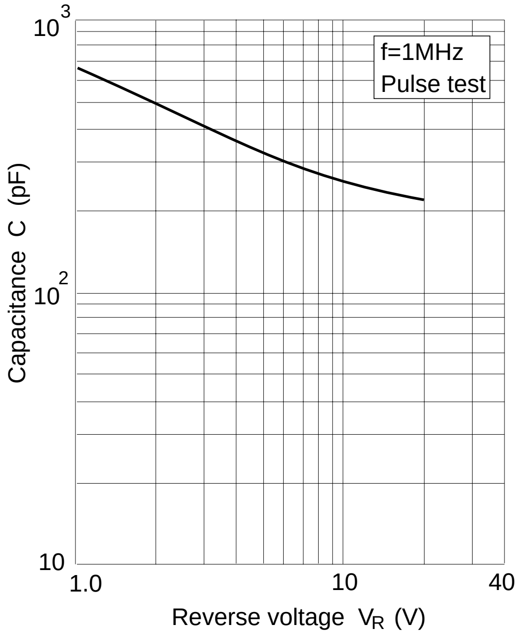


Fig.3 Capacitance Vs. Reverse voltage

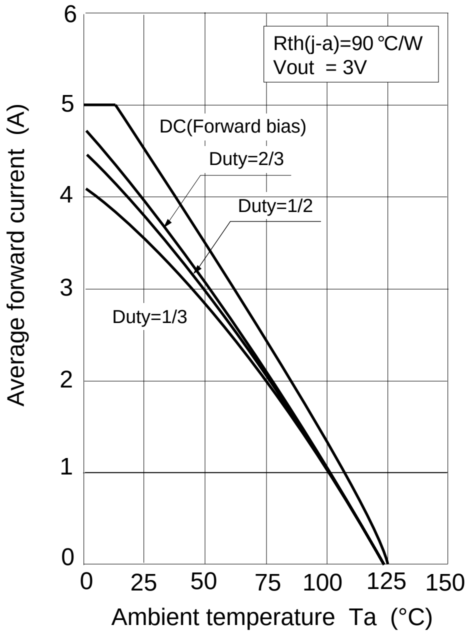


Fig.4 **Average forward current Vs. Ambient temperature**

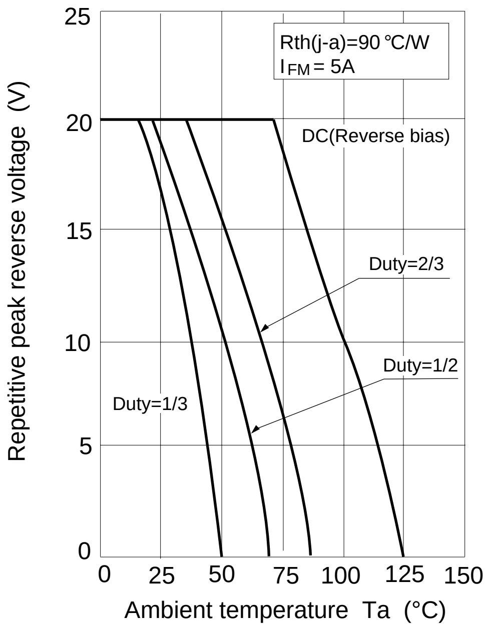


Fig.5 **Repetitive peak reverse voltage Vs. Ambient temperature**

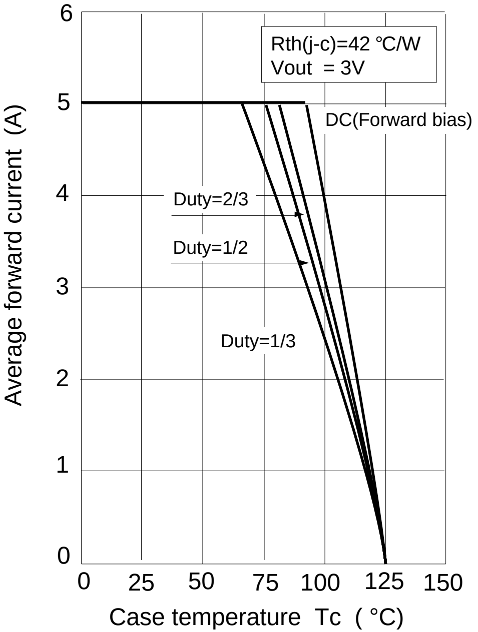


Fig.6 **Average forward current Vs. Case temperature**

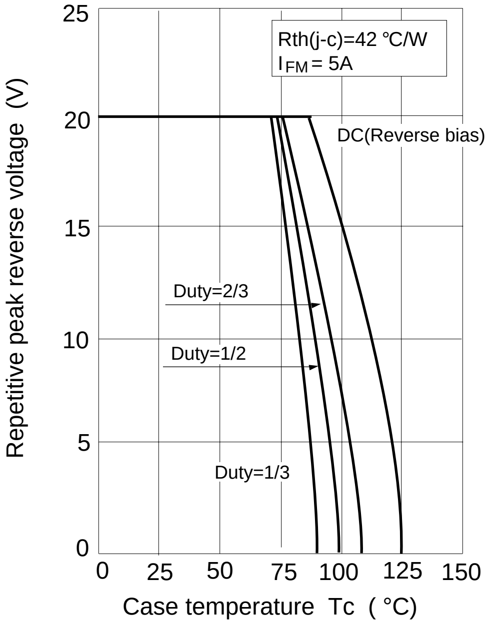
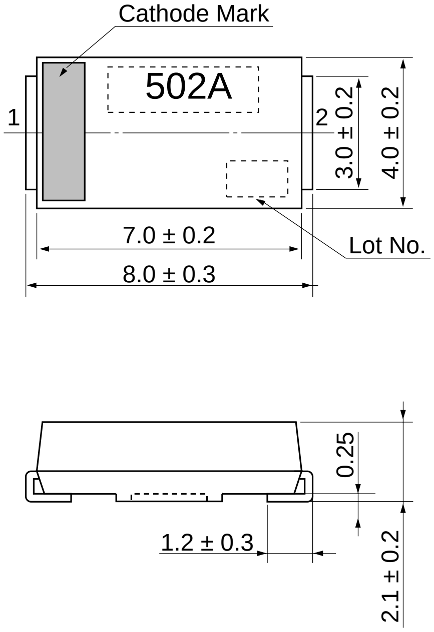


Fig.7 **Repetitive peak reverse voltage Vs. Case temperature**

HRF502A

Package Dimensions

Unit: mm



1	Cathode
2	Anode

HITACHI Code	DO-214
JEDEC Code	DO-214
EIAJ Code	—
Weight (g)	0.16