

HRF502A

Silicon Schottky Barrier Diode for Rectifying

HITACHI

Rev. 2
Nov.1994

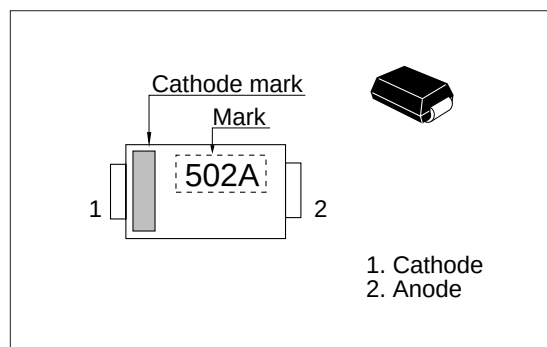
Features

- Low forward voltage drop and suitable for high efficiency 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

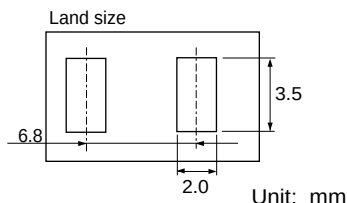
** See Fig.4 & Fig.6

*** 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	$I_F = 5\text{ A}$
Reverse current	I_R	—	—	1.0	mA	$V_R = 20\text{ V}$
Thermal resistance	$R_{th(j-a)}$	—	90	—	°C/W	Glass epoxy substrate *
	$R_{th(j-c)}$	—	42	—	°C/W	
ESD-capability	—	250	—	—	V	$C=200\text{pF}, R=0\Omega$ Both forward and reverse direction 1 pulse

* Glass epoxy PCB



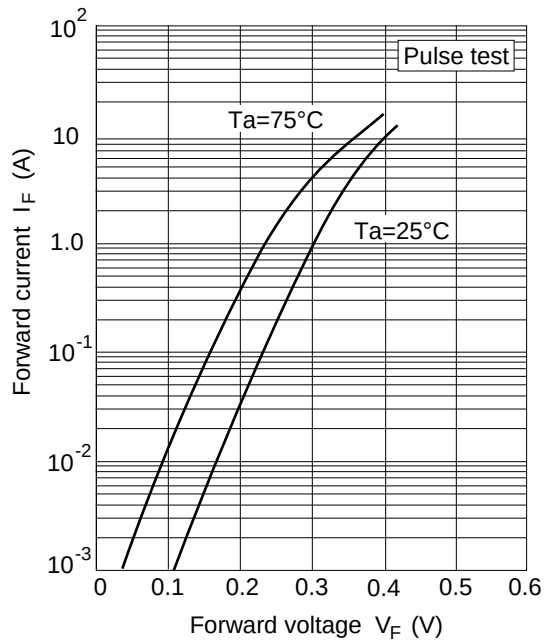


Fig.1 Forward current Vs. Forward voltage

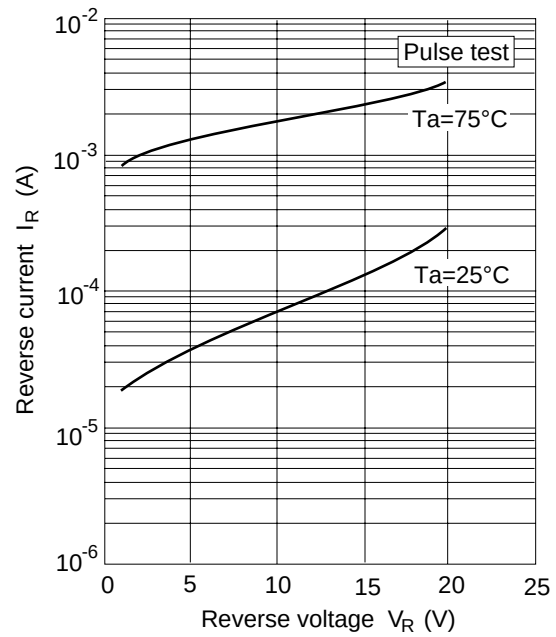


Fig.2 Reverse current Vs. Reverse voltage

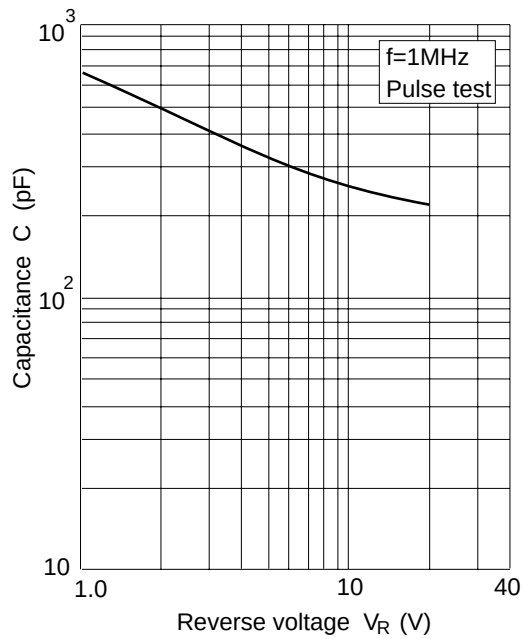


Fig.3 Capacitance Vs. Reverse voltage

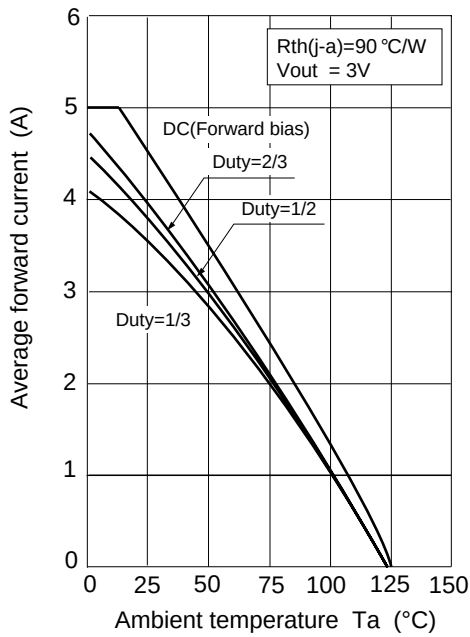


Fig.4 Average forward current Vs. Ambient temperature

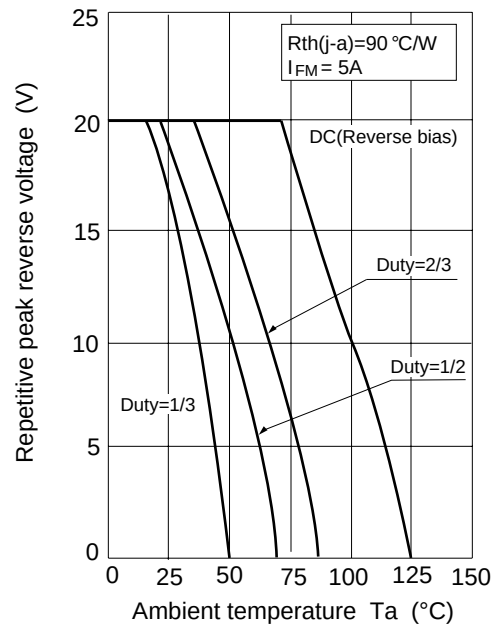


Fig.5 Repetitive peak reverse voltage Vs. Ambient temperature

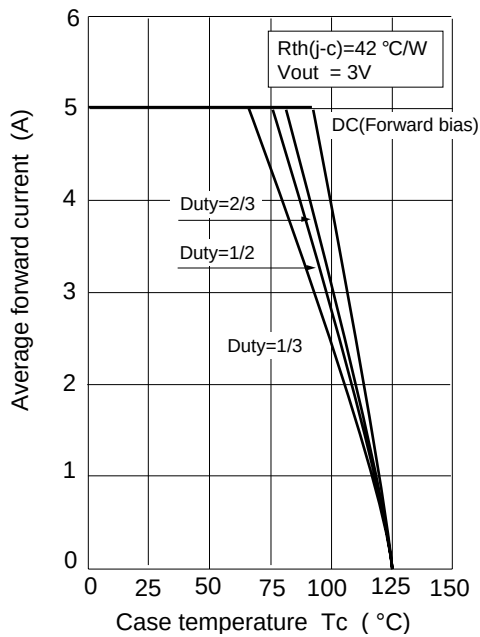


Fig.6 Average forward current Vs. Case temperature

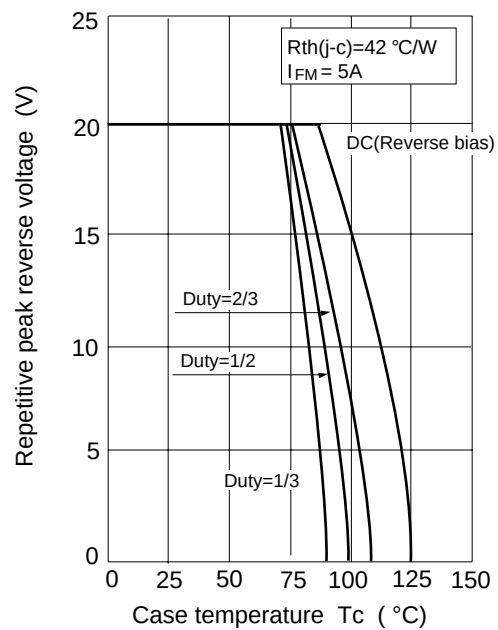


Fig.7 Repetitive peak reverse voltage Vs. Case temperature

HRF502A

Package Dimensions

Unit: mm

