

HRF502A

Silicon Schottky Barrier Diode for Rectifying

HITACHI

ADE-208-245C(Z)

Rev 3

Sep. 1997

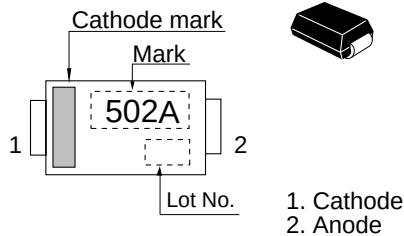
Features

- 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)

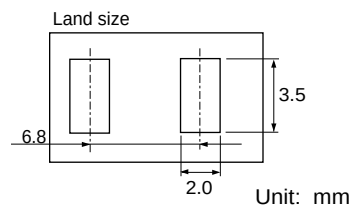
Item	Symbol	Value	Unit
Repetitive peak reverse voltage	V_{RRM}^{*1}	20	V
Average rectified current	I_o^{*1}	5	A
Non-Repetitive peak forward surge current	I_{FSM}^{*2}	100	A
Junction temperature	Tj	125	°C
Storage temperature	Tstg	-40 to +125	°C

Note: 1. See from Fig.4 to Fig.7
Note: 2. 10msec half sine wave 1 pulse

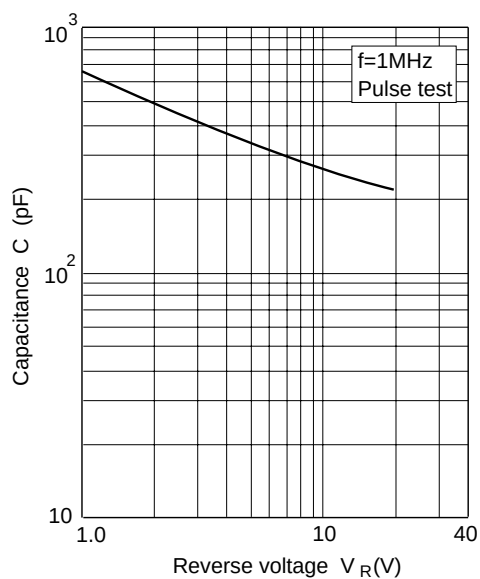
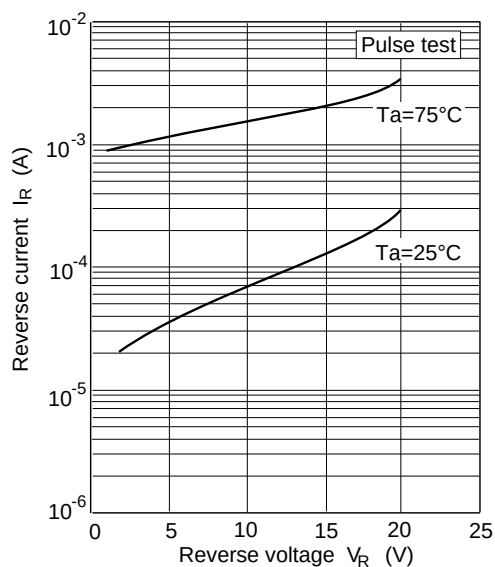
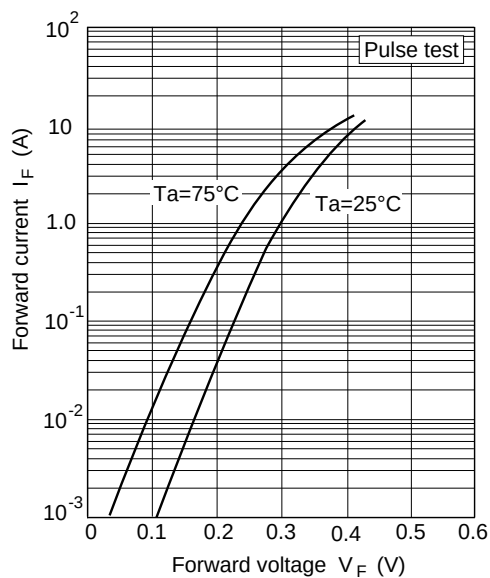
Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_F	—	—	0.40	V	$I_F = 5A$
Reverse current	I_R	—	—	1.0	mA	$V_R = 20V$
ESD-Capability	—	250	—	—	V	C=200pF , R=0Ω , Both forward and reverse direction 1 pulse.
Thermal resistance	Rth(j-a)	—	90	—	°C/W	Glass epoxy board ^{*1}
	Rth(j-c)	—	42	—		Tc=25°C

Note: 1. Glass epoxy board



Main Characteristic



Main Characteristic

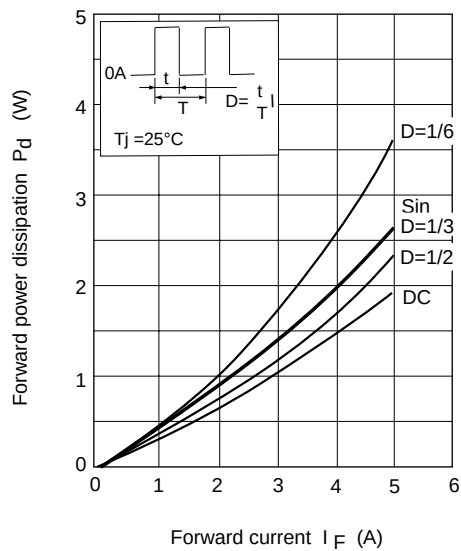


Fig.4 Forward p over dissipation Vs. Forward current

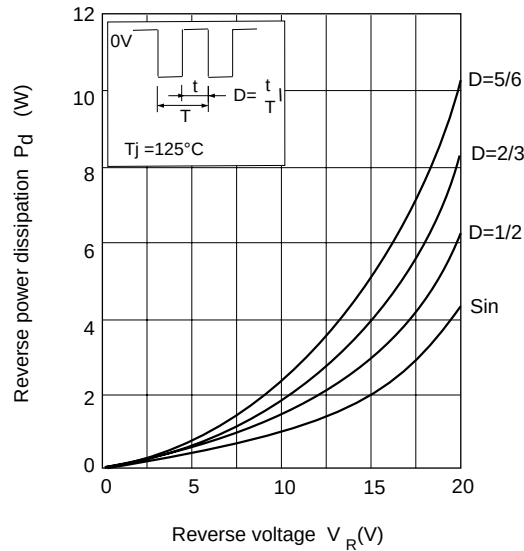


Fig.5 Reverse power dissipation Vs. Reverse voltage

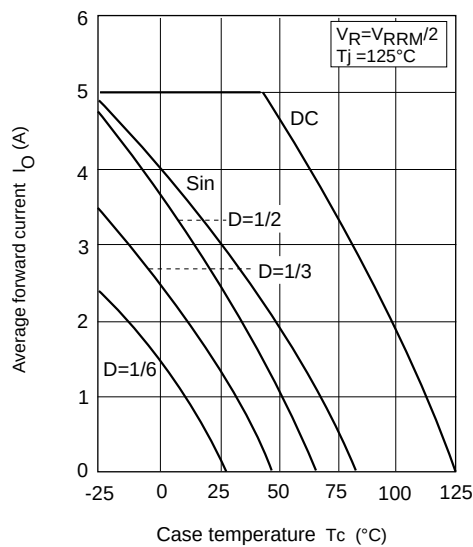


Fig.6 Average forward current Vs. Case temperature

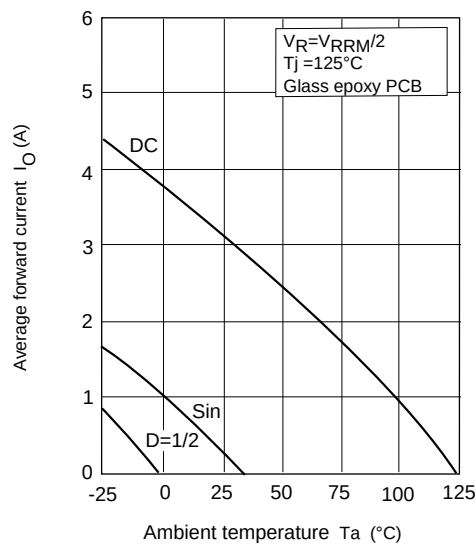
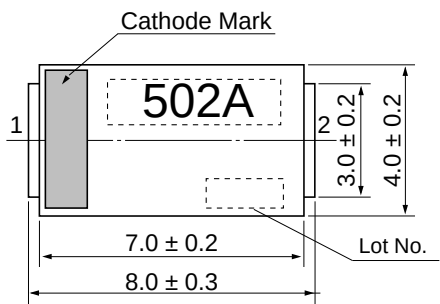


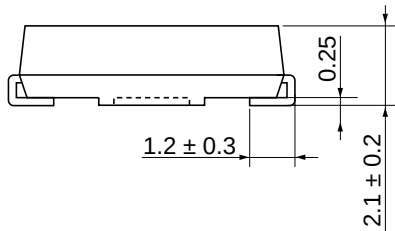
Fig.7 Average forward current Vs. Ambient temperature

Package Dimensions

Unit : mm



- 1 Cathode
- 2 Anode



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

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