HRF503A

Silicon Schottky Barrier Diode for Rectifying

HITACHI

ADE-208-401B(Z)
Rev 2

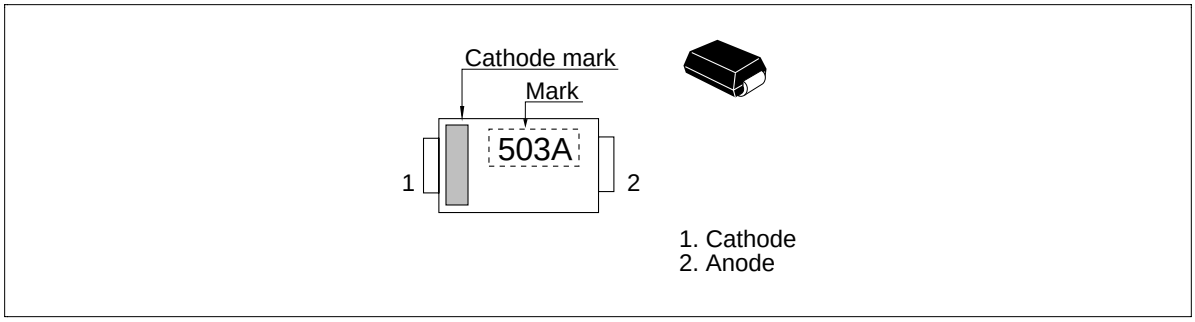
Features

- 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
HRF503A	503A	DO-214

Outline



Hitachi semiconductor

Absolute Maximum Ratings (Ta = 25°C)

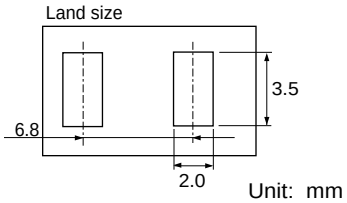
Item	Symbol	Value	Unit
Repetitive peak reverse voltage	V_{RRM} *1	35	V
Average rectified current	I_o *1	5	A
Non-Repetitive peak forward surge current	I_{FSM} *2	100	A
Junction temperature	Tj	125	°C
Storage temperature	Tstg	–40 to +125	°C

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

Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_{F1}	—	0.38	—	V	I_F = 3A
	V_{F2}	—	—	0.45		I_F = 5A
Reverse current	I_R	—	—	1.0	mA	V_R = 35V
Thermal resistance	Rth(j-a)	—	75	—	°C/W	Glass epoxy board *1
	Rth(j-c)	—	35	—		Tc = 25°C

Note: 1. Glass epoxy board



Unit: mm

Main Characteristic

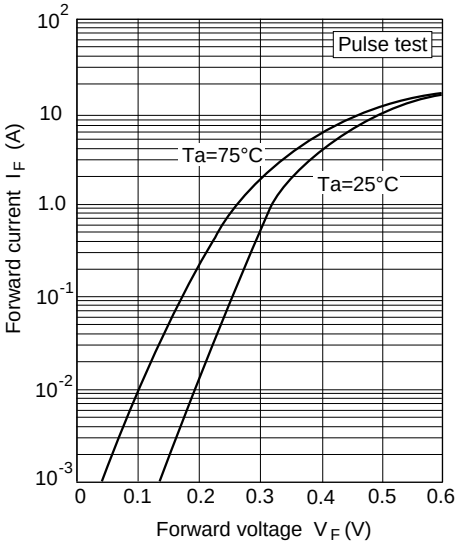


Fig.1 Forward current Vs. Forward voltage

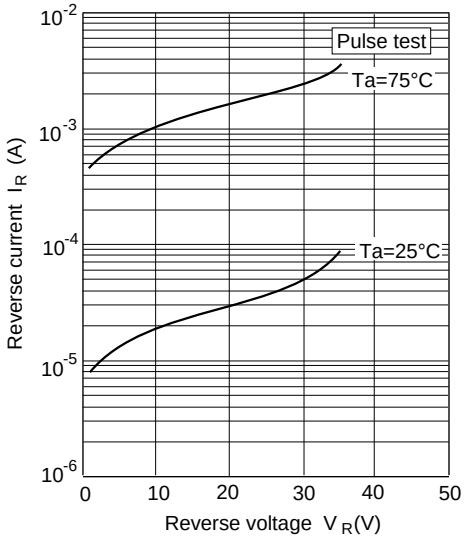


Fig.2 Reverse current Vs. Reverse voltage

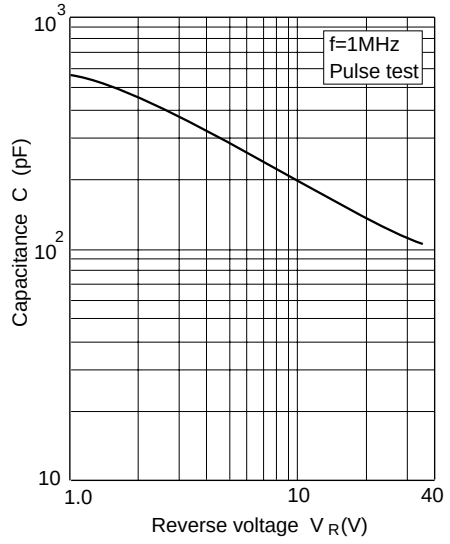


Fig.3 Capacitance Vs. Reverse voltage

Main Characteristic

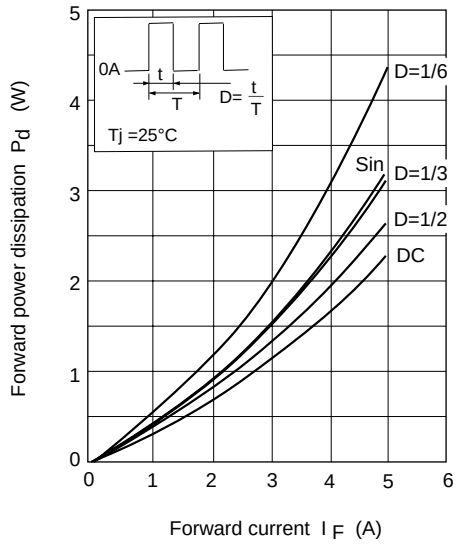


Fig.4 Forward p ower dissipation Vs. Forward current

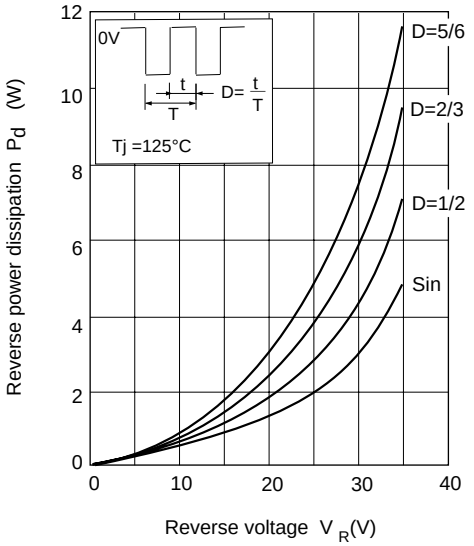


Fig.5 Reverse power dissipation Vs. Reverse voltage

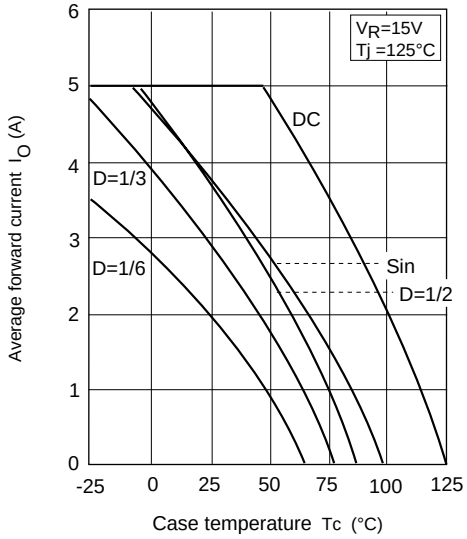


Fig.6 Average forward current Vs. Case temperature

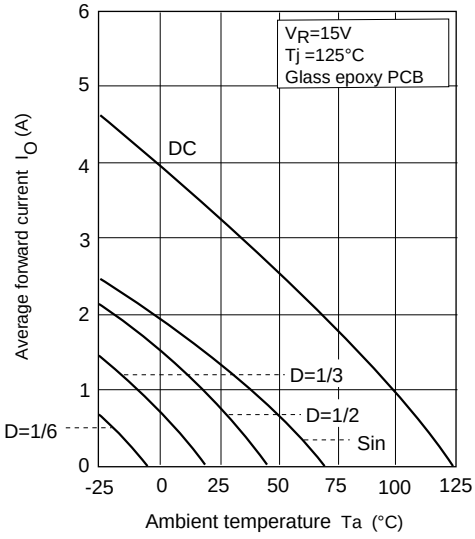
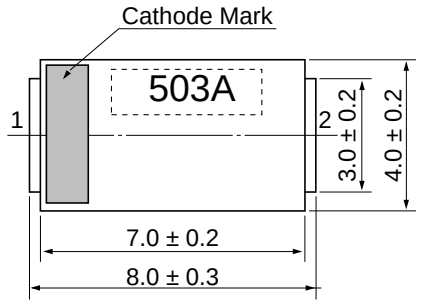


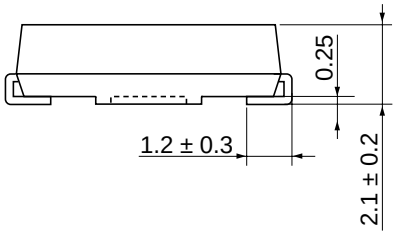
Fig.7 Average forward current Vs. Ambient temperature

Package Dimensions

Unit : mm



1 Cathode
2 Anode



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