
HRF503A

Silicon Schottky Barrier Diode for Rectifying

HITACHI

ADE-208-401B(Z)
Rev 2

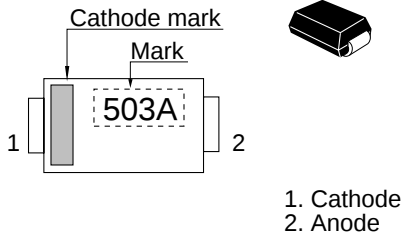
Features

- 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
HRF503A	503A	DO-214

Outline



HRF503A

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

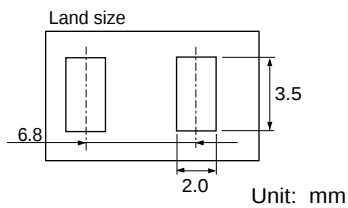
Notes: 1. See from Fig.4 to Fig.7

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



Main Characteristic

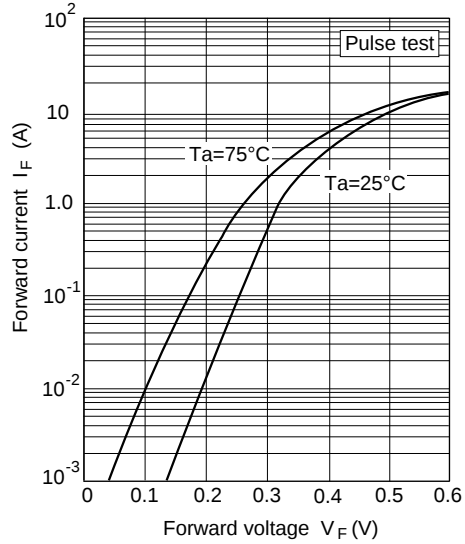


Fig.1 Forward current Vs. Forward voltage

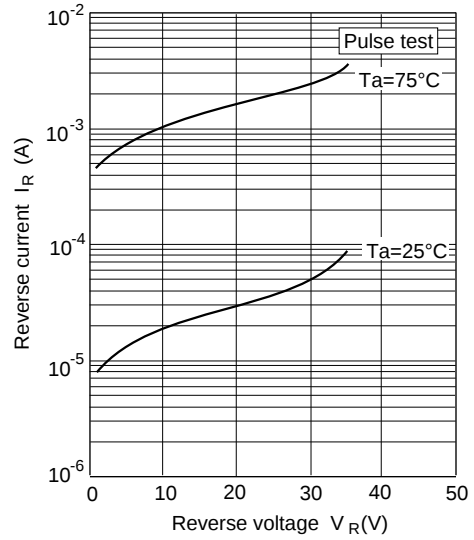


Fig.2 Reverse current Vs. Reverse voltage

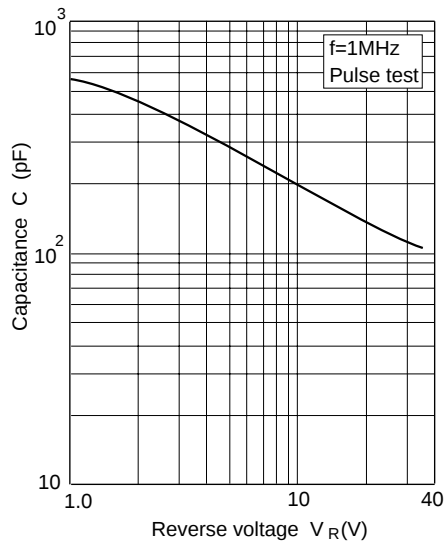


Fig.3 Capacitance Vs. Reverse voltage

Main Characteristic

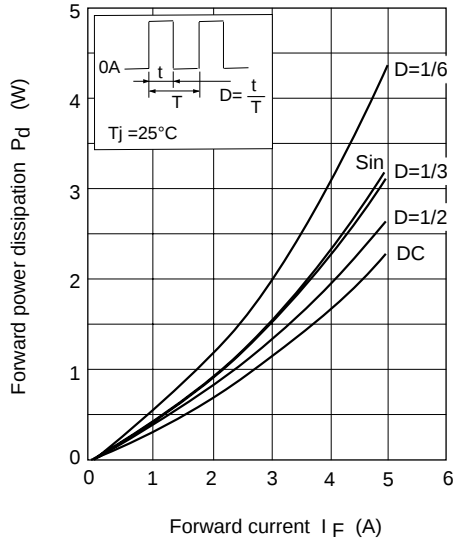


Fig.4 Forward power dissipation Vs. Forward current

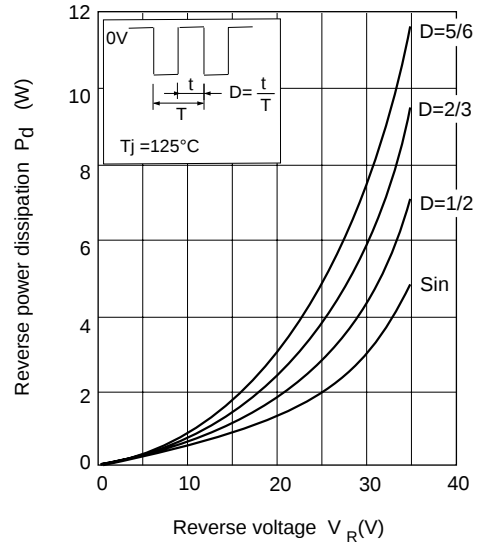


Fig.5 Reverse power dissipation Vs. Reverse voltage

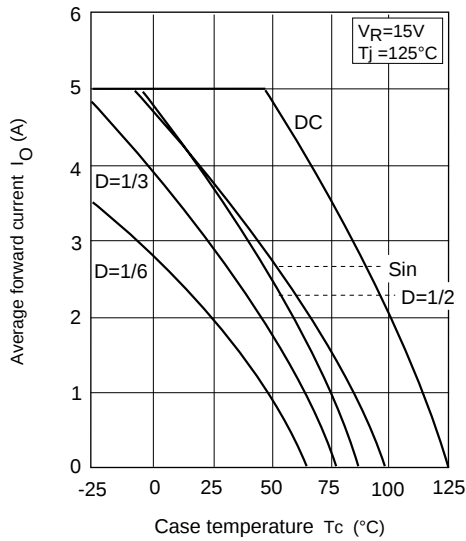


Fig.6 Average forward current Vs. Case temperature

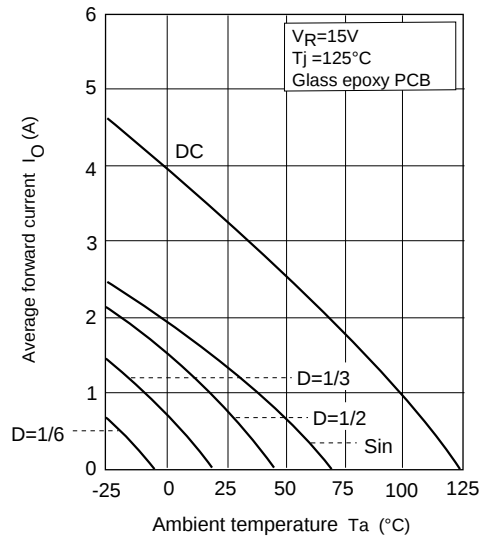


Fig.7 Average forward current Vs. Ambient temperature

Package Dimensions

Unit : mm

