
HRF503A

Silicon Schottky Barrier Diode for Rectifying

HITACHI

ADE-208-401 (Z)
Rev. 0
Oct. 1995

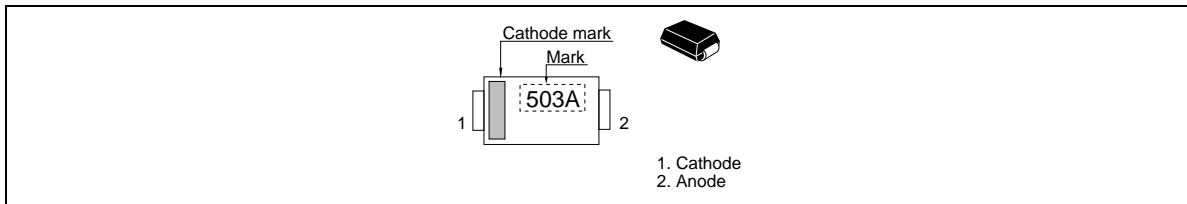
Features

- 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



Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Value	Unit
Repetitive peak reverse voltage	V_{RRM}^{*1}	35	V
Average forward current	I_o^{*2}	5	A
Non-Repetitive peak forward surge current	I_{FSM}^{*3}	100	A
Junction temperature	Tj	125	°C
Storage temperature	Tstg	-40 to +125	°C

- Notes: 1. See Fig.5 & Fig.7
2. See Fig.4 & Fig.6
3. 10msec sine wave 1 pulse

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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 substrate*
	Rth (j-c)	—	35	—	°C/W	

Note: Glass epoxy PCB

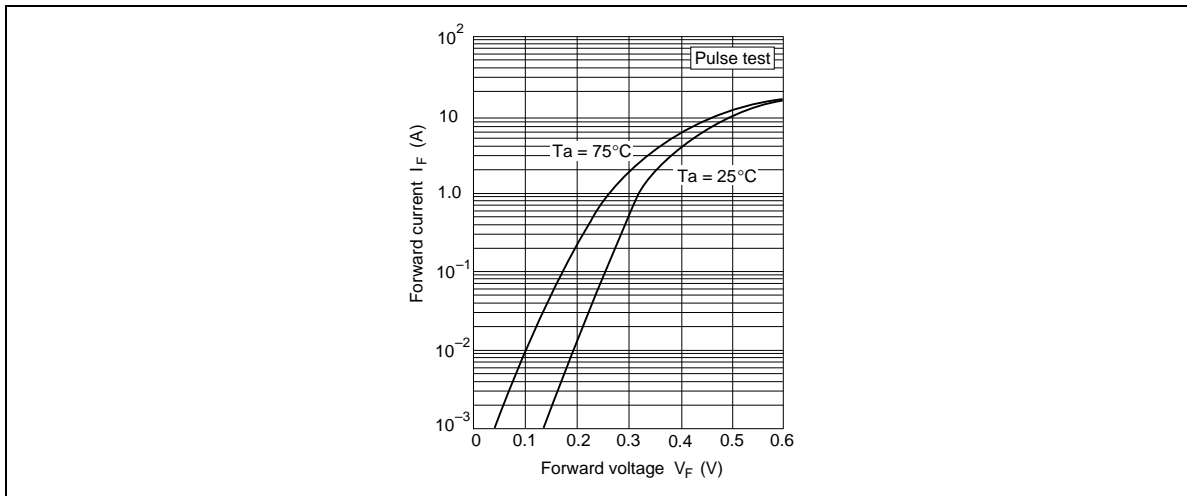
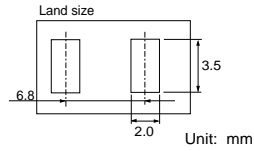


Fig.1 Forward current Vs. Forward voltage

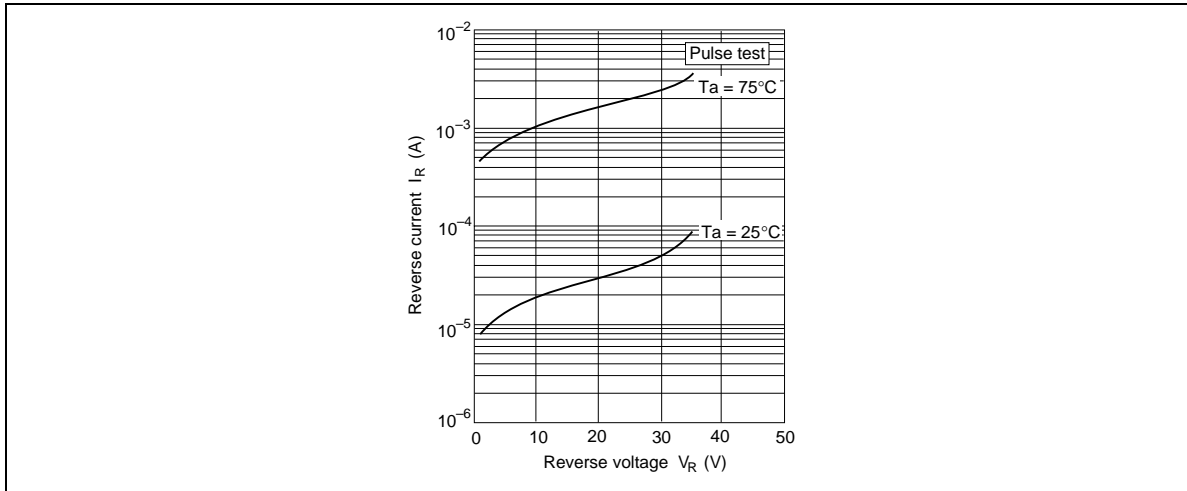


Fig.2 Reverse current Vs. Reverse voltage

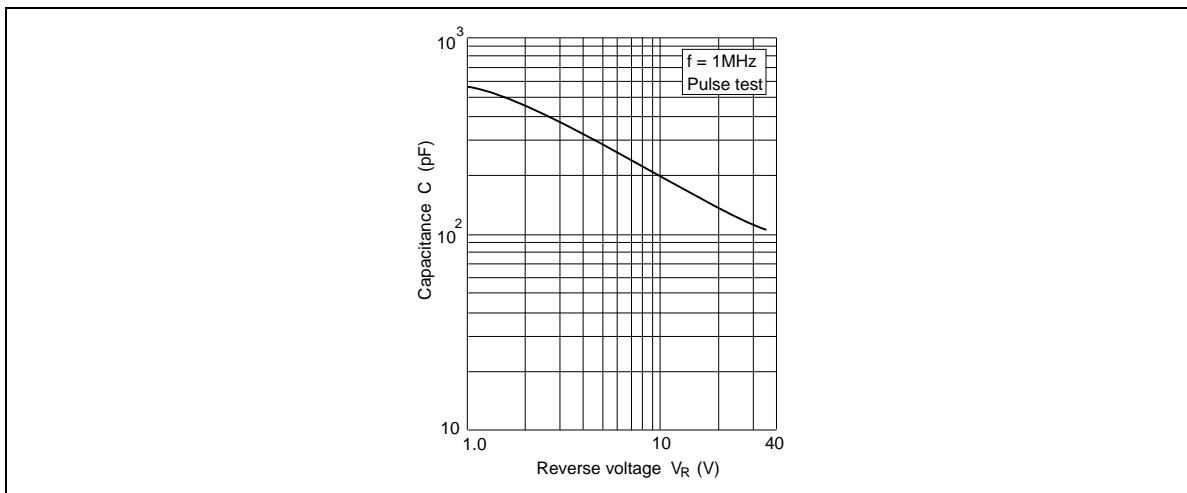


Fig.3 Capacitance Vs. Reverse voltage

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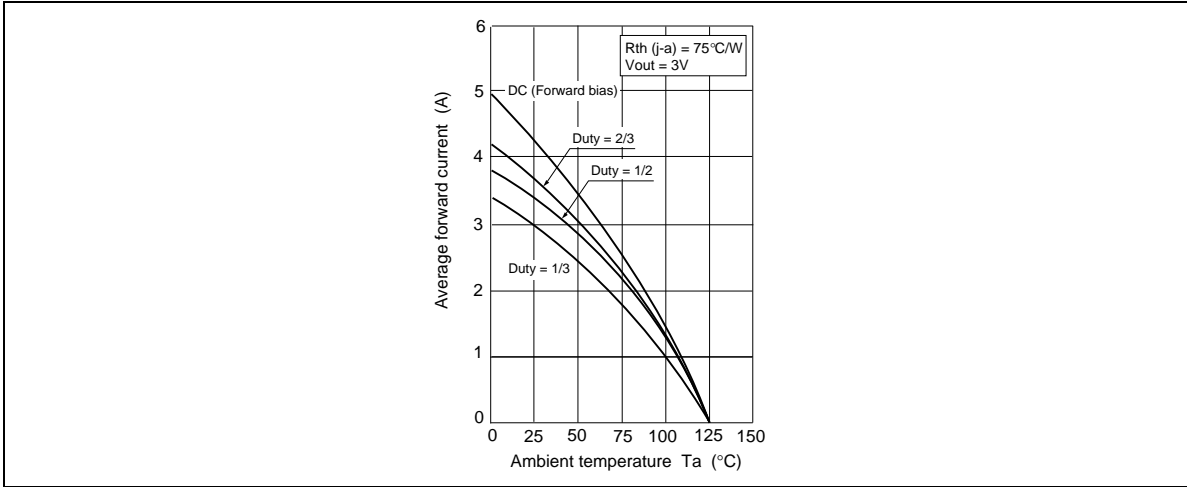


Fig.4 Average forward current Vs. Ambient temperature

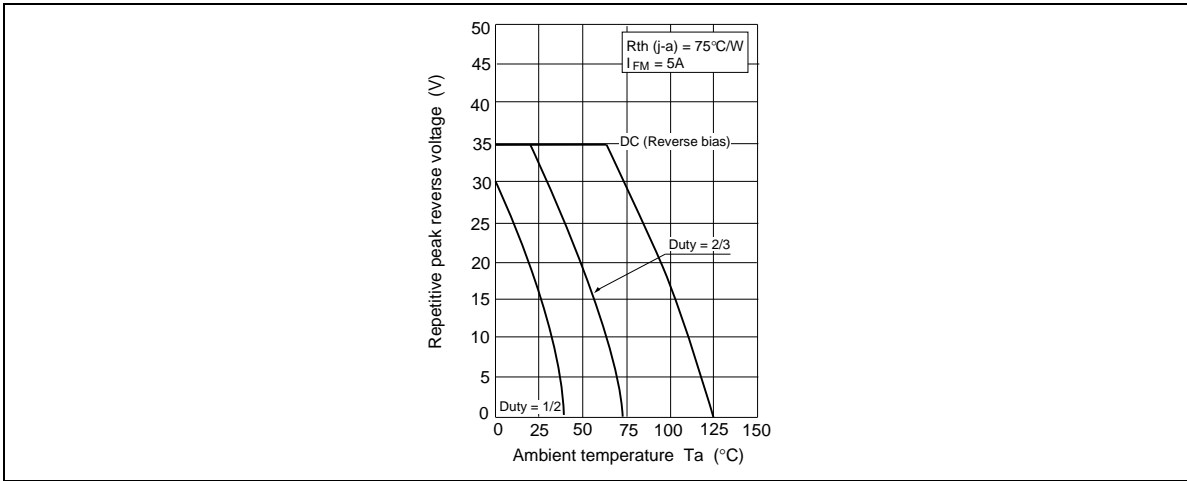


Fig.5 Repetitive peak reverse voltage Vs. Ambient temperature

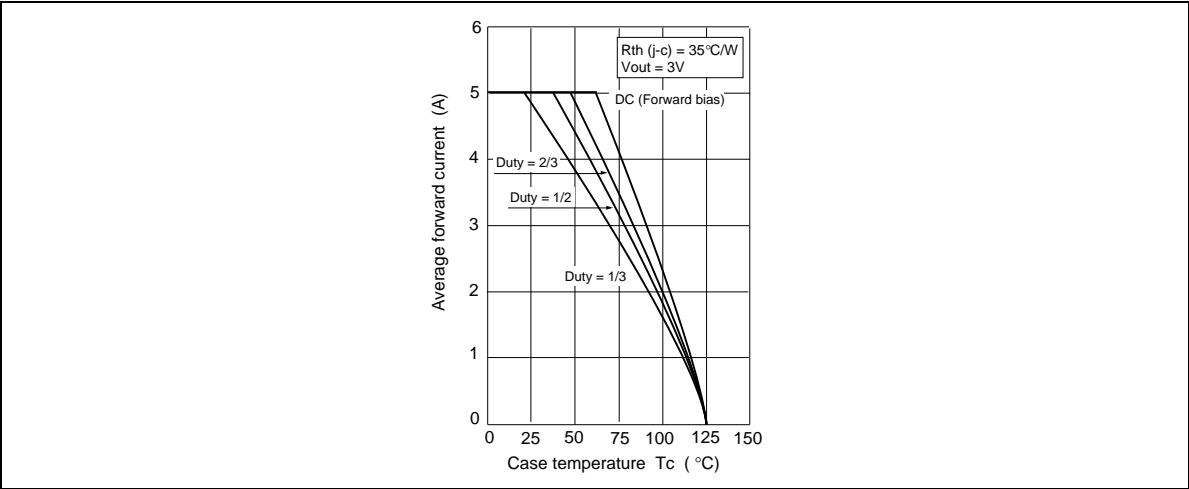


Fig.6 Average forward current Vs. Case temperature

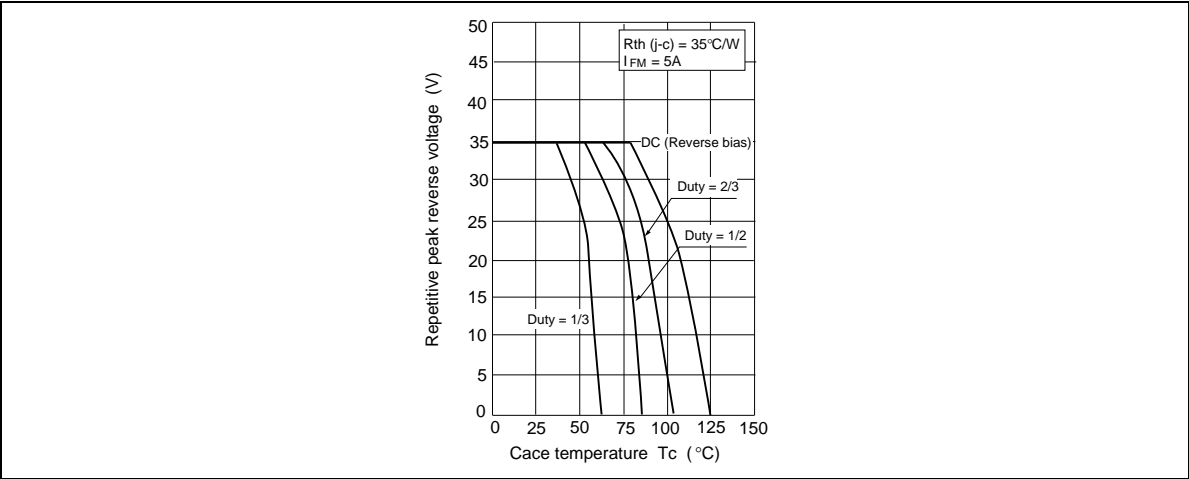


Fig.7 Repetitive peak reverse voltage Vs. Case temperature

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Package Dimensions

