

# Shottky barrier diode

## RB501V-40

### ●Application

Low current rectification

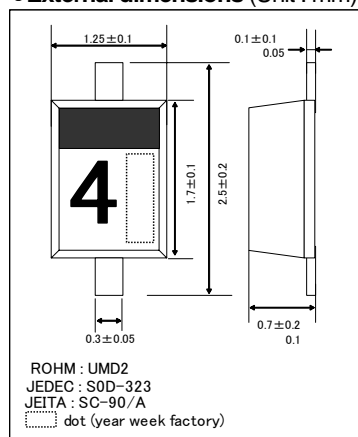
### ●Features

- 1) Ultra Small mold type. (UMD2)
- 2) Low  $I_R$
- 3) High reliability.

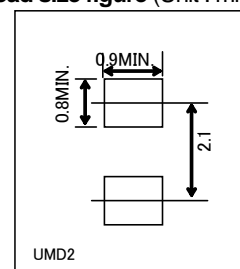
### ●Construction

Silicon epitaxial planer

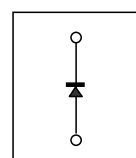
### ●External dimensions (Unit : mm)



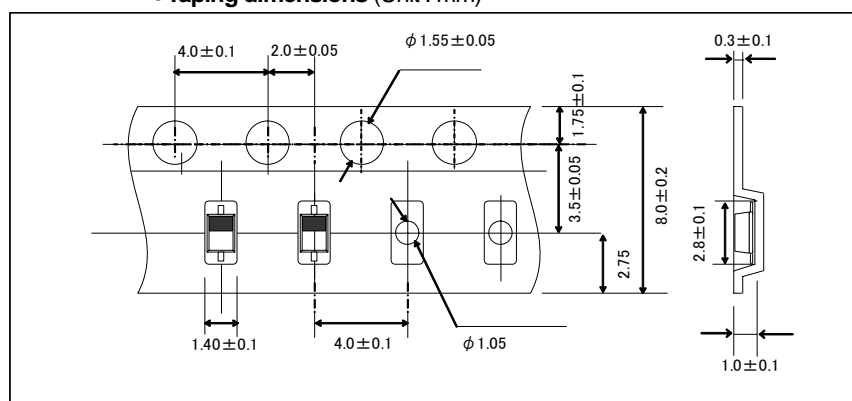
### ●Lead size figure (Unit : mm)



### ●Structure



### ●Taping dimensions (Unit : mm)



### ●Absolute maximum ratings (Ta=25°C)

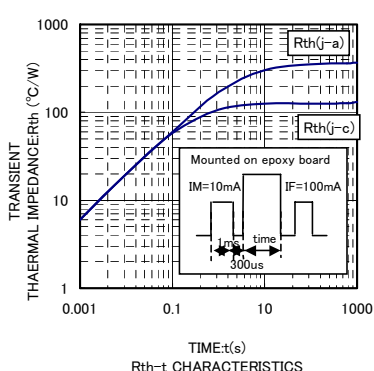
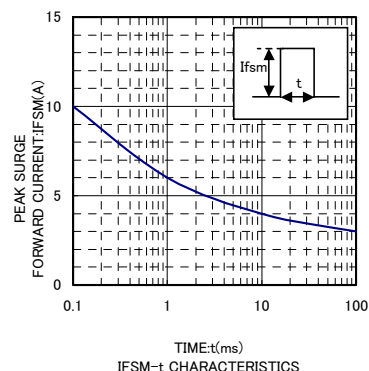
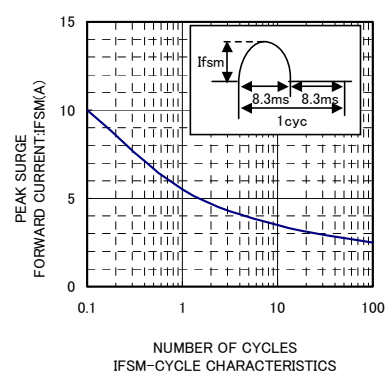
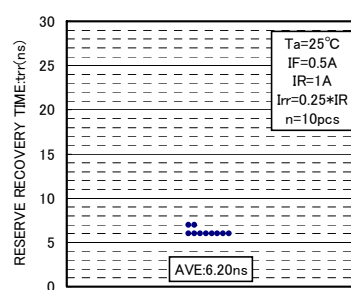
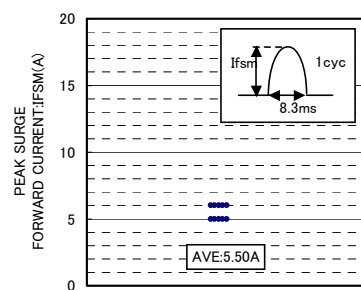
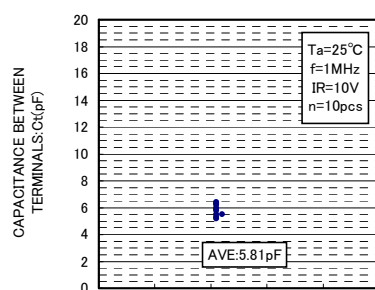
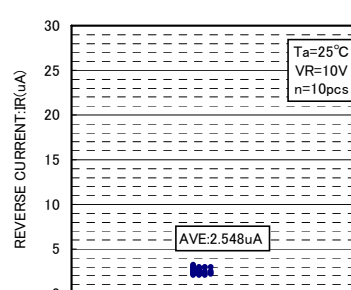
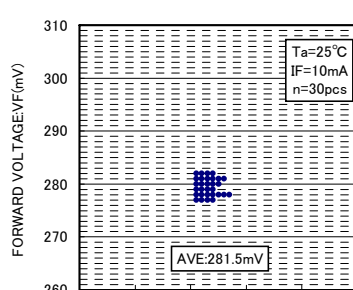
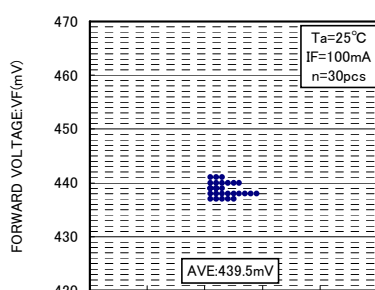
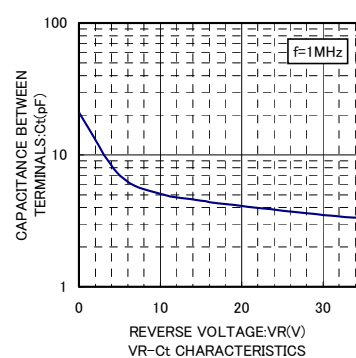
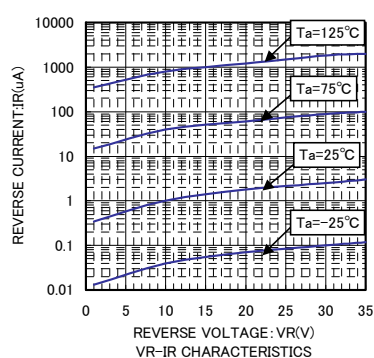
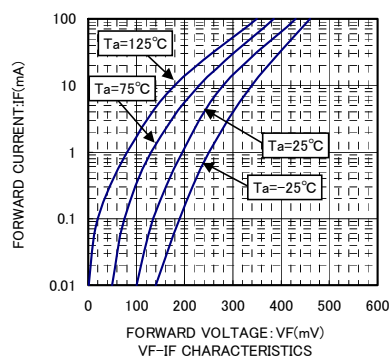
Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	$V_{RM}$	45	V
Reverse voltage (DC)	$V_R$	40	V
Average rectified forward current	$I_o$	100	mA
Forward current surge peak (60Hz · 1cyc)	$I_{FSM}$	1	A
Junction temperature	$T_J$	125	°C
Storage temperature	$T_{stg}$	-40 to +125	°C

### ●Electrical characteristics (Ta=25°C)

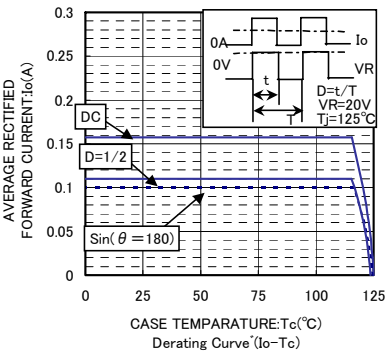
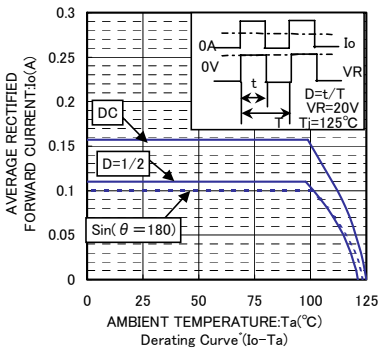
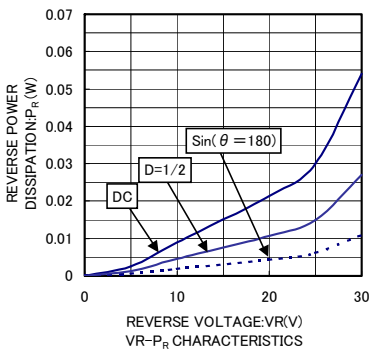
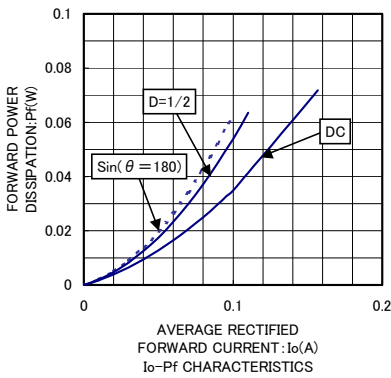
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_{F1}$	-	-	0.55	V	$I_F=100mA$
	$V_{F2}$	-	-	0.34	V	$I_F=10mA$
Reverse current	$I_R$	-	-	30	μA	$V_R=10V$
Capacitance between terminals	$C_t$	-	6.0	-	pF	$V_R=10V, f=1MHz$

## Diodes

## ●Electrical characteristic curves (Ta=25°C)



Diodes



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