

# Schottky Barrier Diode

RB501VM-40

●Applications

Low current rectification

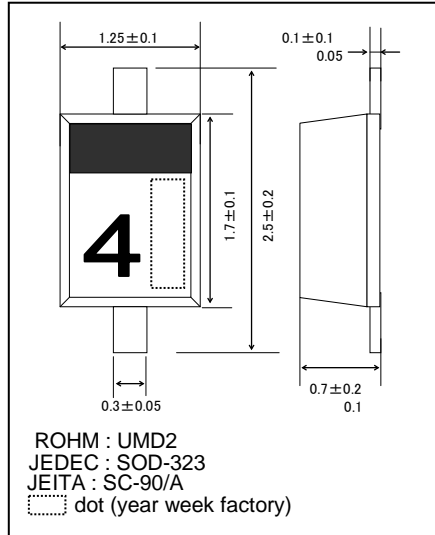
●Features

- 1) Small mold type. (UMD2)
- 2) High reliability

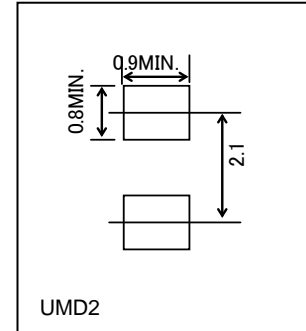
●Construction

Silicon epitaxial planer

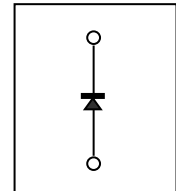
●Dimensions (Unit : mm)



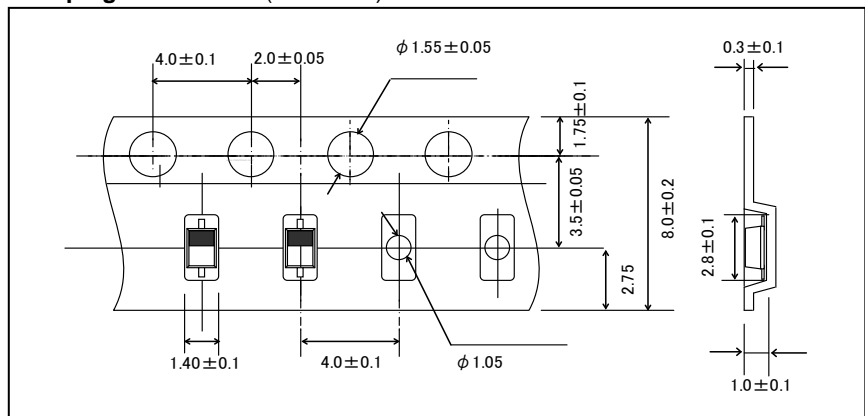
●Land size figure (Unit : mm)



●Structure



●Taping dimensions (Unit : mm)

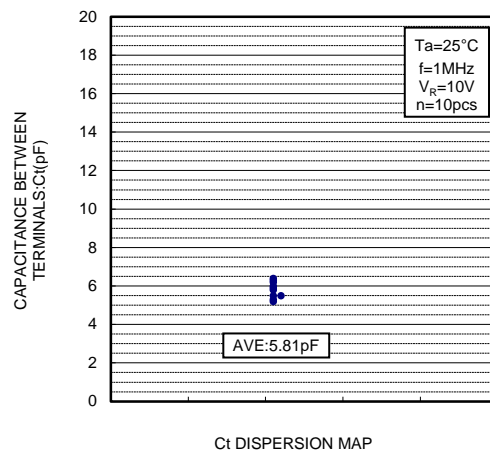
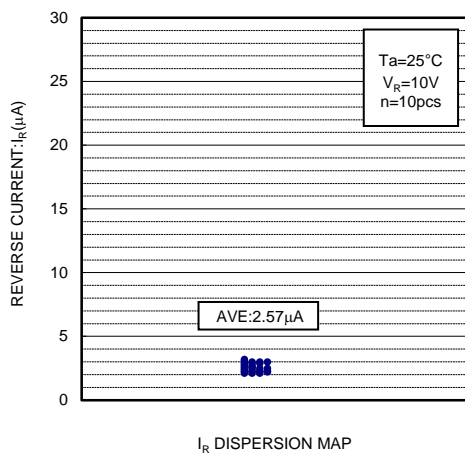
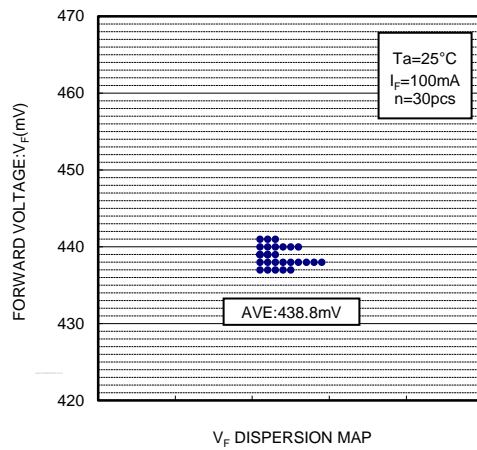
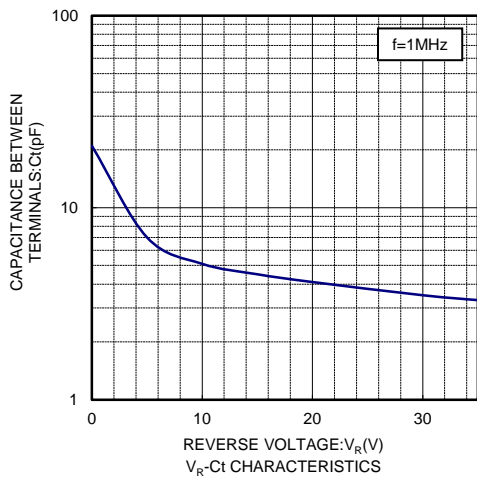
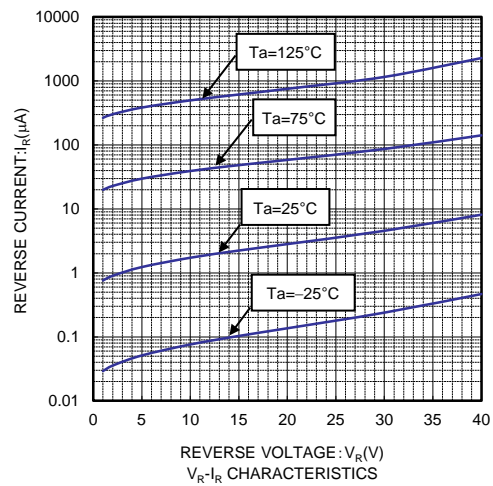
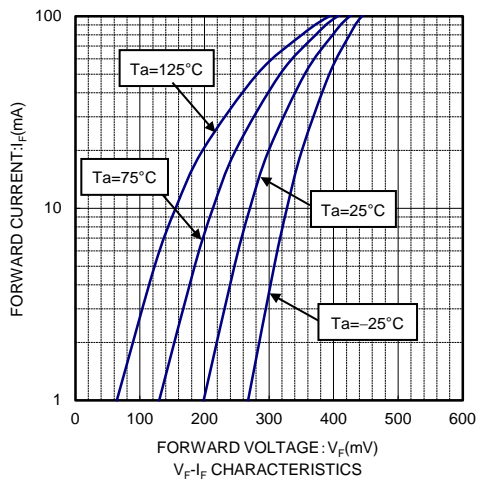


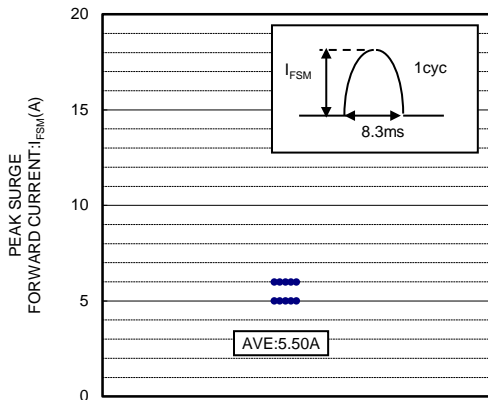
●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive)	$V_{RM}$	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

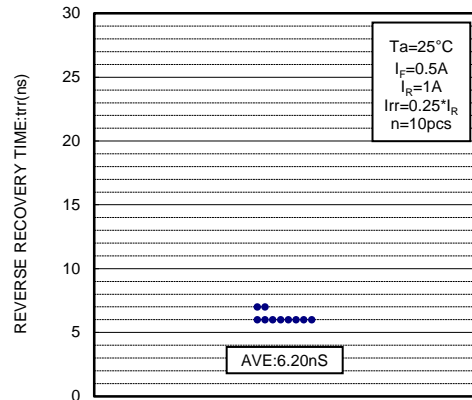
●Electrical characteristics (Ta=25°C)

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	$V_R=10V, f=1MHz$

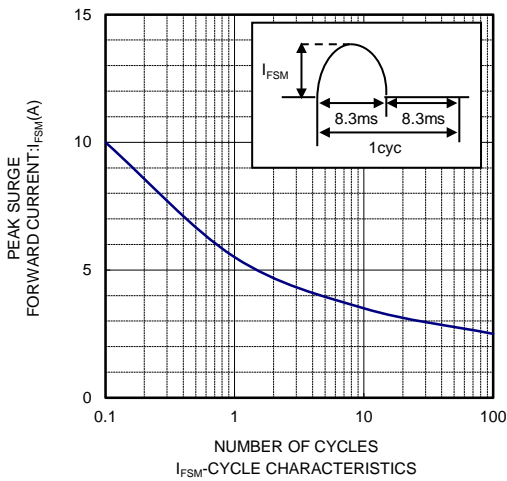




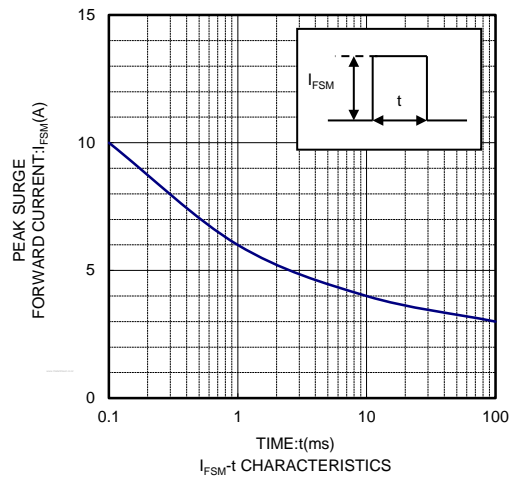
$I_{FSM}$  DISPERSION MAP



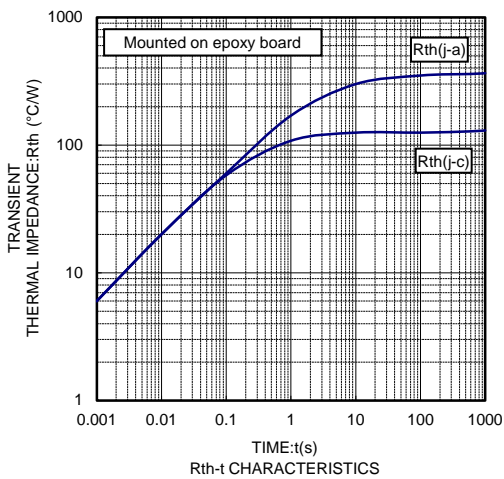
$t_{rr}$  DISPERSION MAP



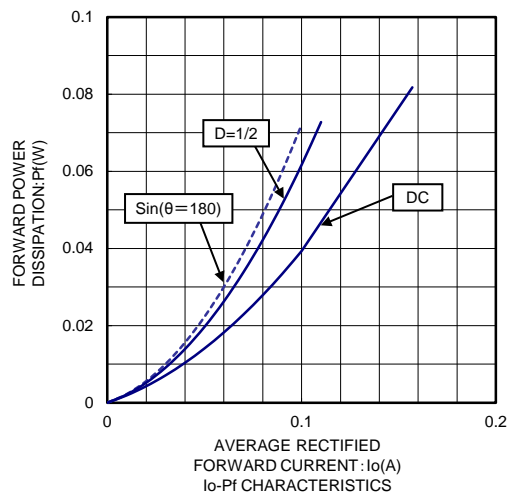
$I_{FSM}$ -CYCLE CHARACTERISTICS



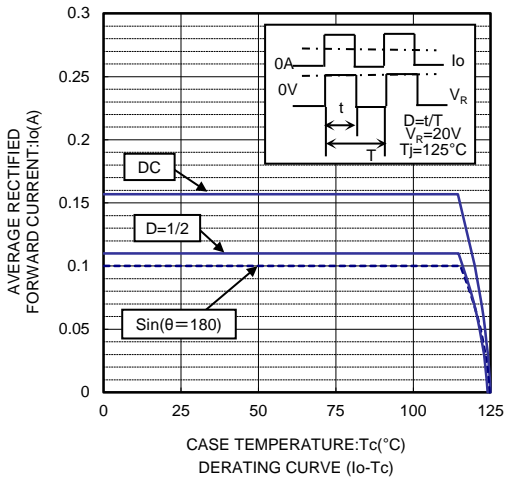
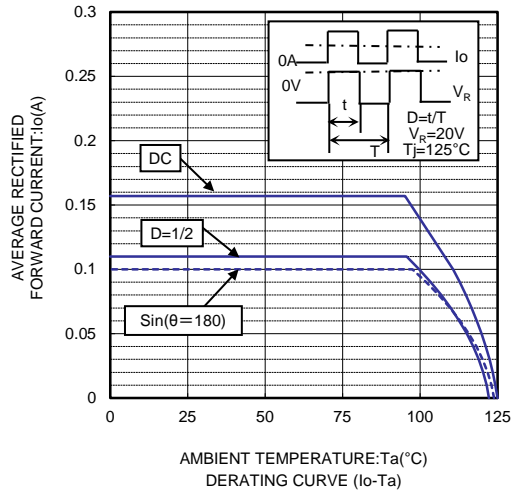
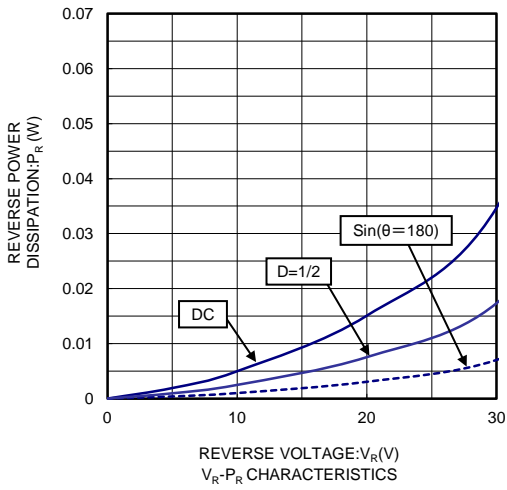
$I_{FSM}$ - $t$  CHARACTERISTICS



$R_{th}$ - $t$  CHARACTERISTICS



$I_o$ - $P_f$  CHARACTERISTICS



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