

# Schottky Barrier Diode

RB551VM-30

●Applications

High speed switching

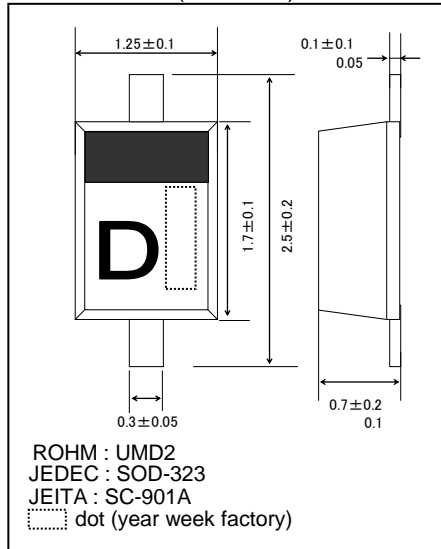
●Features

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

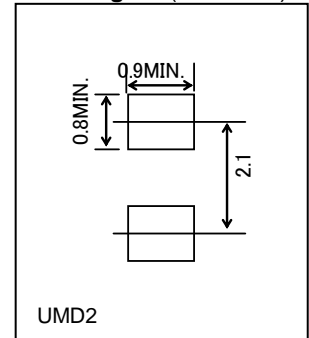
●Construction

Silicon epitaxial

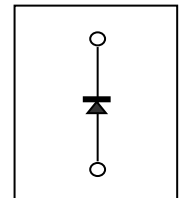
●Dimensions (Unit : mm)



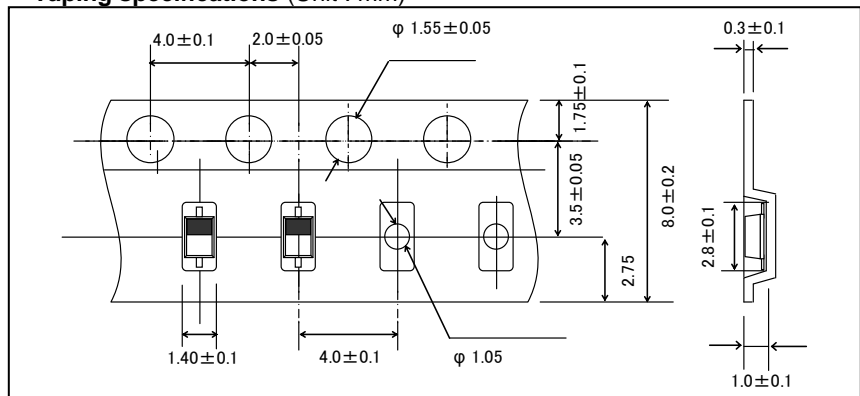
●Land size figure (Unit : mm)



●Structure



●Taping specifications (Unit : mm)

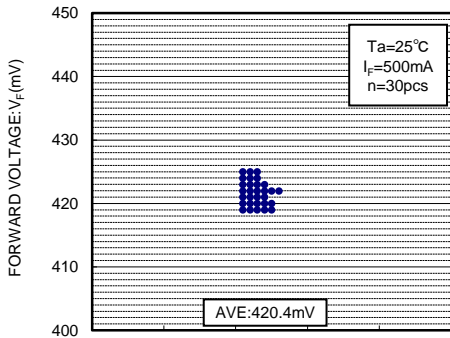
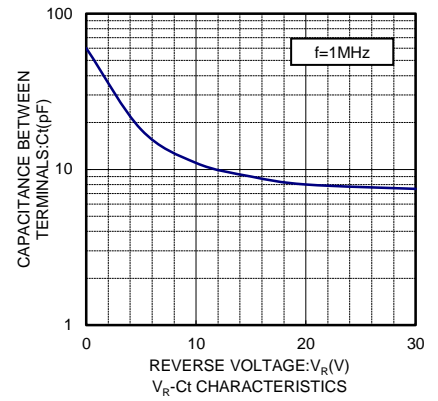
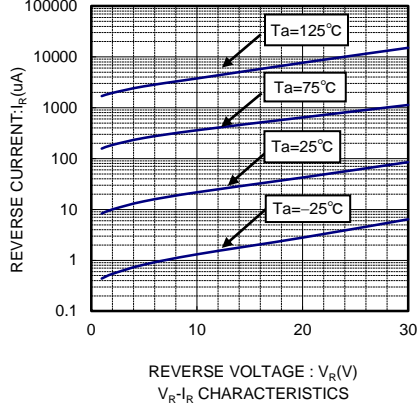
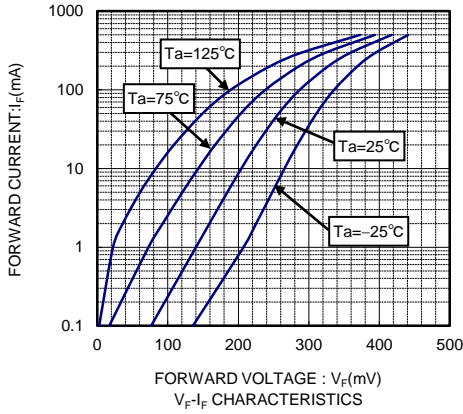


●Absolute maximum ratings (Ta=25°C)

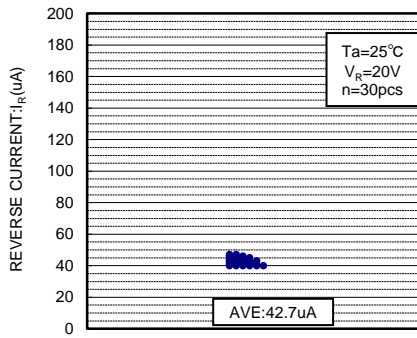
Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive)	$V_{RM}$	30	V
Reverse voltage (DC)	$V_R$	20	V
Average rectified forward current	$I_o$	500	mA
Forward current surge peak (60Hz·1cyc)	$I_{FSM}$	2	A
Junction temperature	$T_j$	125	°C
Storage temperature	$T_{stg}$	-40 to +125	°C

●Electrical characteristics (Ta=25°C)

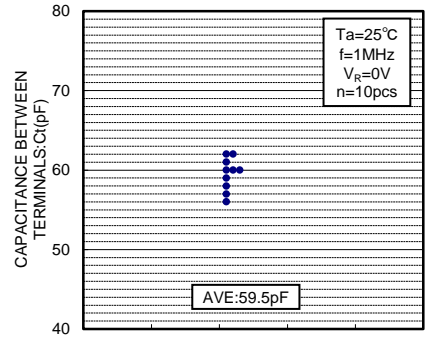
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_{F1}$	-	-	0.36	V	$I_F=100mA$
	$V_{F2}$	-	-	0.47	V	$I_F=500mA$
Reverse current	$I_R$	-	-	100	μA	$V_R=20V$



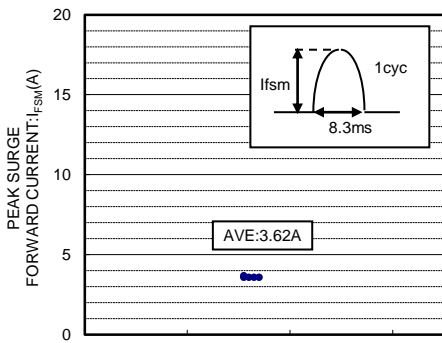
$V_F$  DISPERSION MAP



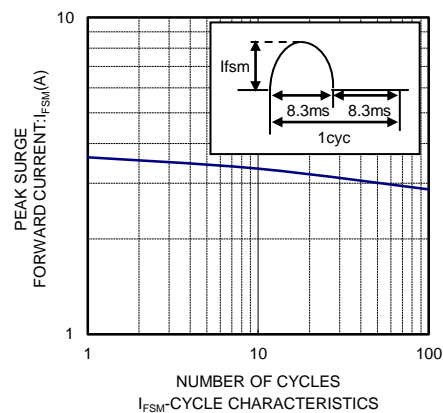
$I_R$  DISPERSION MAP



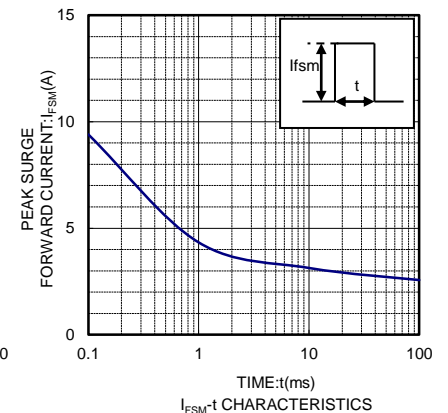
$C_t$  DISPERSION MAP



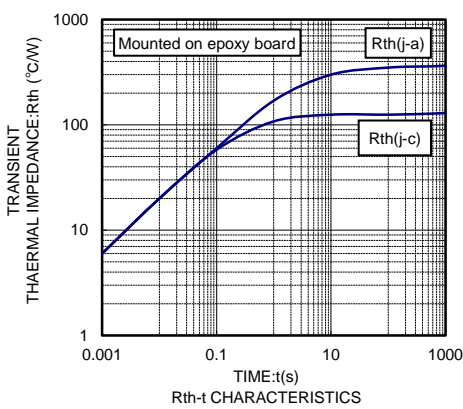
$I_{FSM}$  DISPERSION MAP



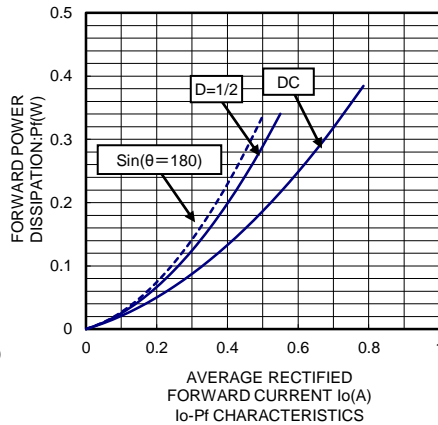
$I_{FSM}$ -CYCLE CHARACTERISTICS



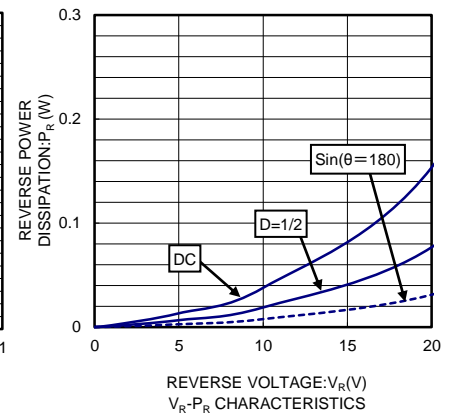
$I_{FSM}$ - $t$  CHARACTERISTICS



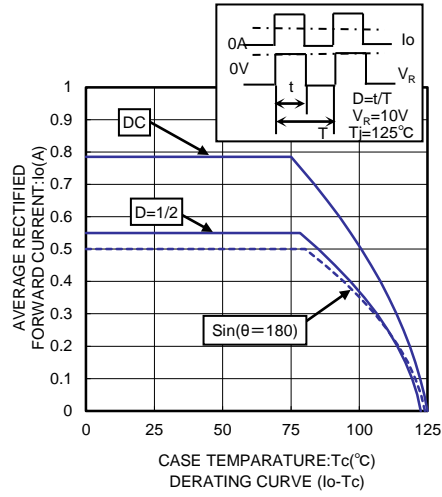
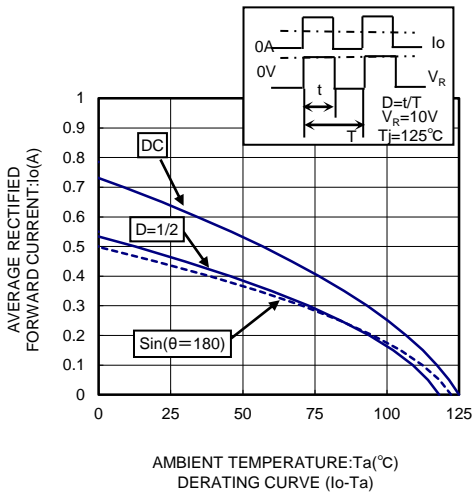
$R_{th}$ - $t$  CHARACTERISTICS



AVERAGE RECTIFIED FORWARD CURRENT  $I_o$  ( $A$ )  
 $I_o$ - $P_F$  CHARACTERISTICS



REVERSE VOLTAGE:  $V_R$  (V)  
 $V_R$ - $P_R$  CHARACTERISTICS



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