

# Schottky barrier diode

## RB751CS-40

### ●Applications

Low current rectification

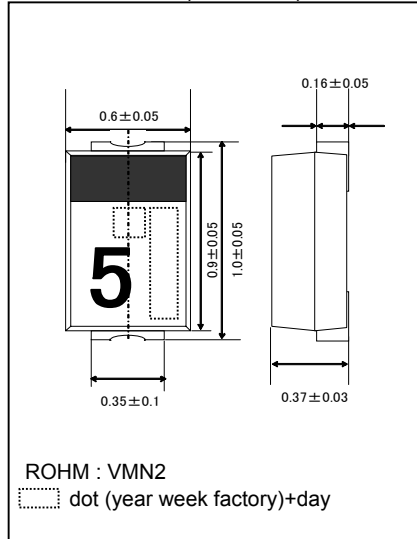
### ●Features

- 1) Ultra Small mold type (VMN2)
- 2) Low  $V_F$
- 3) High reliability

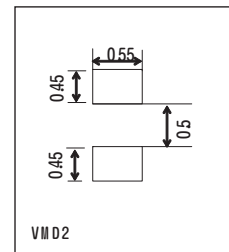
### ●Structure

Silicon epitaxial planer

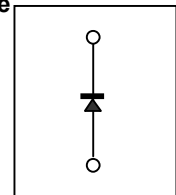
### ●Dimensions (Unit : mm)



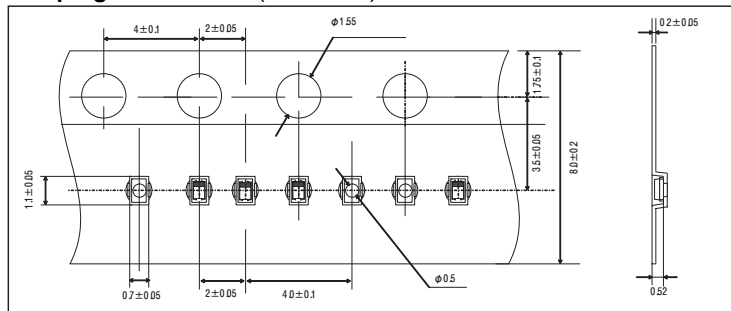
### ●Land size figure (Unit : mm)



### ●Structure



### ●Taping dimensions (Unit : mm)



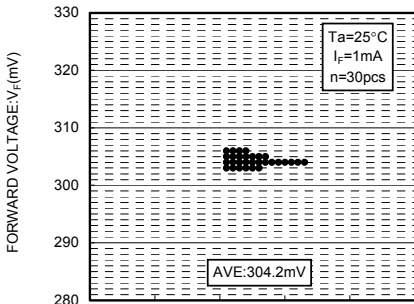
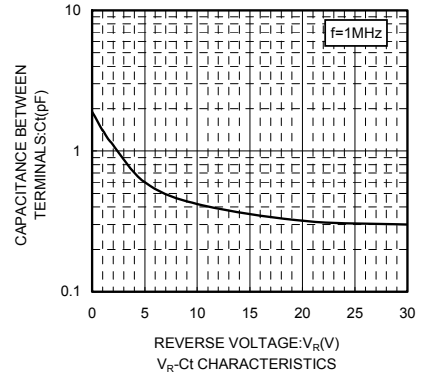
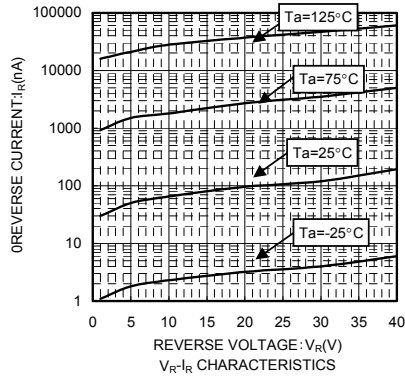
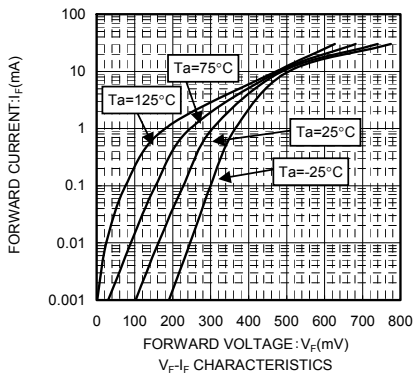
### ●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	$V_{RM}$	40	V
Reverse voltage (DC)	$V_R$	30	V
Average rectified forward current	$I_o$	30	mA
Forward current surge peak(60Hz/1cyc)	$I_{FSM}$	200	mA
Junction temperature	$T_j$	125	°C
Storage temperature	$T_{stg}$	-40 to +125	°C

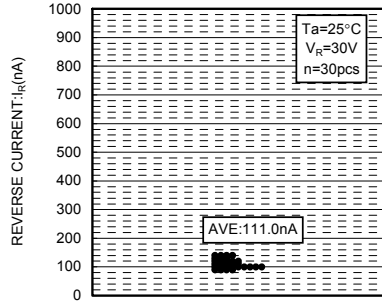
### ●Electrical characteristic (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_F$	-		0.37	V	$I_F=1mA$
Reverse current	$I_R$	-		0.5	$\mu A$	$V_R=30V$
Capacitance between terminals	$C_t$	-	2	-	pF	$V_R=1V, f=1MHz$

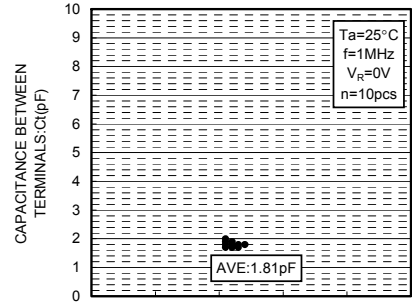
●Electrical characteristic curves



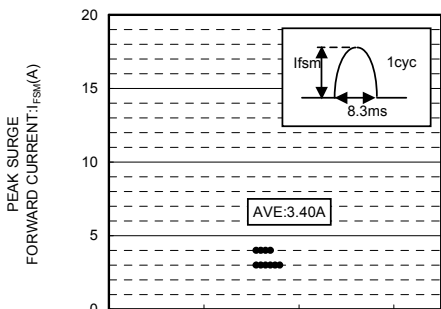
$V_F$  DISPERSION MAP



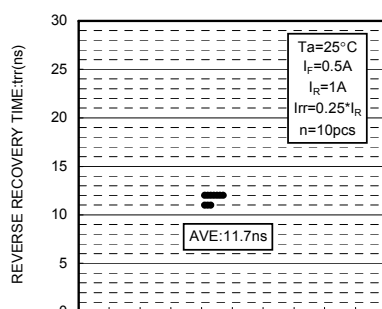
$I_R$  DISPERSION MAP



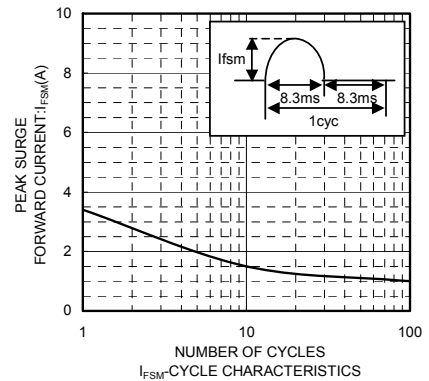
$C_t$  DISPERSION MAP



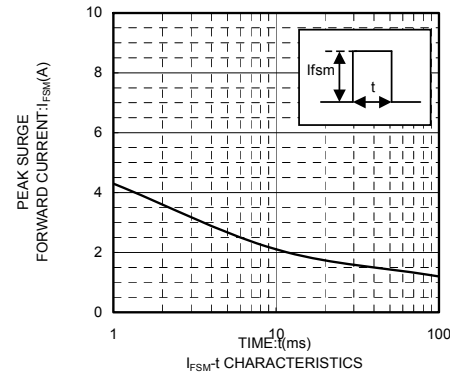
$I_{FSM}$  DISPERSION MAP



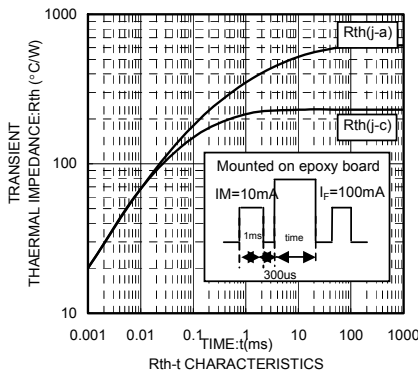
$t_{rr}$  DISPERSION MAP



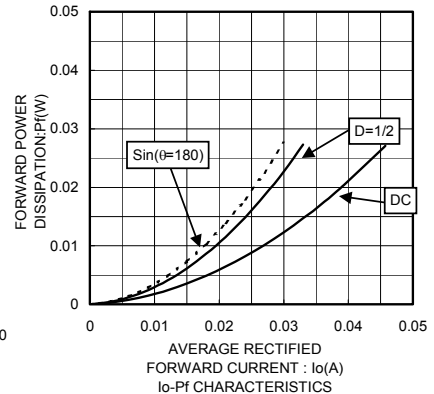
$I_{FSM}$  CYCLE CHARACTERISTICS



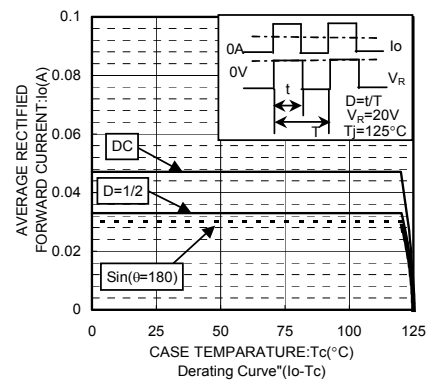
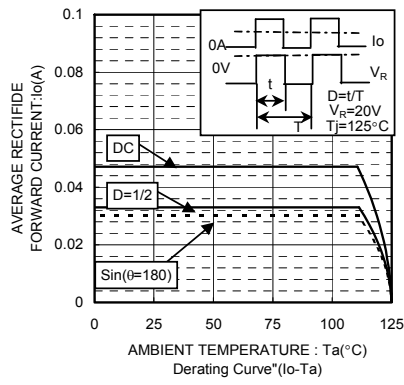
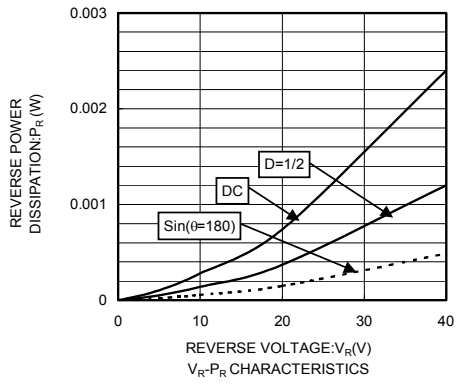
$I_{FSM}$ - $t$  CHARACTERISTICS



$R_{th}$ - $t$  CHARACTERISTICS



$I_o$ - $P_F$  CHARACTERISTICS



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