

## Schottky barrier diode

## RB751V-40

## ●Applications

Low current rectification

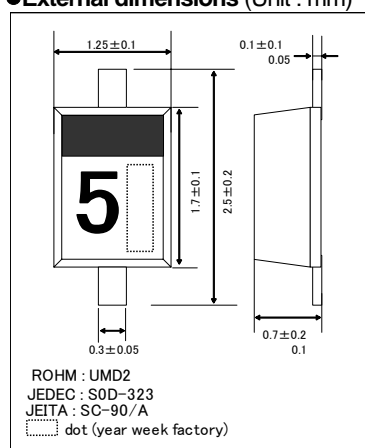
## ●Features

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

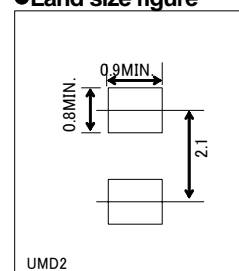
## ●Construction

Silicon epitaxial planar

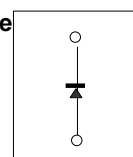
## ●External dimensions (Unit : mm)



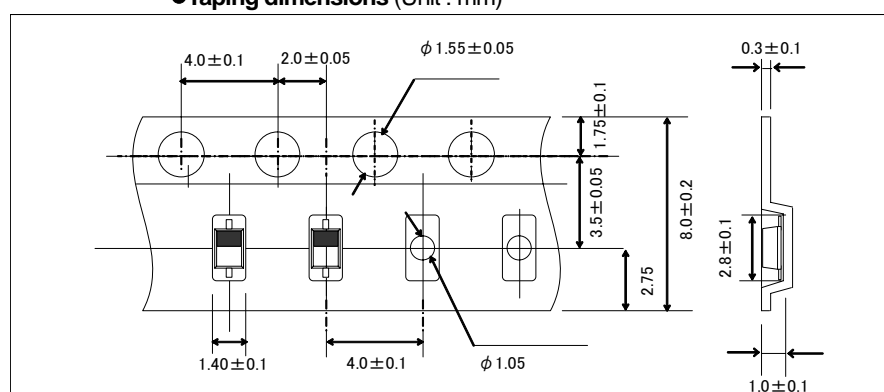
## ●Land size figure



## ●Structure



## ●Taping dimensions (Unit : mm)

●Absolute maximum ratings ( $T_a=25^\circ\text{C}$ )

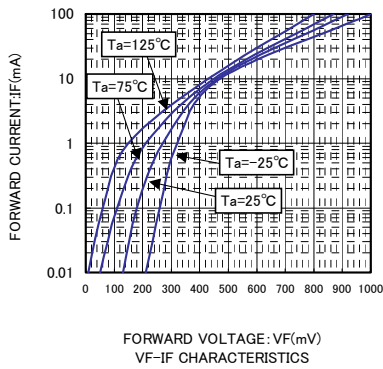
Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	$V_{RM}$	40	V
Reverse voltage (DC)	$V_R$	30	V
Average rectified forward current	$I_o$	30	mA
Forward current surge peak (60Hz·1cyc)	$I_{FSM}$	200	mA
Junction temperature	$T_J$	125	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-40 to +125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

●Electrical characteristic ( $T_a=25^\circ\text{C}$ )

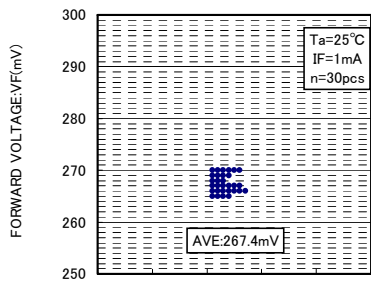
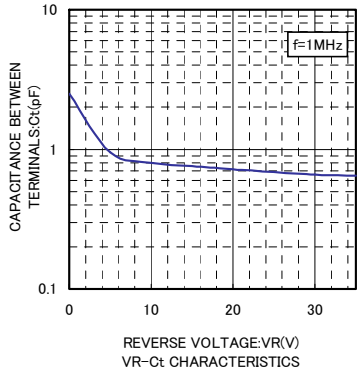
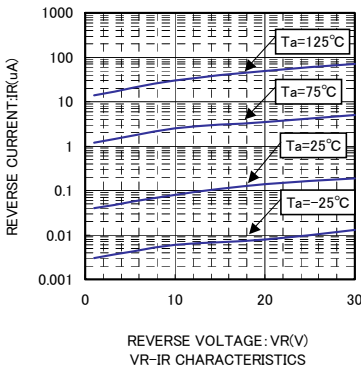
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_F$	-	-	0.37	V	$I_F=1\text{mA}$
Reverse current	$I_R$	-	-	0.5	$\mu\text{A}$	$V_R=30\text{V}$
Capacitance between terminal	$C_t$	-	2	-	pF	$V_R=1\text{V}$ , $f=1\text{MHz}$

Diodes

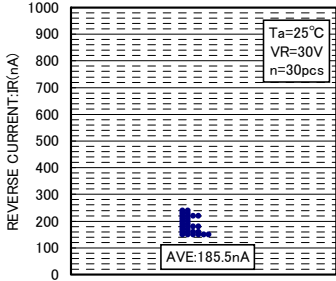
●Electrical characteristic curves



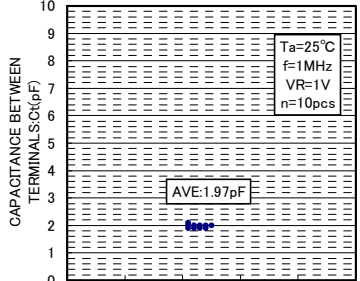
VF分布



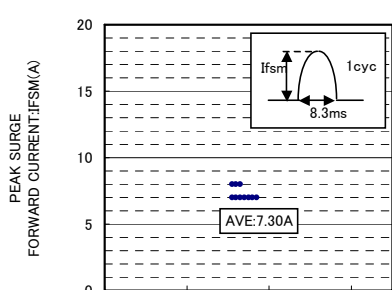
VF DISPERSION MAP



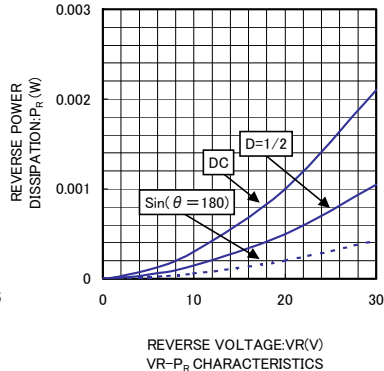
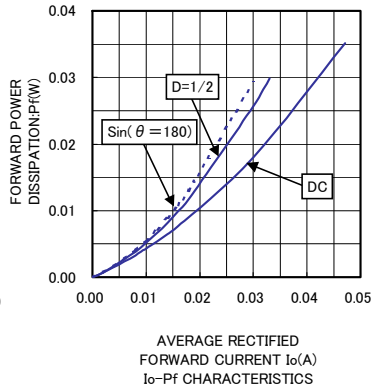
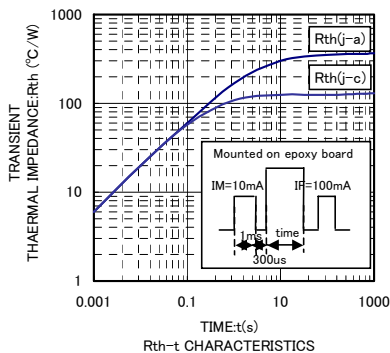
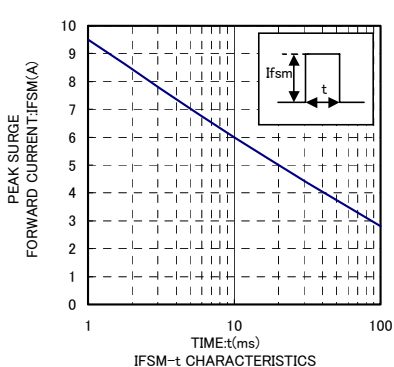
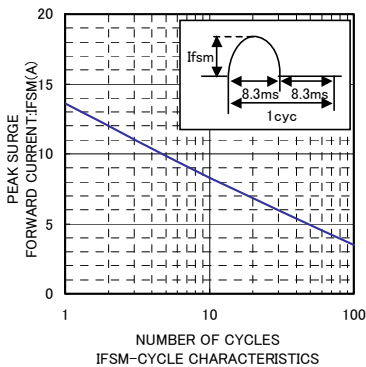
IR DISPERSION MAP



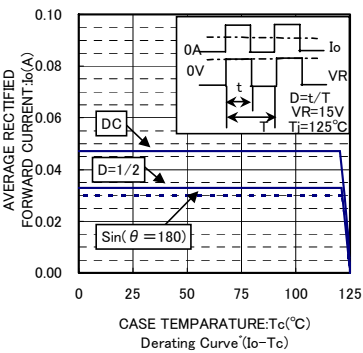
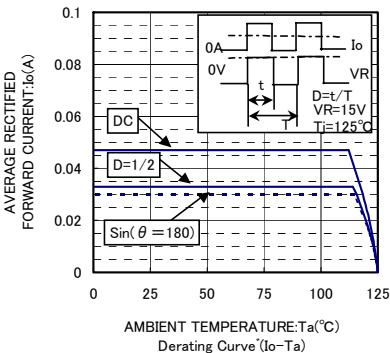
Ct DISPERSION MAP



IFSM DISPERSION MAP



Diodes



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