

# Schottky barrier diode

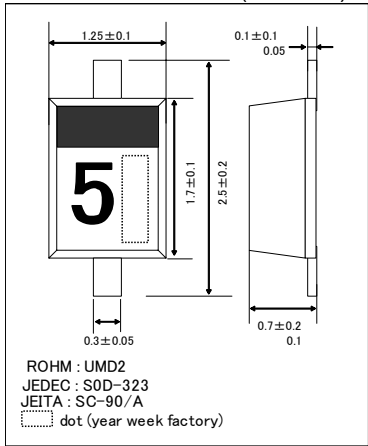
## RB751V-40

**●Applications**  
Low current rectification

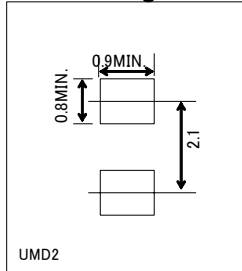
**●Features**  
1) Ultra small mold type. (UMD2)  
2) Low  $V_f$   
3) High reliability

**●Construction**  
Silicon epitaxial planar

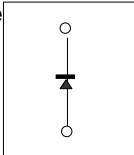
**●External dimensions (Unit : mm)**



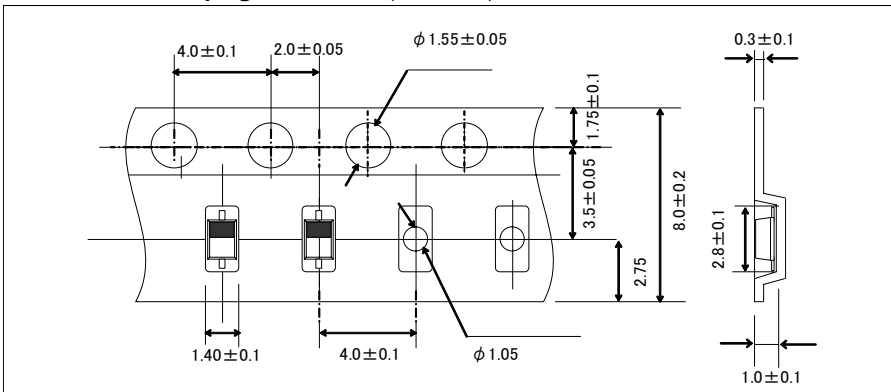
**●Land size figure**



**●Structure**



**●Taping dimensions (Unit : mm)**



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

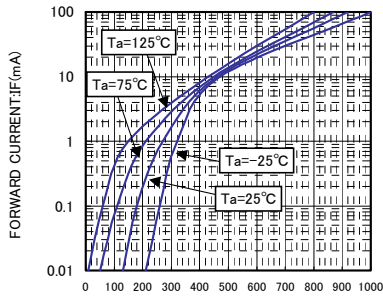
Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	$V_{RM}$	40	V
Reverse voltage (DC)	$V_R$	30	V
Average rectified forward current	$I_o$	30	mA
Forward current surge peak (60Hz·1cyc)	$I_{FSM}$	200	mA
Junction temperature	$T_j$	125	°C
Storage temperature	$T_{stg}$	-40 to +125	°C

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

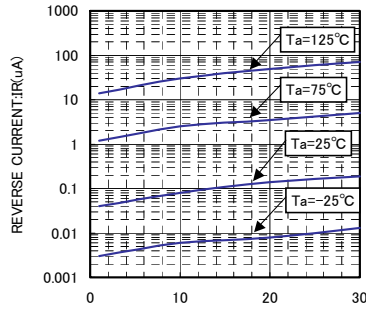
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_f$	-	-	0.37	V	$I_f=1\text{mA}$
Reverse current	$I_R$	-	-	0.5	μA	$V_R=30\text{V}$
Capacitance between terminal	$C_t$	-	2	-	pF	$V_R=1\text{V}, f=1\text{MHz}$

Diodes

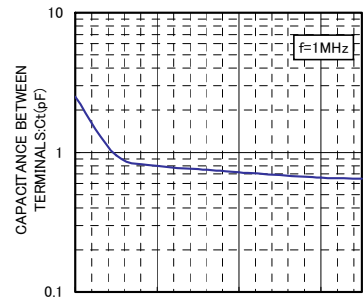
●Electrical characteristic curves



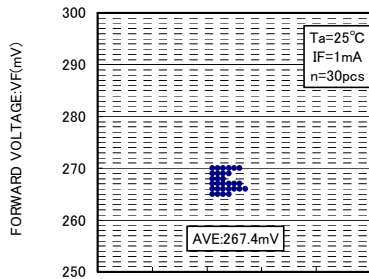
VF-IF CHARACTERISTICS  
VF分布



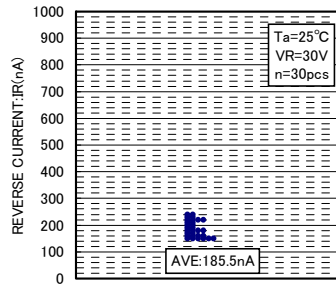
VR-IR CHARACTERISTICS



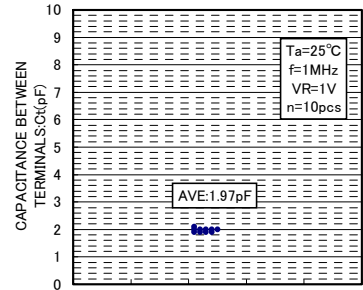
VR-Ct CHARACTERISTICS



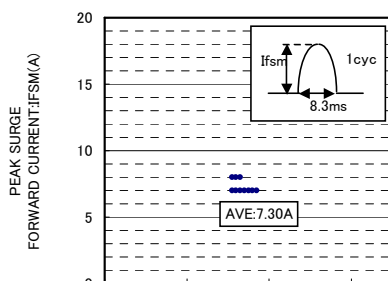
VF DISPERSION MAP



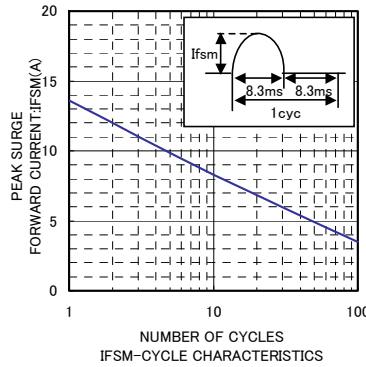
IR DISPERSION MAP



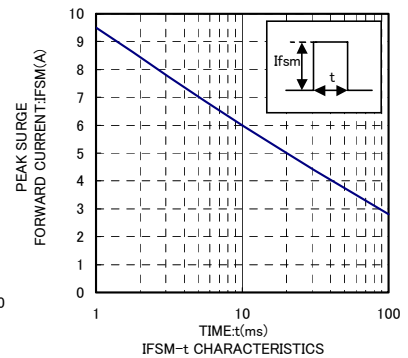
Ct DISPERSION MAP



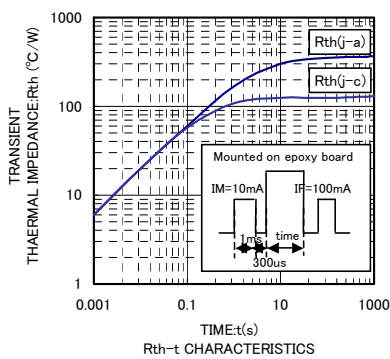
IFSM DISPERSION MAP



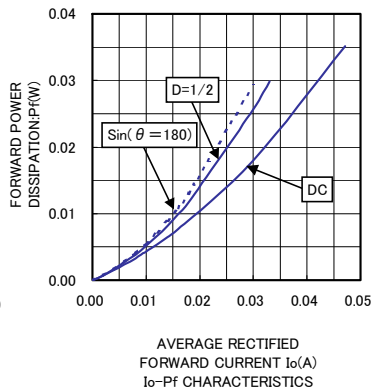
IFSM-CYCLE CHARACTERISTICS



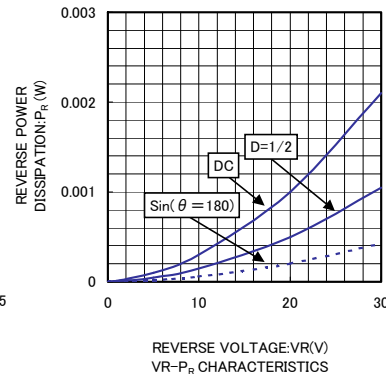
IFSM-t CHARACTERISTICS



Rth-t CHARACTERISTICS

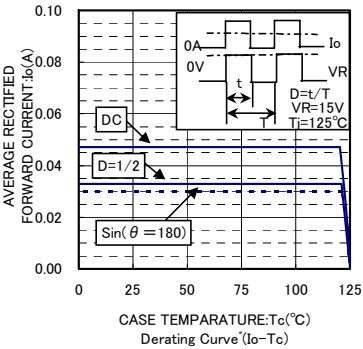
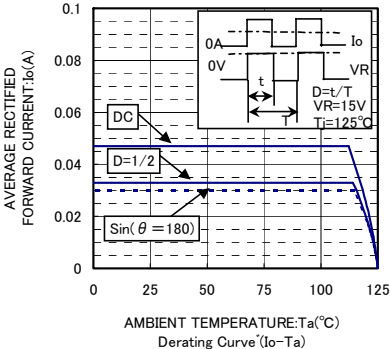


Io-Pf CHARACTERISTICS



VR-Pr CHARACTERISTICS

Diodes



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