

Schottky barrier diode

RB751V-40

●Applications

Low current rectification

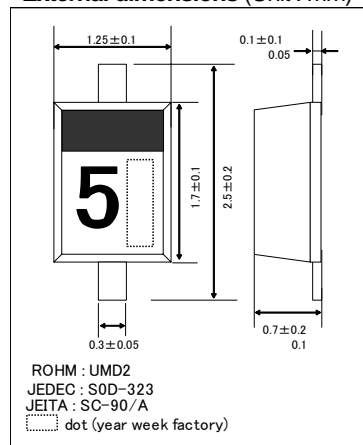
●Features

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

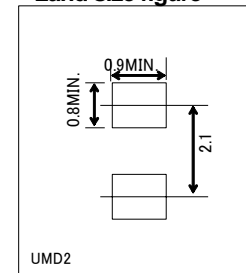
●Construction

Silicon epitaxial planar

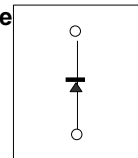
●External dimensions (Unit : mm)



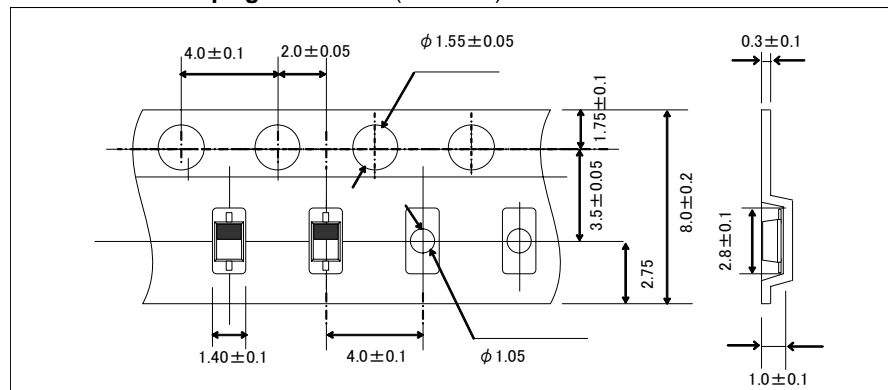
●Land size figure



●Structure



●Taping dimensions (Unit : mm)

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

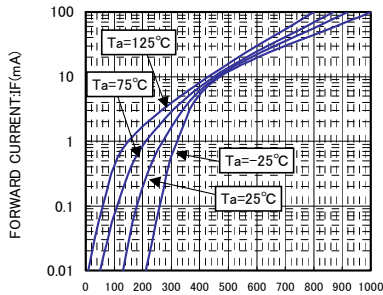
Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	V_{RM}	40	V
Reverse voltage (DC)	V_R	30	V
Average rectified forward current	I_o	30	mA
Forward current surge peak (60Hz·1cyc)	I_{FSM}	200	mA
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature	T_{stg}	-40 to +125	$^\circ\text{C}$

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

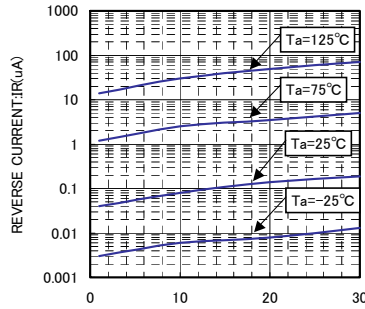
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_f	-	-	0.37	V	$I_f=1\text{mA}$
Reverse current	I_R	-	-	0.5	μA	$V_R=30\text{V}$
Capacitance between terminal	C_t	-	2	-	pF	$V_R=1\text{V}$, $f=1\text{MHz}$

Diodes

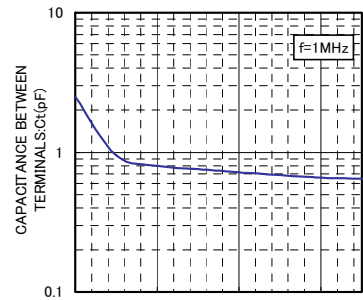
●Electrical characteristic curves



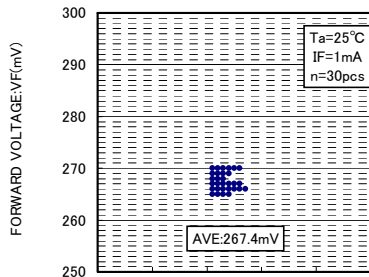
VF-IF CHARACTERISTICS
VF分布



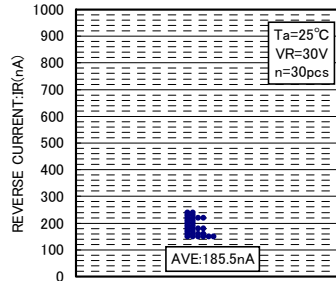
VR-IR CHARACTERISTICS



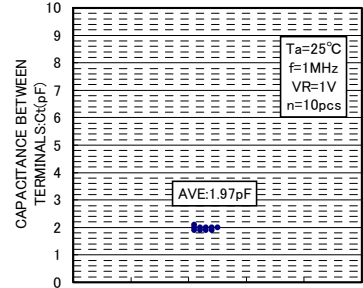
VR-Ct CHARACTERISTICS



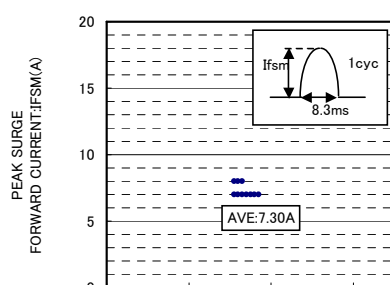
VF DISPERSION MAP



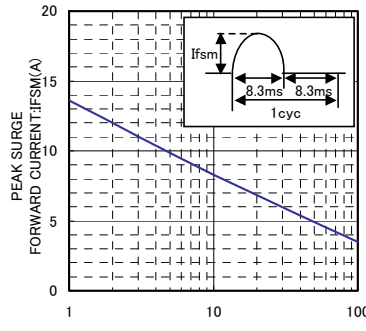
IR DISPERSION MAP



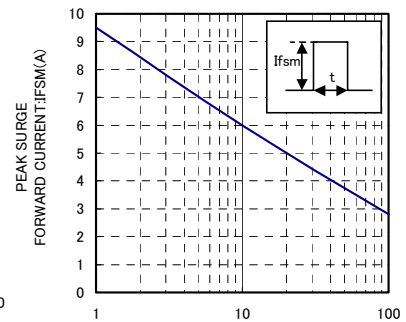
Ct DISPERSION MAP



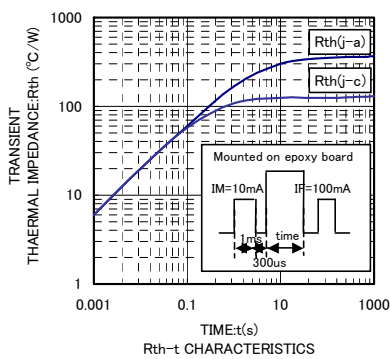
IFSM DISPERSION MAP



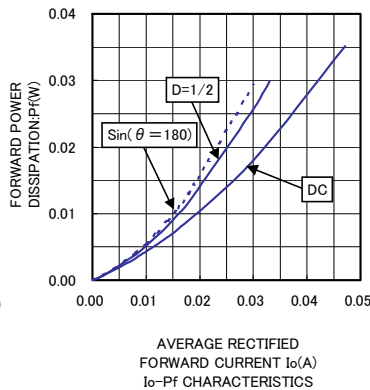
IFSM-CYCLE CHARACTERISTICS



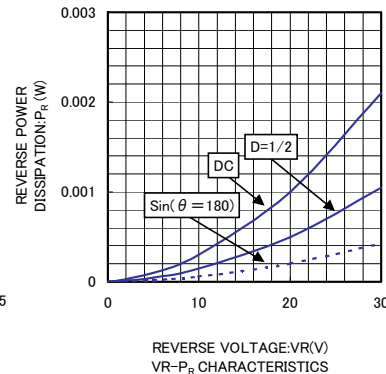
IFSM-t CHARACTERISTICS



Rth-t CHARACTERISTICS

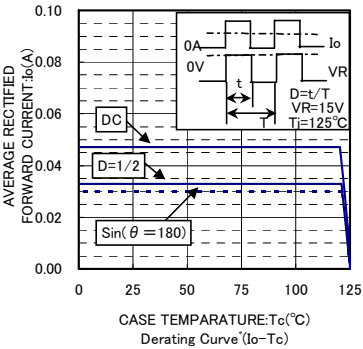
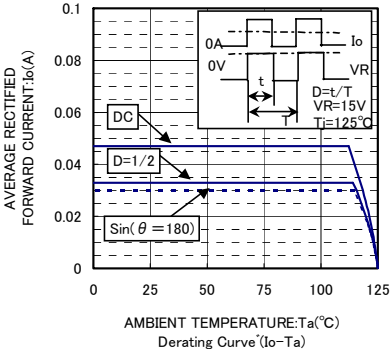


Io-Pf CHARACTERISTICS



VR-Pr CHARACTERISTICS

Diodes



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