

Schottky barrier diode

RB731XN

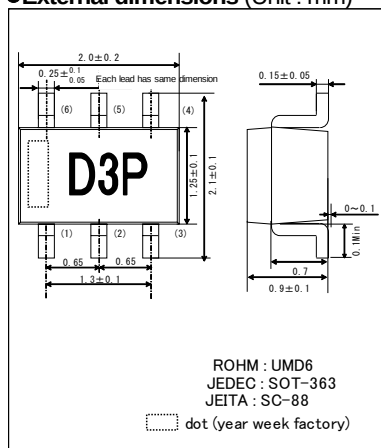
●Applications

General rectification

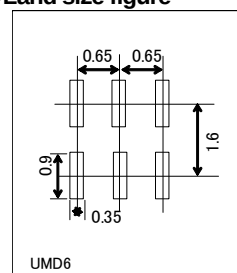
●Features

- 1) Small power mold type.
(UMD6)
- 2) Low V_F
- 3) High reliability

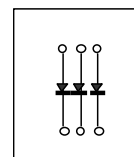
●External dimensions (Unit : mm)



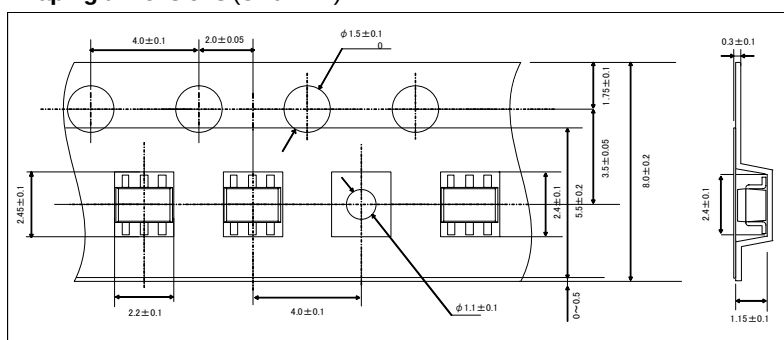
●Land size figure



●Structure



●Taping dimensions (Unit : mm)

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

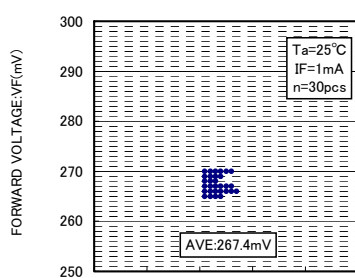
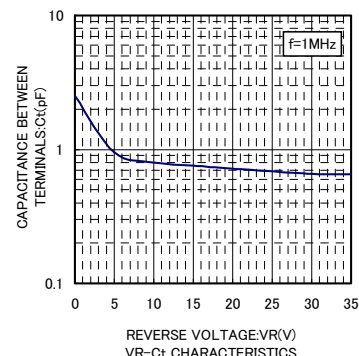
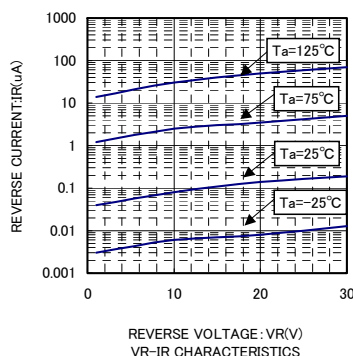
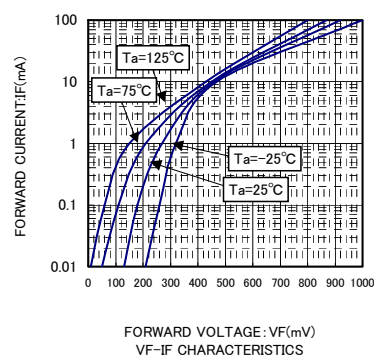
Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	V_{RM}	40	V
Reverse voltage (DC)	V_R	40	V
Average rectified forward current *	I_o	30	mA
Forward current surge peak (60Hz·1cyc.) *	I_{FSM}	200	mA
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature	T_{stg}	-40 to +125	$^\circ\text{C}$

* Rating for each diode $I_o/3$ ●Electrical characteristic ($T_a=25^\circ\text{C}$)

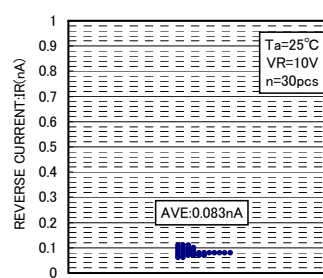
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	—	—	0.37	V	$I_F=1\text{mA}$
Reverse current	I_R	—	—	1	μA	$V_R=10\text{V}$
Capacitance between terminal	C_t	—	2	—	pF	$V_R=1\text{V}$, $f=1\text{MHz}$

Diodes

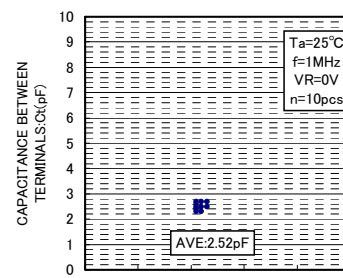
●Electrical characteristic curves



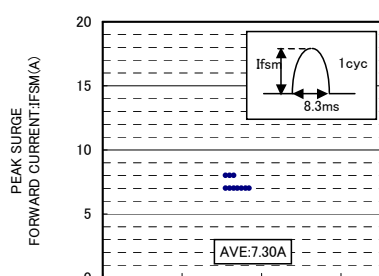
VF DISPERSION MAP



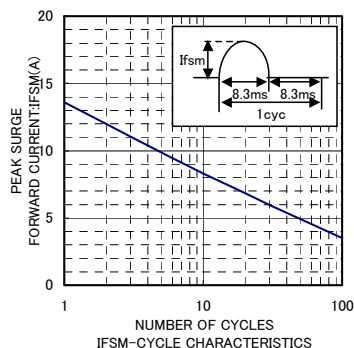
IR DISPERSION MAP



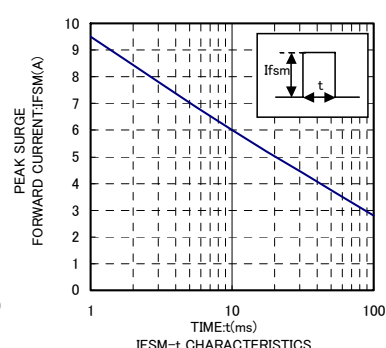
Ct DISPERSION MAP



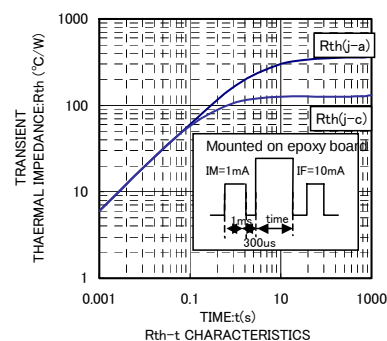
IFSM DISPERSION MAP



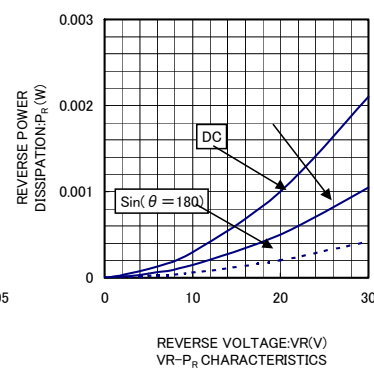
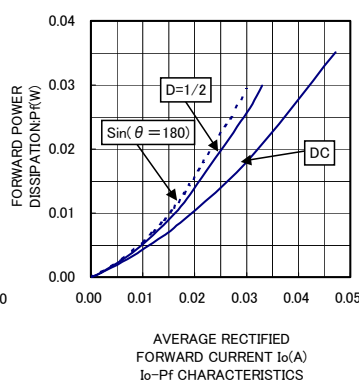
IFSM-CYCLE CHARACTERISTICS



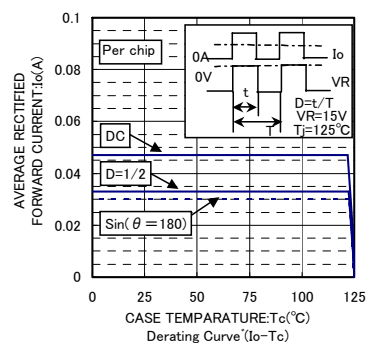
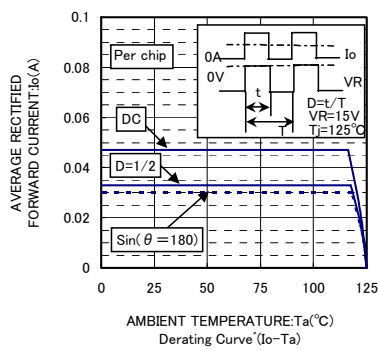
IFSM-t CHARACTERISTICS



Rth-t CHARACTERISTICS



Diodes



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