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Data Sheet

Schottky Barrier Diode

RB531XN

●Applications

Rectify small power

●Features

1)Small mold type.(UMD6)

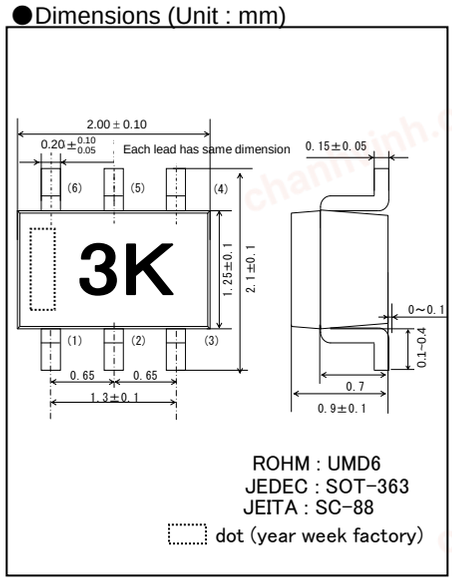
2)Low V_F

3)High reliability

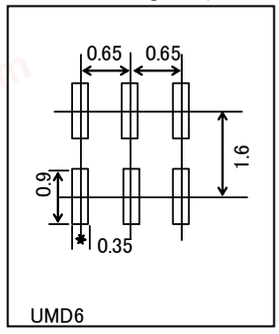
●Construction

Silicon epitaxial

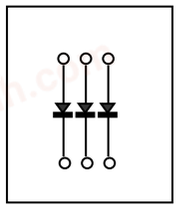
●Dimensions (Unit : mm)



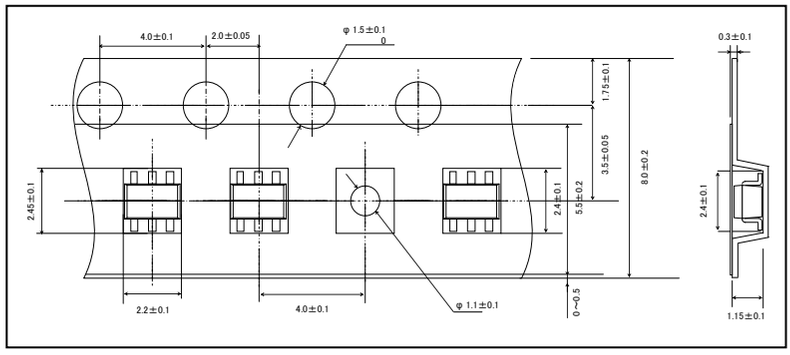
●Land size figure (Unit : mm)



●Structure



●Taping specifications (Unit : mm)



●Absolute maximum ratings (Ta=25℃)

Parameter	Symbol	Limits	Unit
Reverse voltage (DC)	V_R	30	V
Average rectified forward current	Io	100	mA
Forward voltage surge peak (60Hz/1cyc)(*1)	I_{FSM}	1	A
Junction temperature	Tj	125	℃
Storage temperature	Tstg	-40 to +125	℃

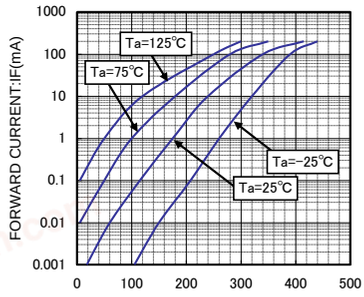
(*1) Rating of per diode

●Electical voltage (Ta=25℃)

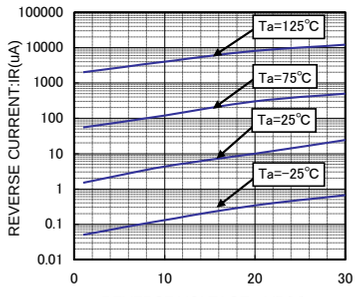
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F1	-	-	0.30	V	I_F=10mA
	V_F2	-	-	0.43	V	I_F=100mA
Reverse current	I_R	-	-	20	μA	V_R=10V

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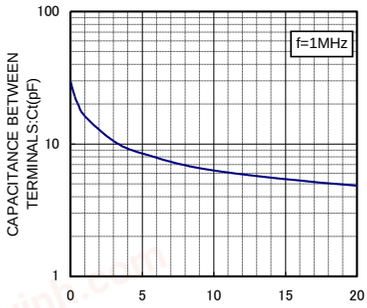
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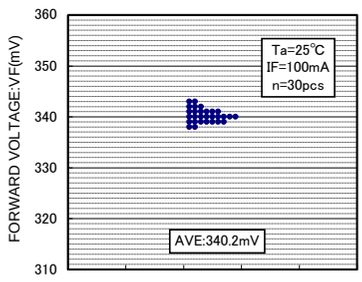
FORWARD VOLTAGE : VF(mV)
VF-IF CHARACTERISTICS



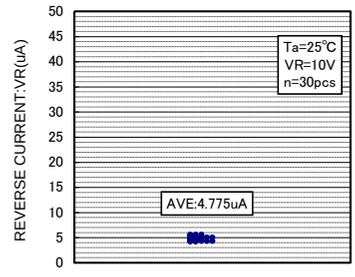
REVERSE VOLTAGE : VR(V)
VR-IR CHARACTERISTICS



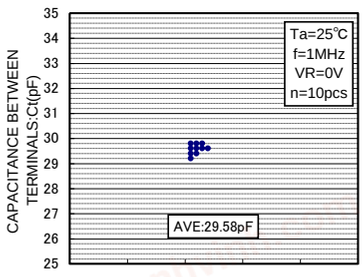
REVERSE VOLTAGE:VR(V)
VR-Ct CHARACTERISTICS



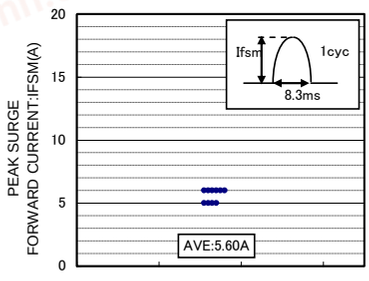
VF DISPERSION MAP



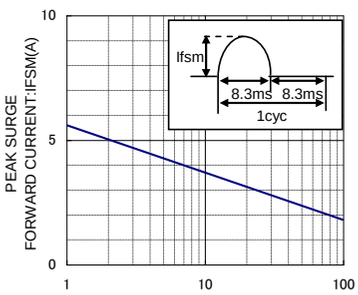
IR DISPERSION MAP



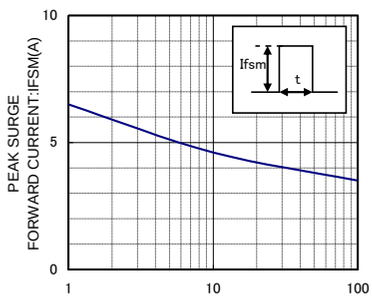
Ct DISPERSION MAP



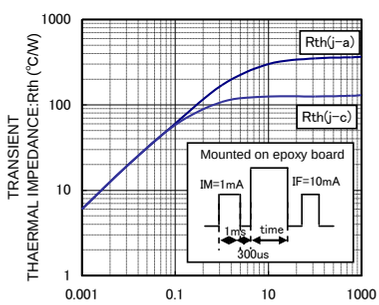
IFSM DISPERSION MAP



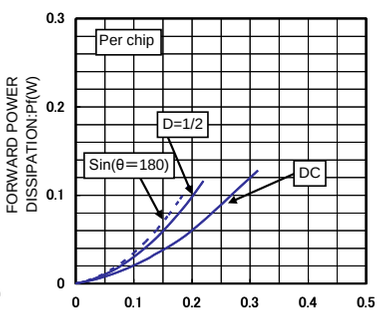
NUMBER OF CYCLES
IFSM-CYCLE CHARACTERISTICS



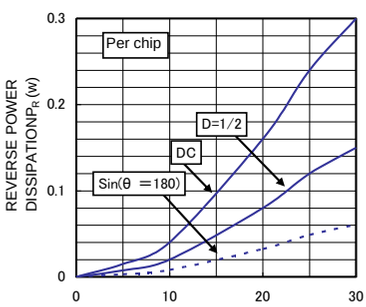
TIME:t(ms)
IFSM-t CHARACTERISTICS



TIME:(s)
Rth-t CHARACTERISTICS



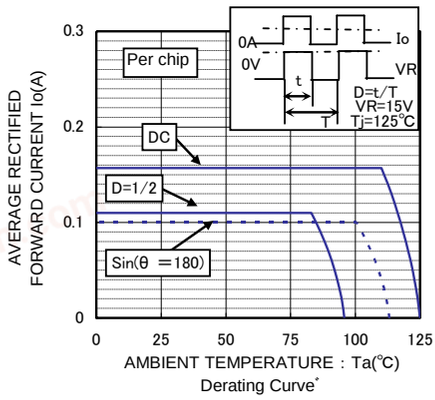
AVERAGE RECTIFIED
FORWARD CURRENT : Io(A)
Io-P f CHARACTERISTICS



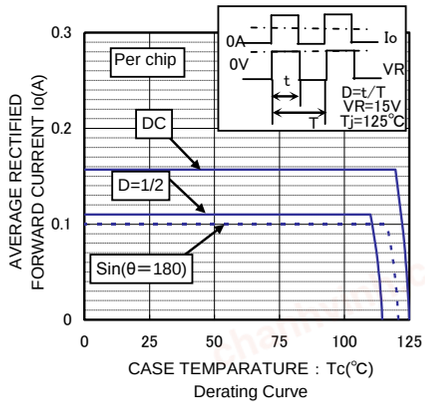
REVERSE VOLTAGE : VR(V)
VR-P_R CHARACTERISTICS

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Derating Curve*



Derating Curve

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