

Shottky barrier diode

RB451F

●Application

Low current rectification

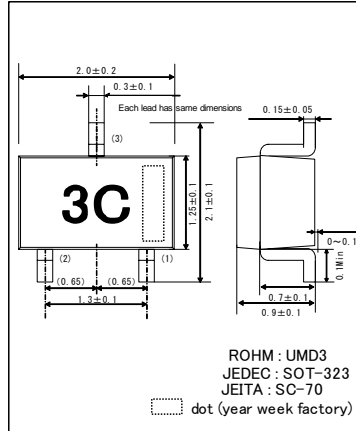
●Features

- 1) Small mold type. (UMD3)
- 2) Low V_f
- 3) High reliability.

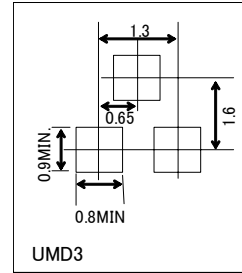
● Construction

Silicon epitaxial planer

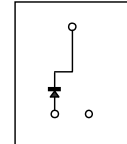
●External dimensions (Unit : mm)



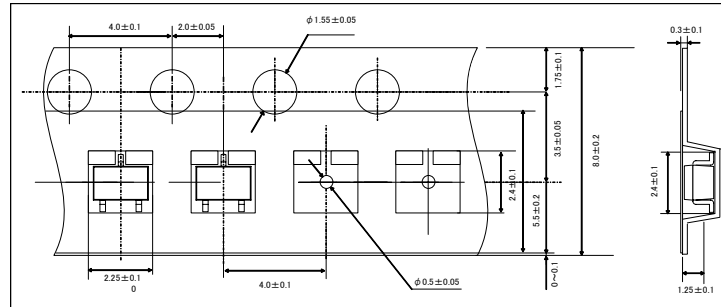
●Lead size figure (Unit : mm)



●Structure



●Taping dimensions (Unit : mm)



●Absolute maximum ratings (Ta=25°C)

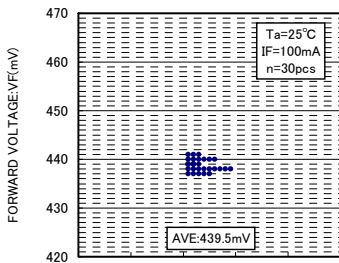
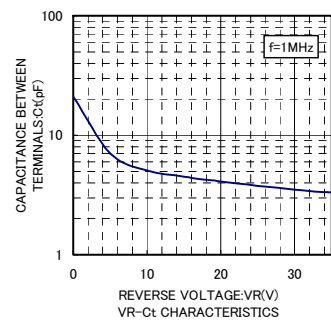
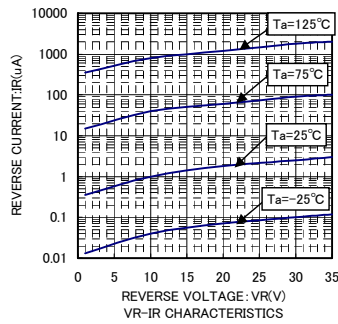
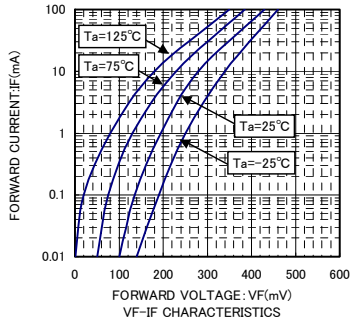
Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	V_{RM}	40	V
Reverse voltage (DC)	V_R	40	V
Average rectified forward current	I_o	100	mA
Forward current surge peak (60Hz·1cyc)	I_{FSM}	1	A
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	-40 to +125	°C

●Electrical characteristics (Ta=25°C)

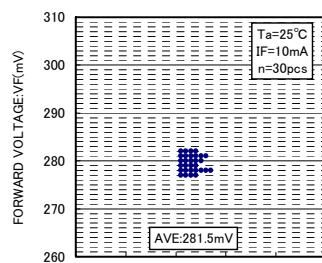
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_{F1}	-	-	0.55	V	$I_F=100mA$
	V_{F2}	-	-	0.34	V	$I_F=10mA$
Reverse current	I_R	-	-	30	μA	$V_R=10V$
Capacitance between terminals	C_t	-	6.0	-	pF	$V_R=10V, f=1MHz$

Diodes

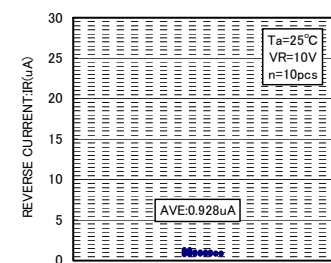
● Electrical characteristic curves (Ta=25°C)



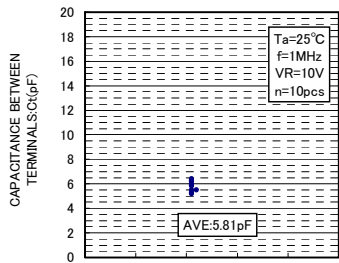
VF DISPERSION MAP



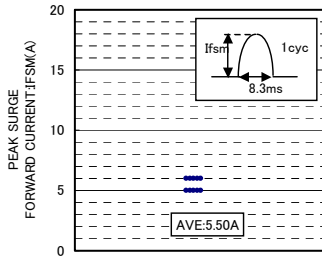
VF DISPERSION MAP



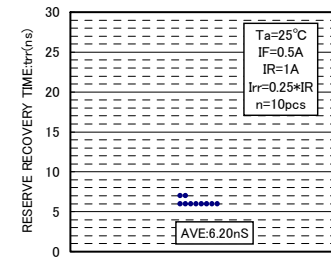
IR DISPERSION MAP



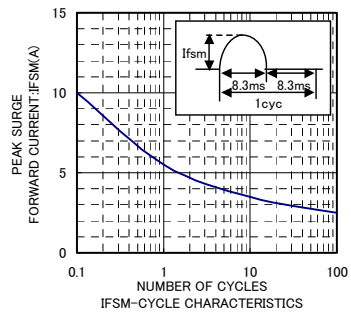
Ct DISPERSION MAP



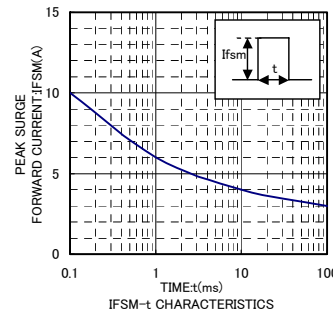
IFSM DISRESION MAP



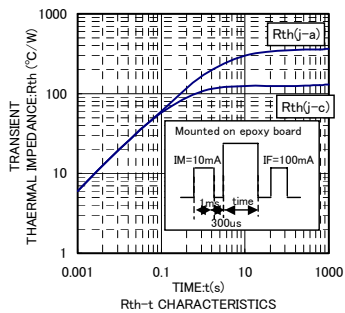
trr DISPERSION MAP



IFSM-CYCLE CHARACTERISTICS

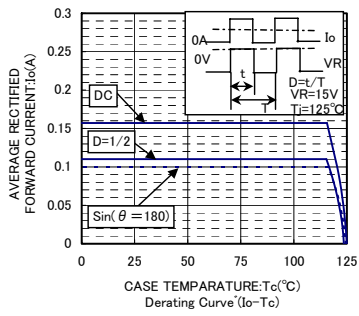
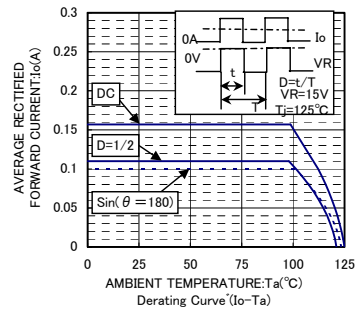
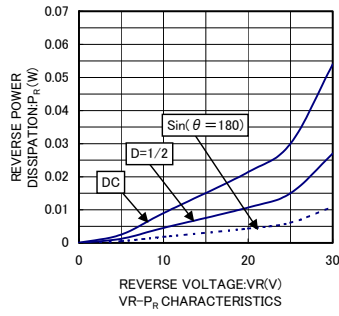
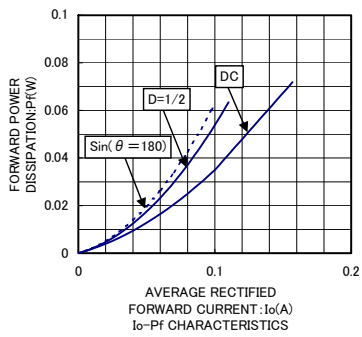


IFSM-t CHARACTERISTICS



Rth-t CHARACTERISTICS

Diodes



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