

Schottky Barrier Diodes

RB160VA-40

● **Applications**

General rectification

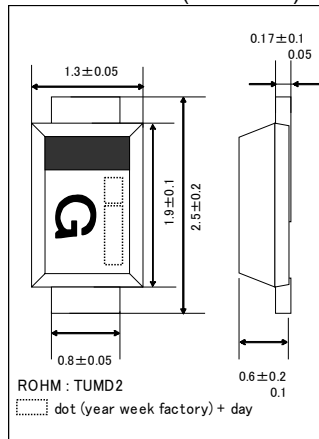
● **Features**

- 1) Small mold type. (TUMD2)
- 2) Low V_F , Low I_R .
- 3) High reliability.

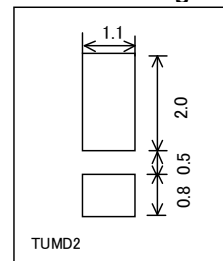
● **Construction**

Silicon epitaxial planar

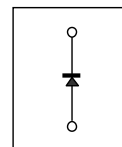
● **Dimensions (Unit : mm)**



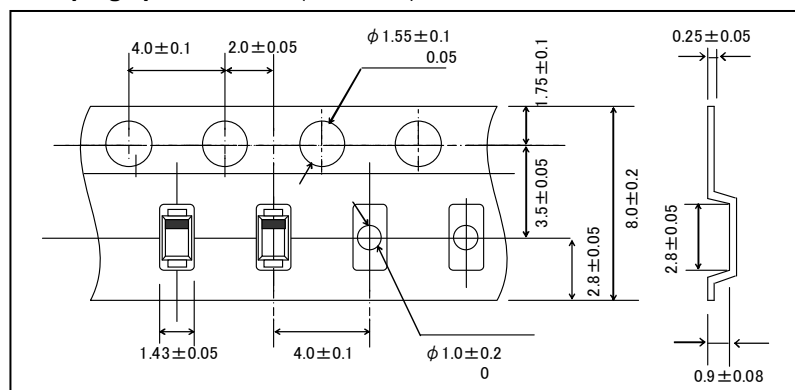
● **Land size figure (Unit : mm)**



● **Structure**



● **Taping specifications (Unit : mm)**



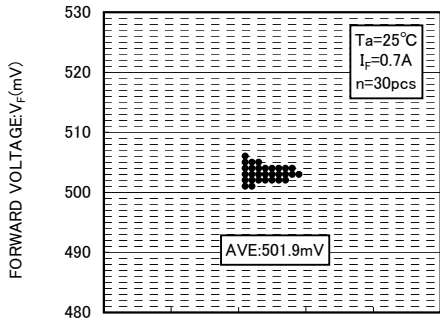
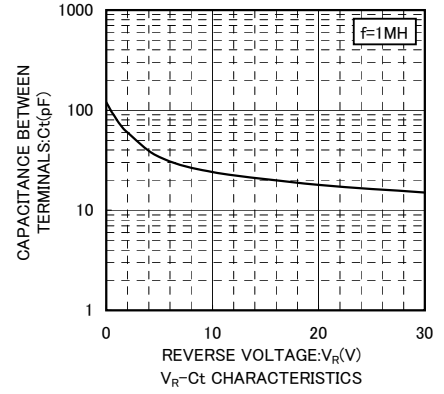
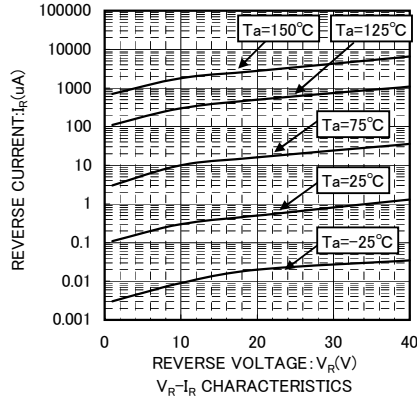
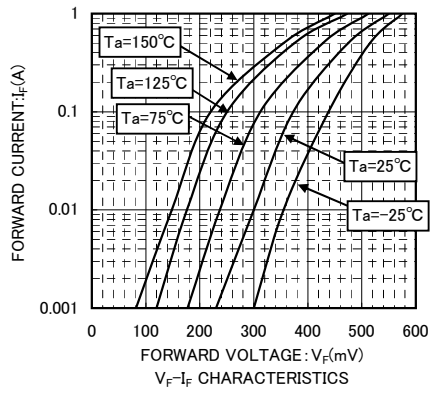
● **Absolute maximum ratings (Ta=25°C)**

Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive)	V_{RM}	40	V
Reverse voltage (DC)	V_R	40	V
Average rectified forward current	I_o	1	A
Forward current surge peak (60Hz·1cyc)	I_{FSM}	5	A
Forward current surge peak (t=100μs·1cyc)	I_{FSM}	10	A
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-40 to +150	°C

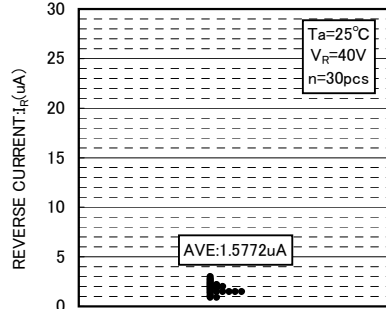
● **Electrical characteristics (Ta=25°C)**

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	-	0.50	0.55	V	$I_F=700mA$
Reverse current	I_R	-	1.5	50	μA	$V_R=40V$

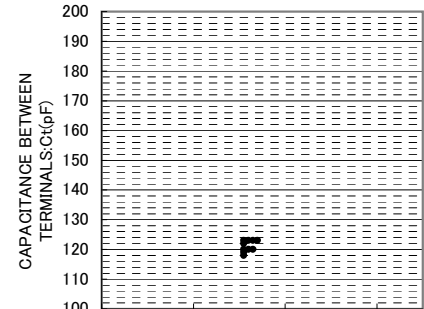
●Electrical characteristic curves (Ta=25°C)



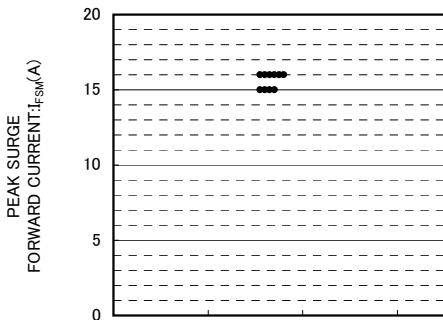
V_F DISPERSION MAP



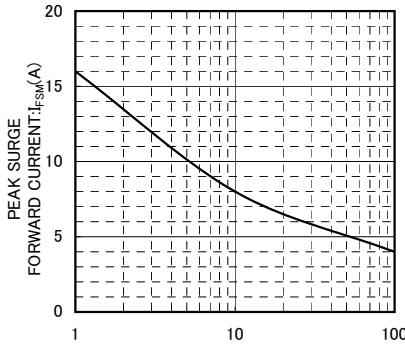
I_R DISPERSION MAP



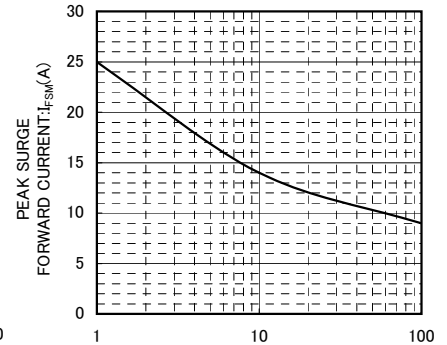
C_t DISPERSION MAP



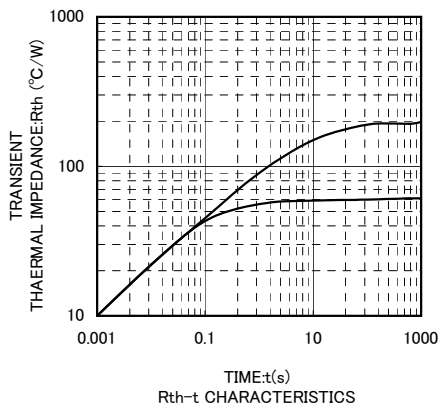
I_{FSM} DISPERSION MAP



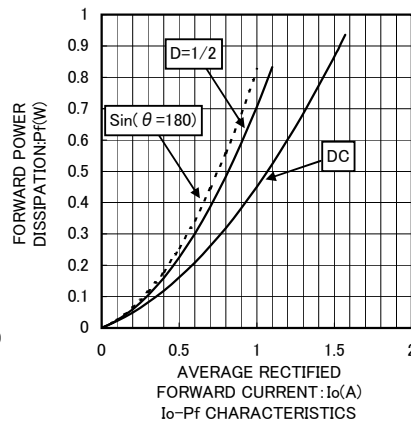
I_{FSM} -CYCLE CHARACTERISTICS



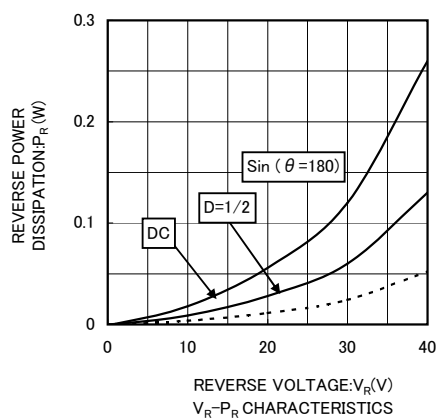
I_{FSM} - t CHARACTERISTICS



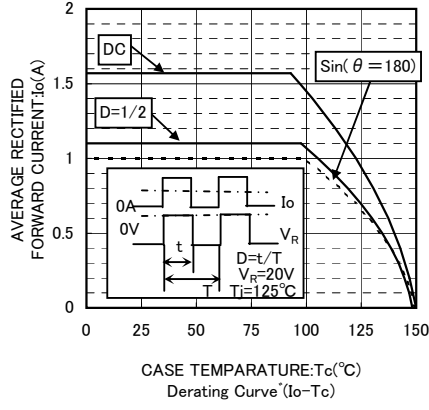
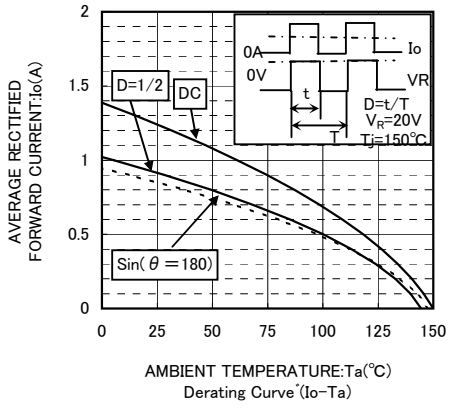
R_{th} - t CHARACTERISTICS



I_o - P_F CHARACTERISTICS



V_R - P_R CHARACTERISTICS



Notes

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