

Schottky Barrier Diode

RB056L-40

● **Applications**

General rectification

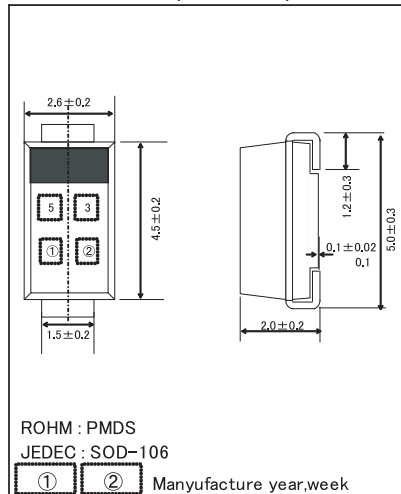
● **Features**

- 1) Small power mold type. (PMDS)
- 2) Low I_R
- 3) High reliability

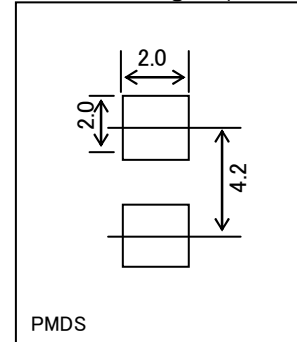
● **Construction**

Silicon epitaxial planer

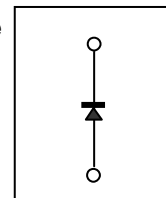
● **Dimensions (Unit : mm)**



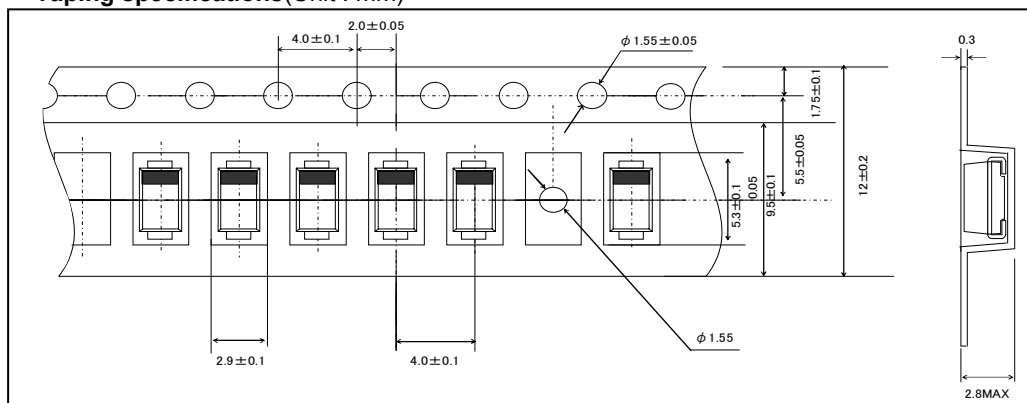
● **Land size figure (Unit : mm)**



● **Structure**



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



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

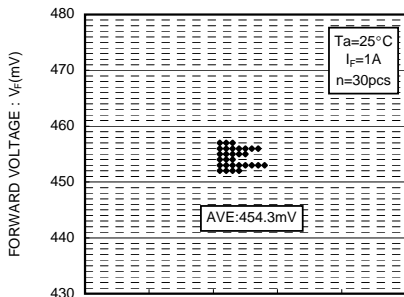
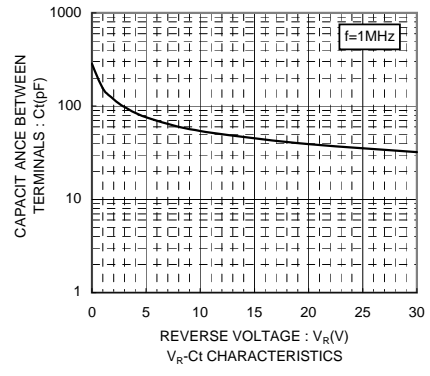
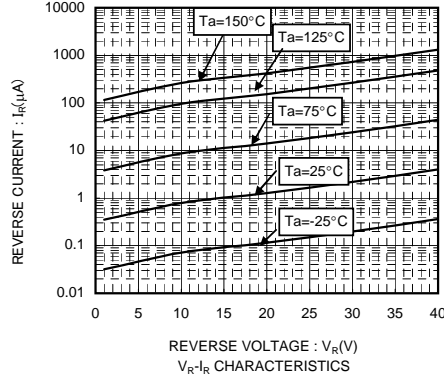
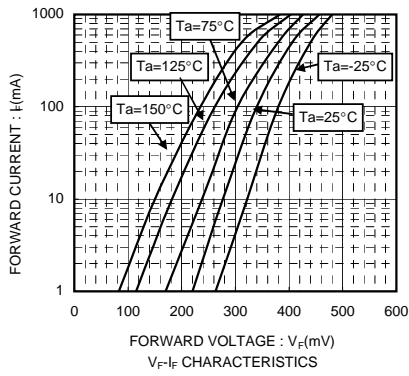
Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive)	V_{RM}	40	V
Reverse voltage (DC)	V_R	40	V
Average rectified forward current (*1)	I_O	3	A
Forward current surge peak (60Hz / 1cyc)	I_{FSM}	70	A
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-40to+150	°C

(*1) Mounting on epoxi board. ($T_c=63^{\circ}C_{MAX.}$)

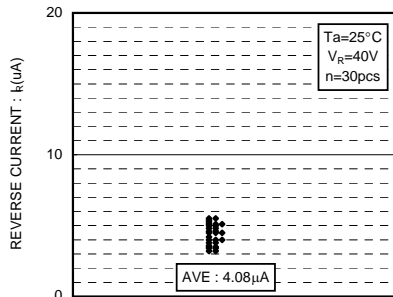
● **Electrical characteristics (Ta=25°C)**

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_{F1}	-	-	0.67	V	$I_F=3.0A$
	V_{F2}	-	-	0.58	V	$I_F=2.0A$
Reverse current	I_R	-	-	50	μA	$V_R=40V$

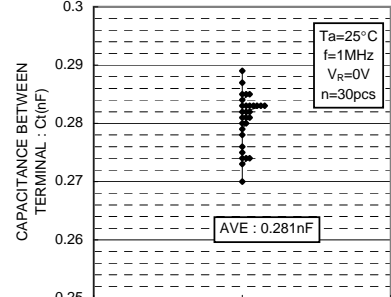
●Electrical characteristics curves



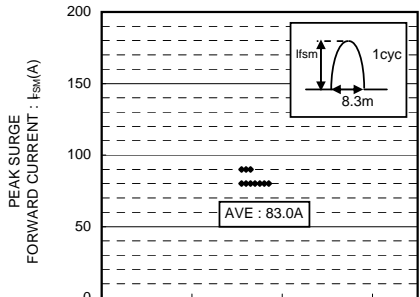
V_F DISPERSION MAP



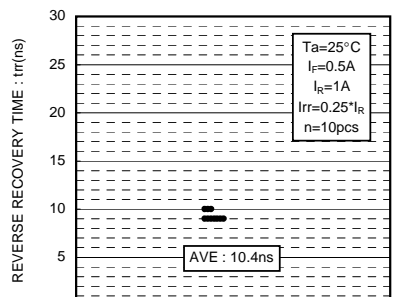
I_R DISPERSION MAP



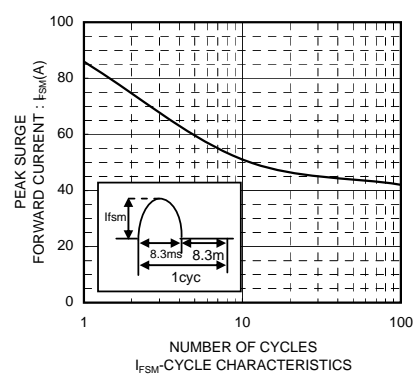
C_t DISPERSION MAP



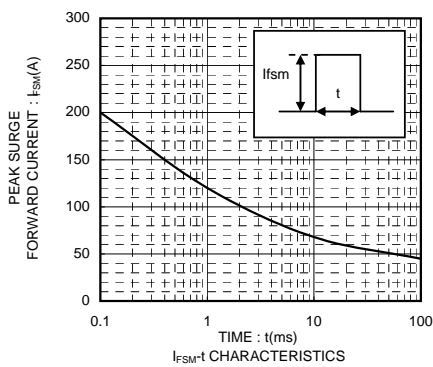
I_{FSM} DISPERSION MAP



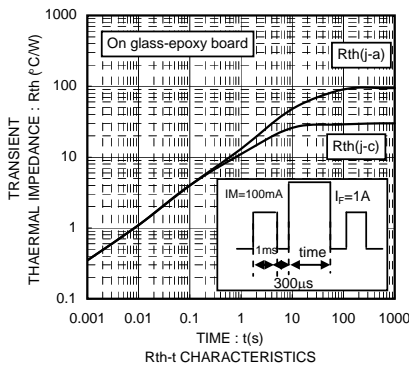
t_{rr} DISPERSION MAP



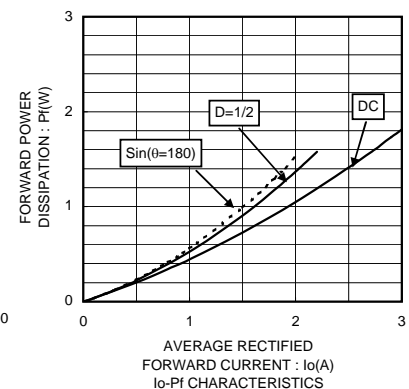
I_{FSM} -CYCLE CHARACTERISTICS



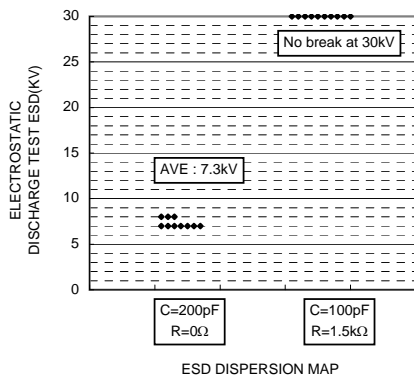
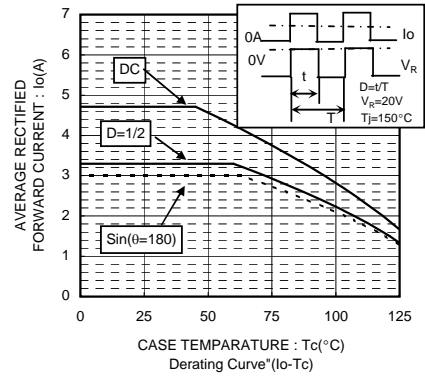
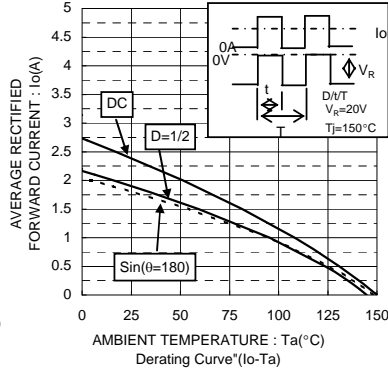
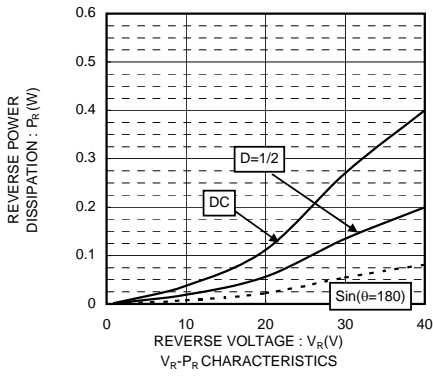
I_{FSM} - t CHARACTERISTICS



R_{th} - t CHARACTERISTICS



I_{FO} - P_f CHARACTERISTICS



Notes

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