

# Schottky Barrier Diode

**RB080L-30**

● **Applications**

General rectification

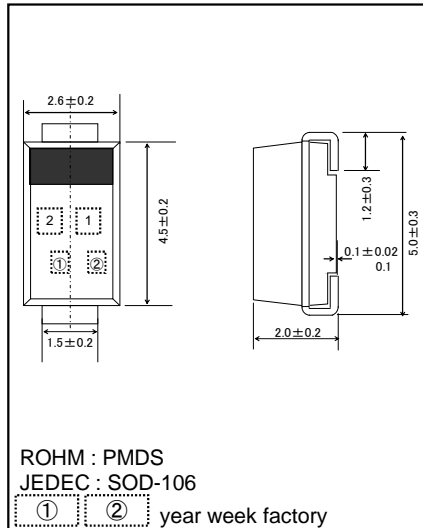
● **Features**

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

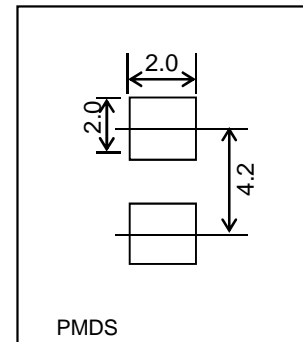
● **Structure**

Silicon epitaxial planer

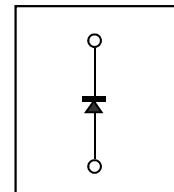
● **Dimensions (Unit : mm)**



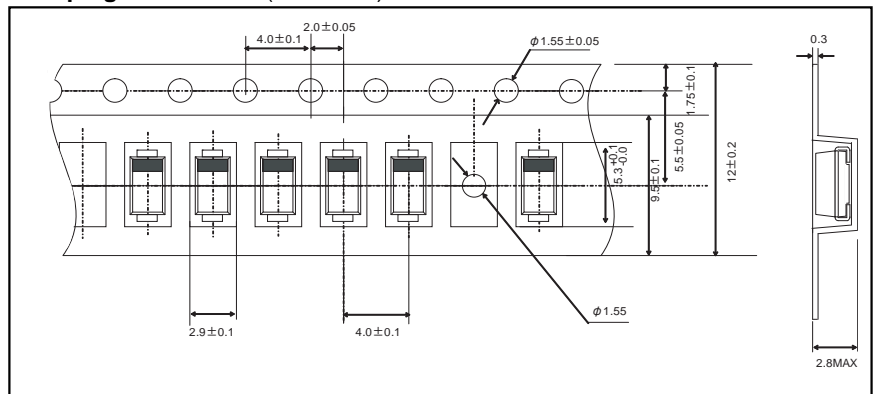
● **Land size figure (Unit : mm)**



● **Structure**



● **Taping dimensions (Unit : mm)**



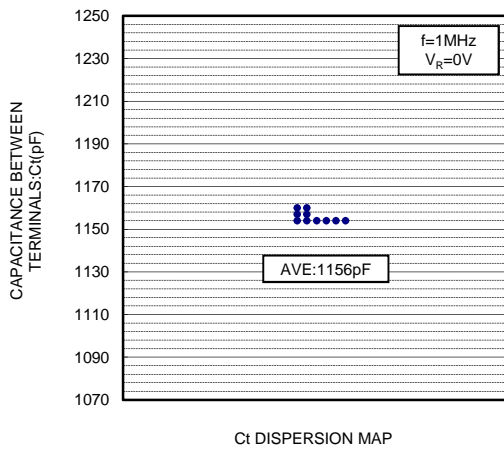
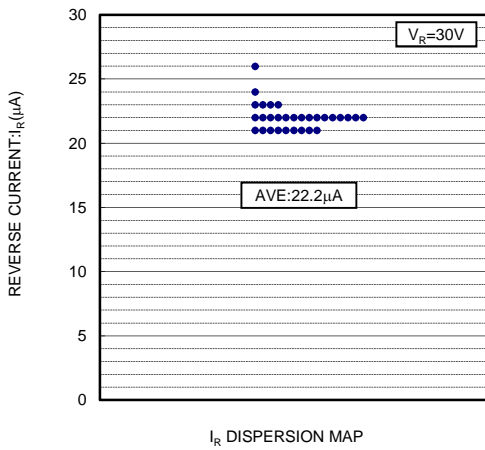
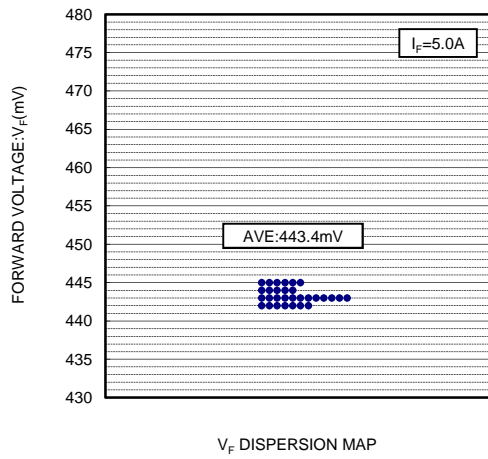
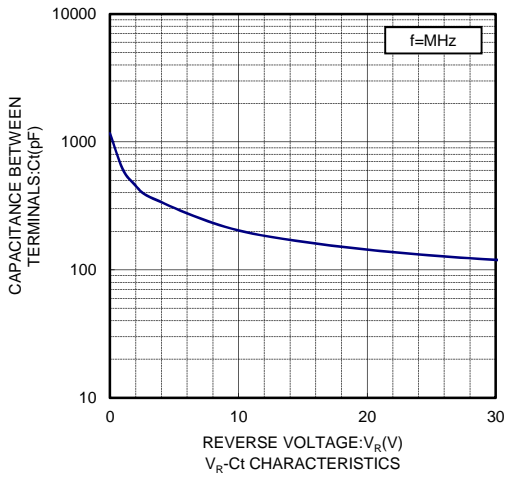
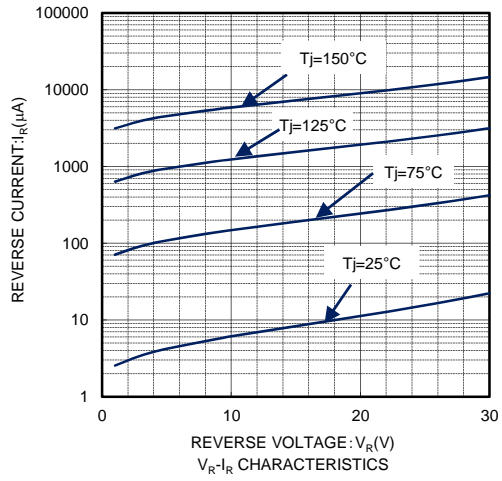
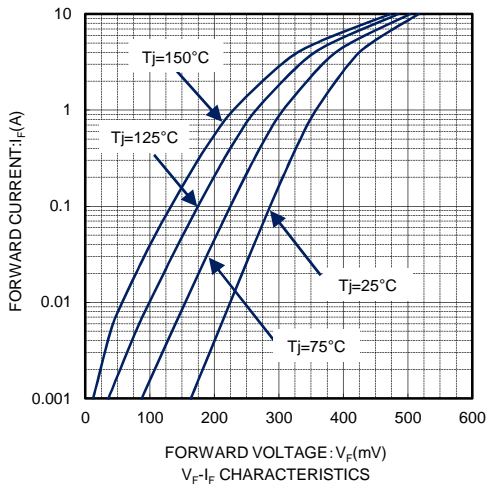
● **Absolute maximum ratings (Ta=25°C)**

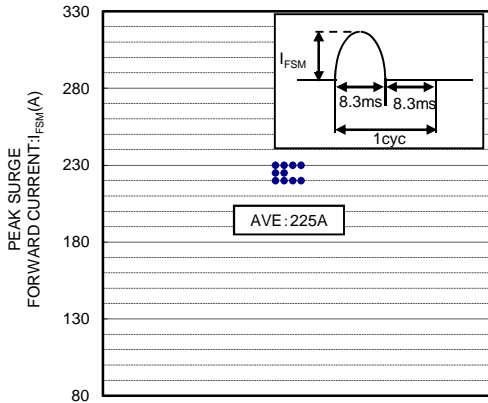
Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive)	$V_{RM}$	30	V
Reverse voltage (DC)	$V_R$	30	V
Average rectified forward current (*1)	$I_o$	5	A
Forward current surge peak (60Hz · 1cyc)	$I_{FSM}$	70	A
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{stg}$	-40 to +150	°C

(\*1) Alumina substrate at the time of assemble 180° Half Sine Wave,  $T_c=100^\circ\text{C MAX.}$

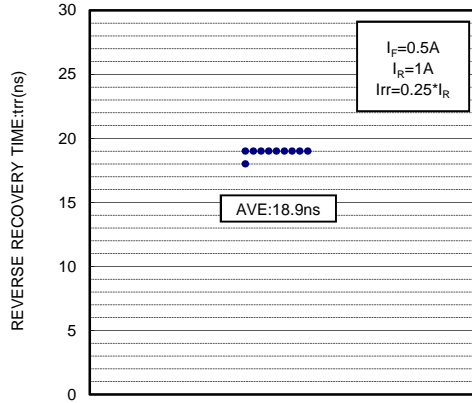
● **Electrical characteristics (Ta=25°C)**

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_F$	-	-	0.51	V	$I_F=5.0A$
Reverse current	$I_R$	-	-	150	$\mu A$	$V_R=30V$

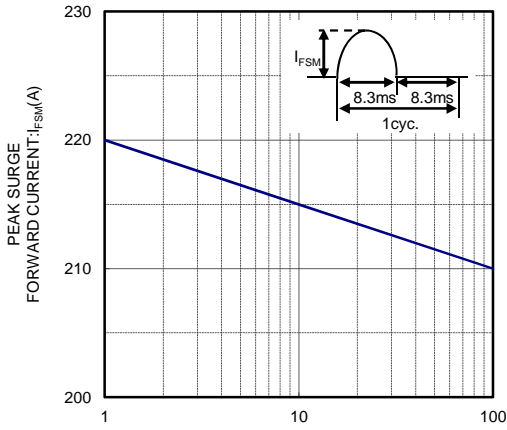




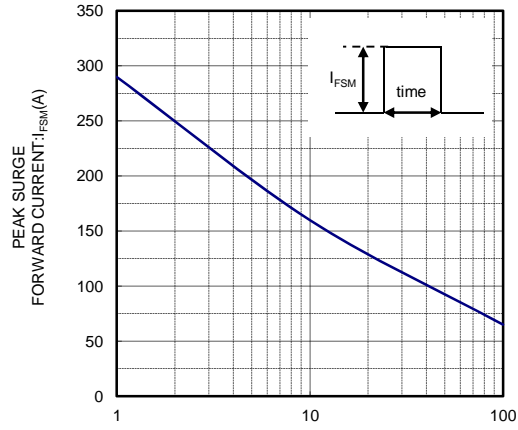
$I_{FSM}$  DISPERSION MAP



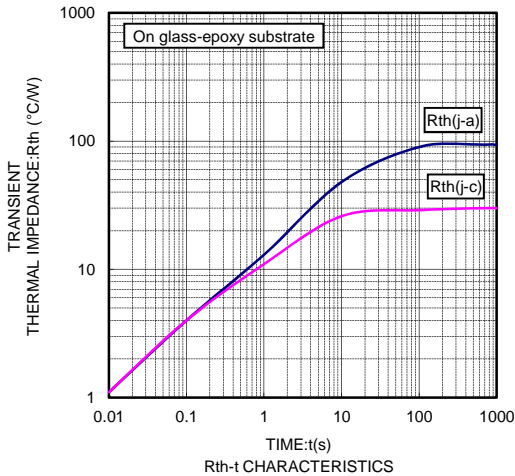
trr DISPERSION MAP



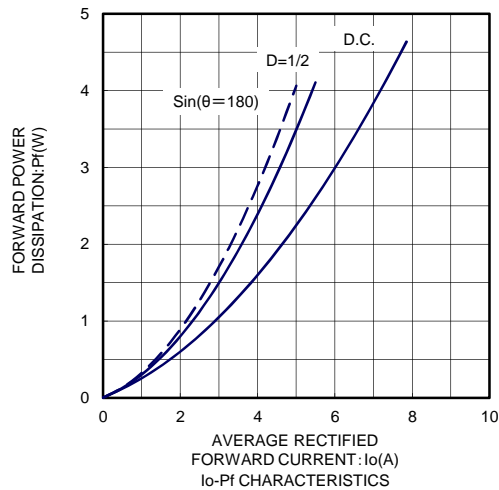
$I_{FSM}$ -CYCLE CHARACTERISTICS



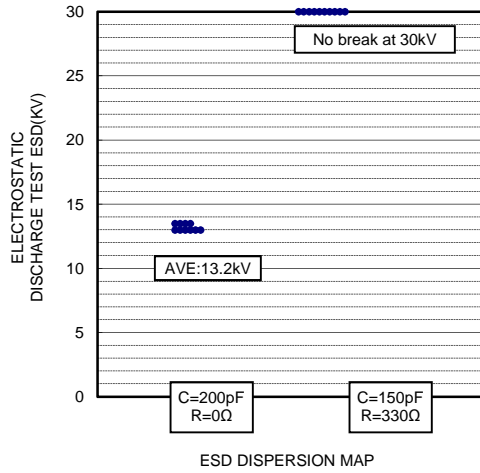
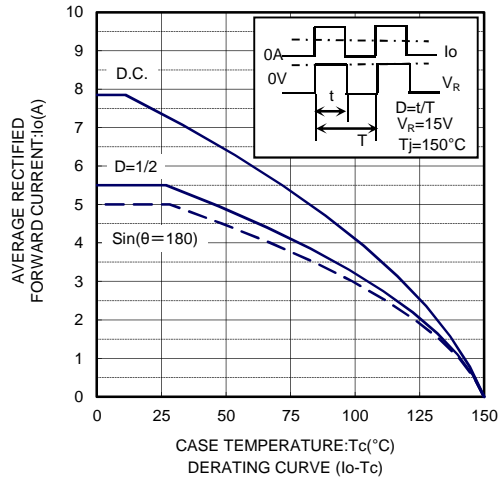
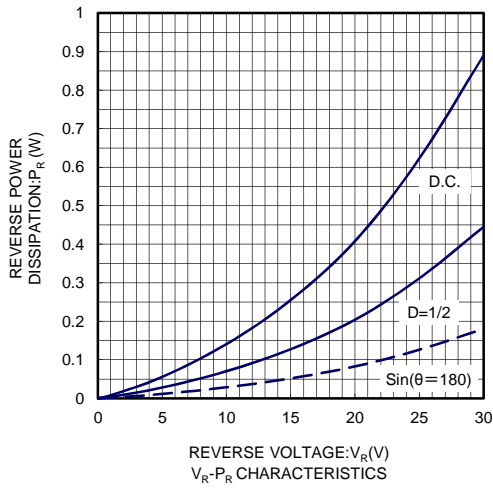
$I_{FSM}$ -t CHARACTERISTICS



Rth-t CHARACTERISTICS



$I_o$ -Pf CHARACTERISTICS



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