

# Schottky Barrier Diode

## RB058L-40

### ●Applications

General rectification

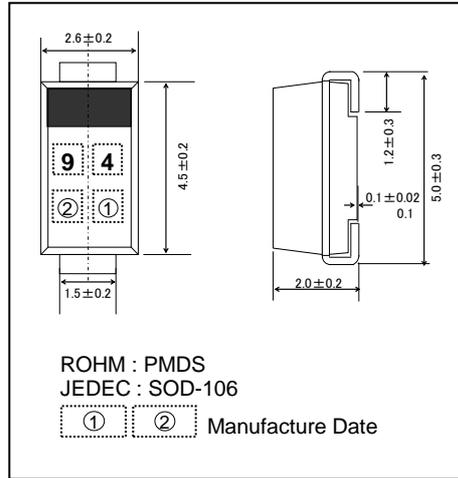
### ●Features

- 1) Small power mold type.(PMDS)
- 2) High reliability
- 3) AEC-Q101 qualified

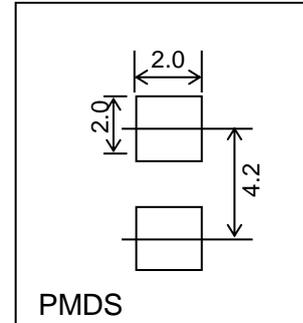
### ●Construction

Silicon epitaxial

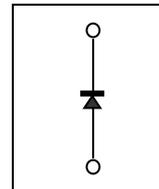
### ●External Dimensions(Unit : mm)



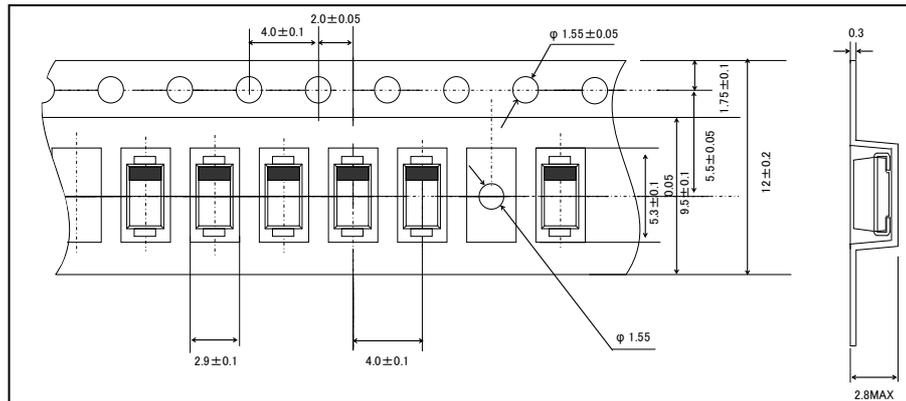
### ●Land Size Figure(Unit : mm)



### ●Structure



### ●Taping Dimensions(Unit : mm)



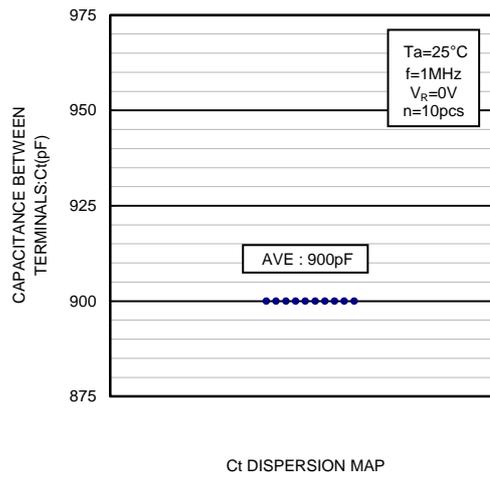
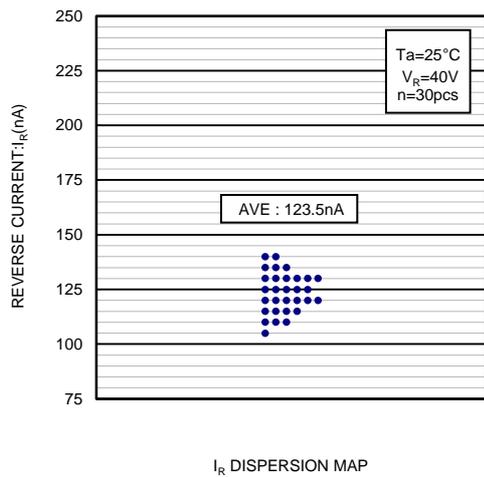
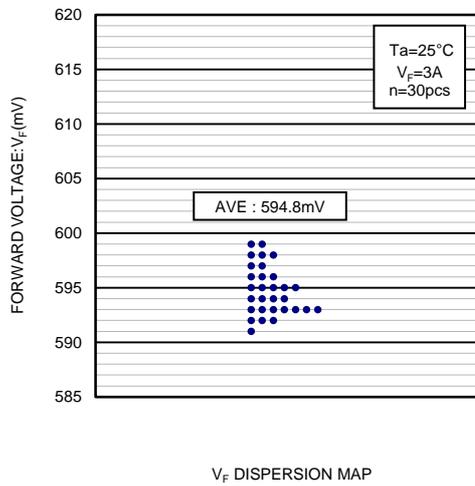
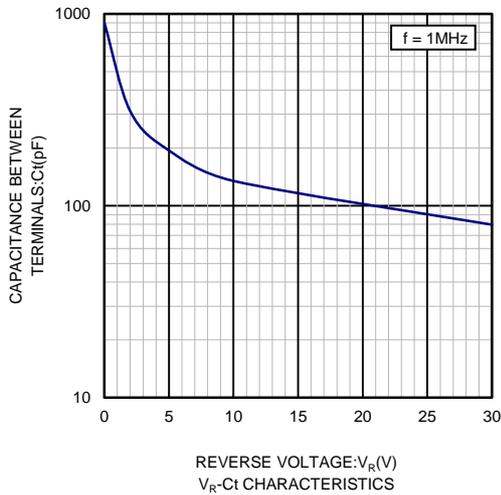
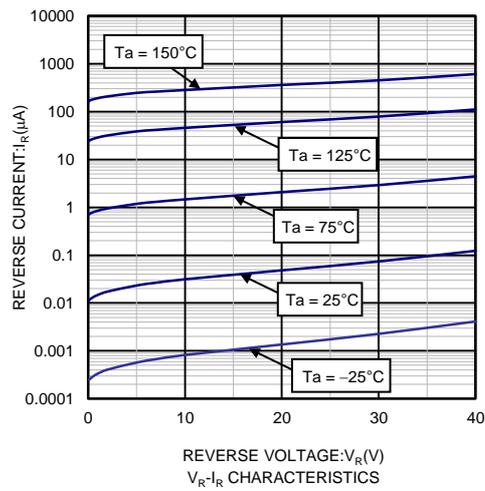
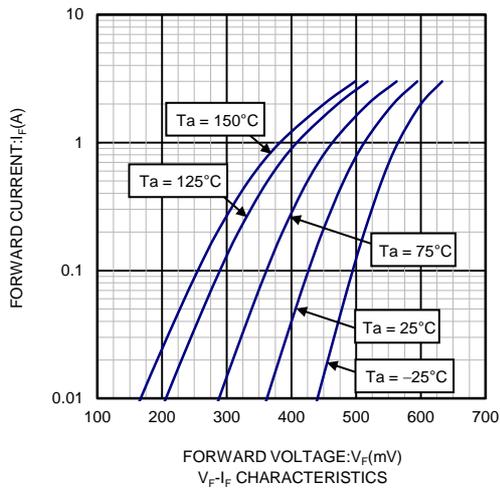
### ●Absolute Maximum Ratings(Ta=25°C)

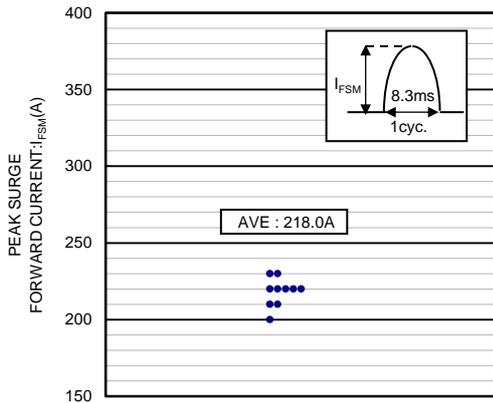
Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive)	$V_{RM}$	40	V
Reverse voltage (DC)	$V_R$	40	V
Average rectified forward current (*1)	$I_o$	3	A
Forward current surge peak (60Hz·1cyc)	$I_{FSM}$	70	A
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{stg}$	-55 to +150	°C

(\*1) Mounting on epoxi board. 180°Half sine wave

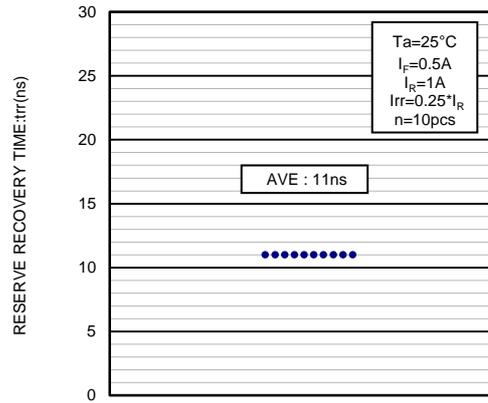
### ●Electrical Characteristics(Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_F$	-	-	0.70	V	$I_F=3.0A$
Reverse current	$I_R$	-	-	5.0	μA	$V_R=40V$

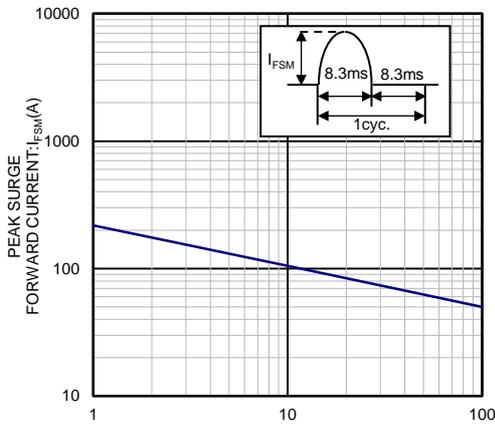




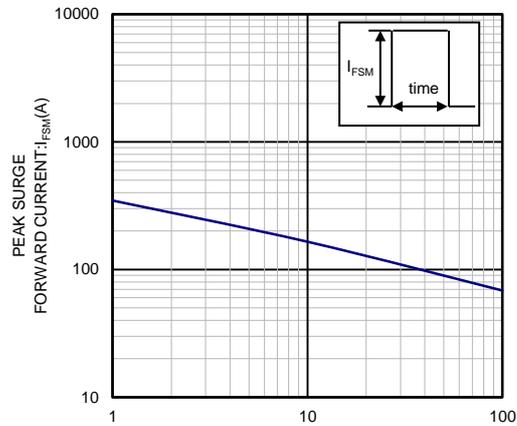
$I_{FSM}$  DISRESION MAP



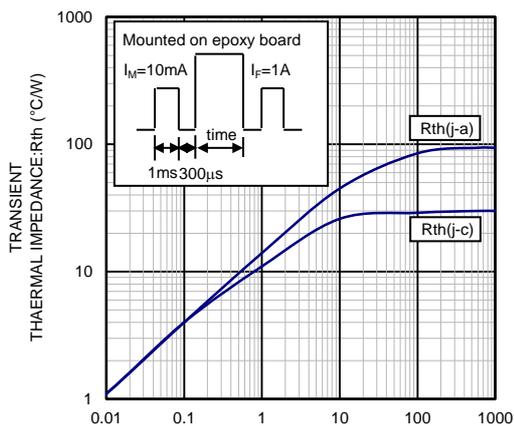
$t_{rr}$  DISPERSION MAP



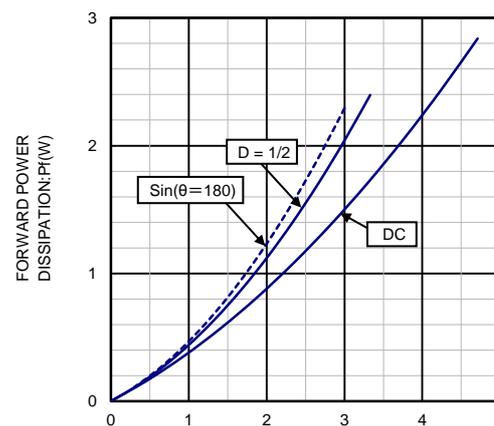
$I_{FSM}$ -CYCLE CHARACTERISTICS



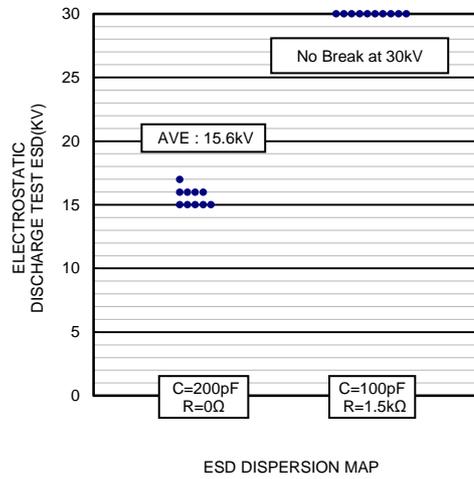
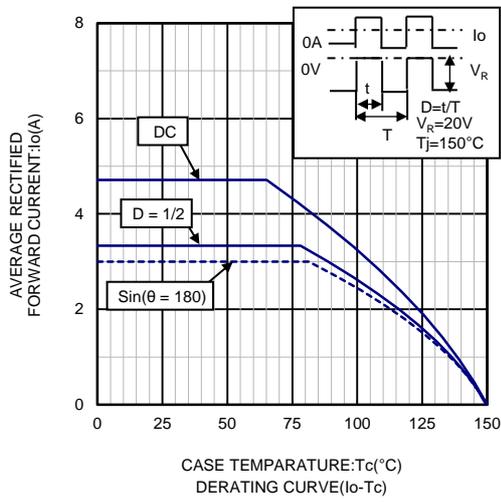
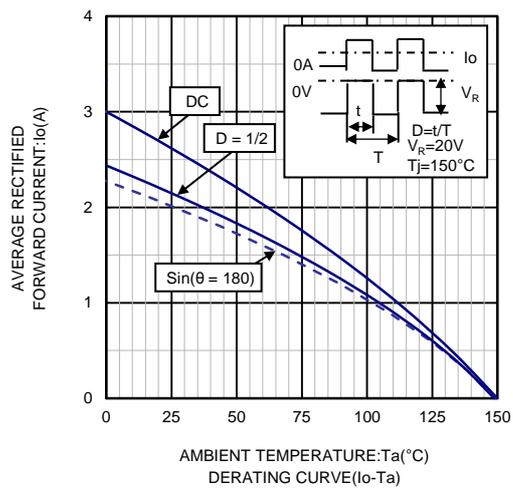
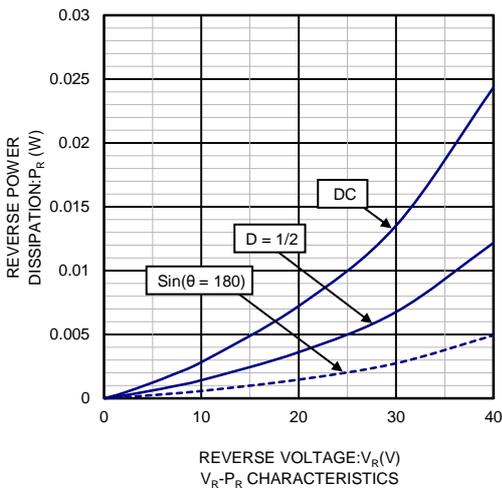
$I_{FSM}$ - $t$  CHARACTERISTICS



$R_{th}$ - $t$  CHARACTERISTICS



AVERAGE RECTIFIED FORWARD CURRENT:  $I_o$ (A)  
 $I_o$ -Pf CHARACTERISTICS



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