

# Schottky barrier diode

RB060L-40

●Applications

Rectifying small power

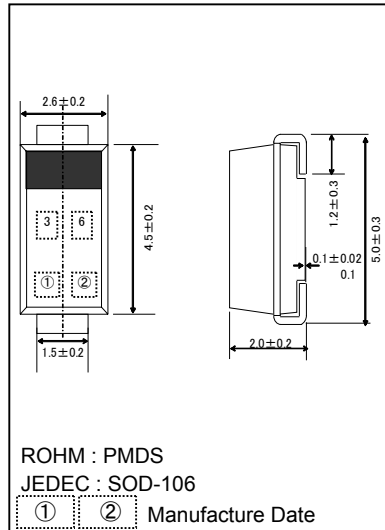
●Features

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

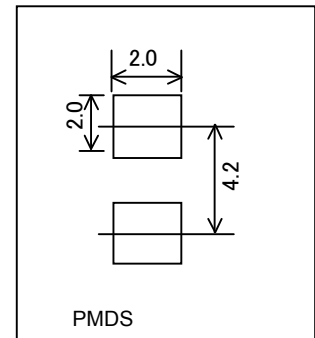
●Construction

Silicon epitaxial planar

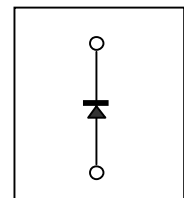
●Dimensions (Unit : mm)



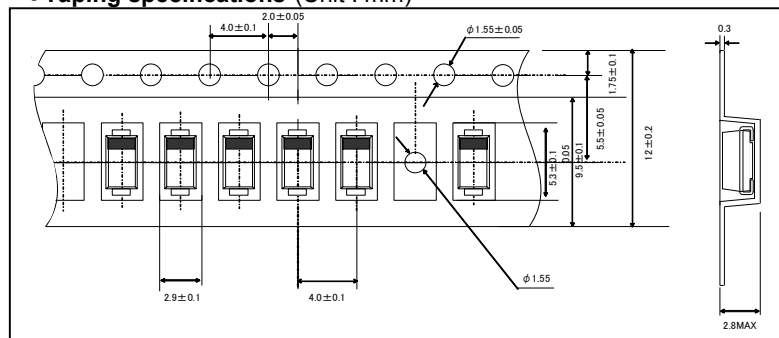
●Land size figure (Unit : mm)



●Structure



●Taping specifications (Unit : mm)



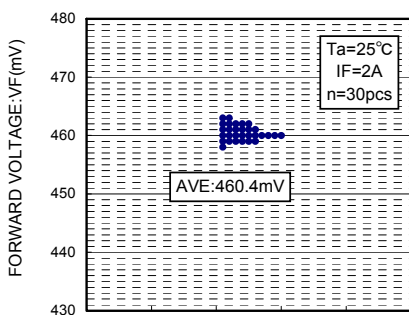
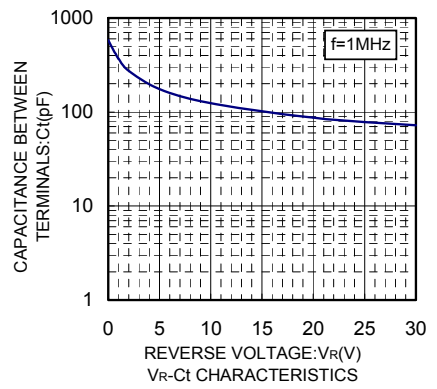
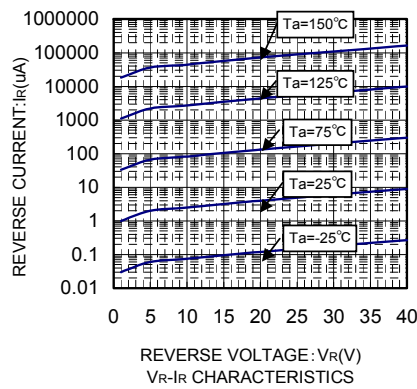
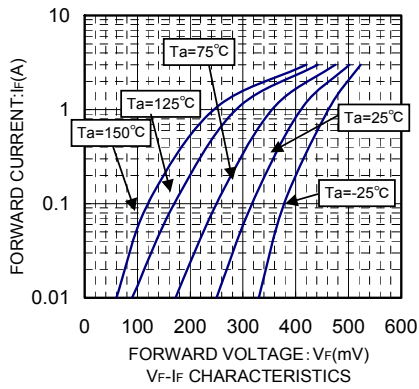
●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	$V_{RM}$	40	V
Reverse voltage (DC)	$V_R$	40	V
Average rectified forward current	$I_o$	2	A
Forward current surge peak (60Hz·1cyc)	$I_{FSM}$	70	A
Junction temperature	$T_j$	125	°C
Storage temperature	$T_{stg}$	-40 to +125	°C

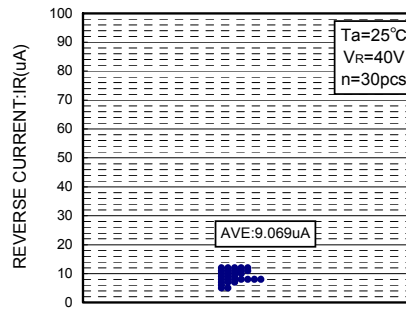
(\*1) Mounted on epoxy board. 180°Half sine wave

●Electrical characteristics (Ta=25°C)

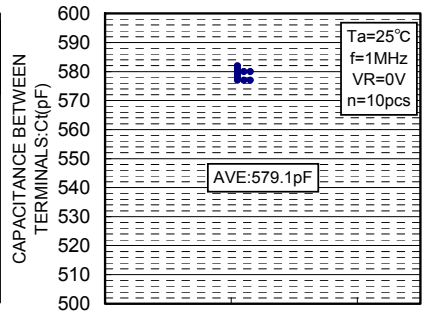
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_{F1}$	-	-	0.50	V	$I_F=2.0A$
	$V_{F2}$	-	-	0.45	V	$I_F=1.0A$
Reverse current	$I_R$	-	-	1	mA	$V_R=40V$
Thermal impedance	$\theta_{j-a}$	-	-	90	°C/W	Mounting on alumina board
	$\theta_{j-a}$	-	-	120		Mounted on epoxy board



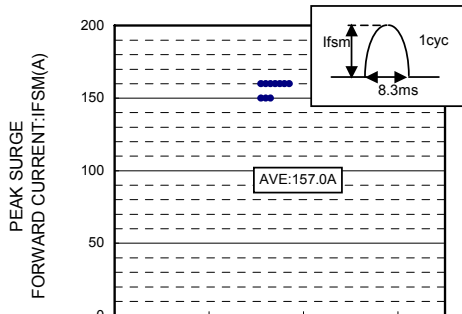
$V_F$  DISPERSION MAP



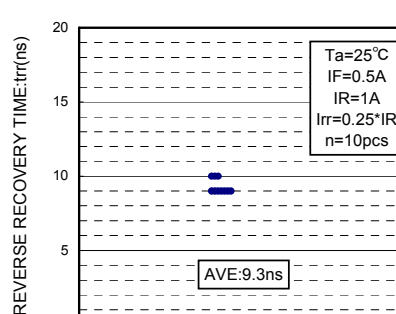
$I_R$  DISPERSION MAP



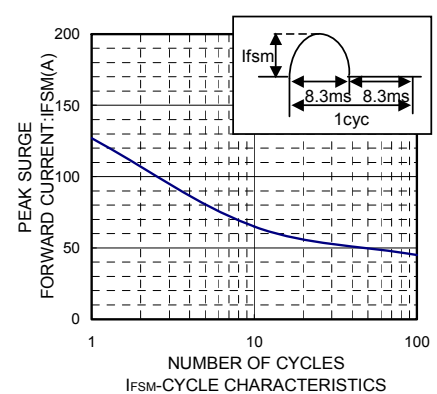
$C_t$  DISPERSION MAP



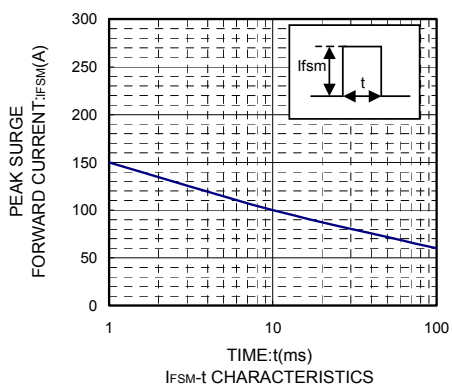
$I_{FSM}$  DISRESION MAP



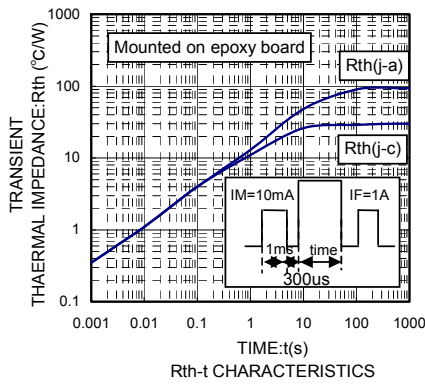
$t_{rr}$  DISPERSION MAP



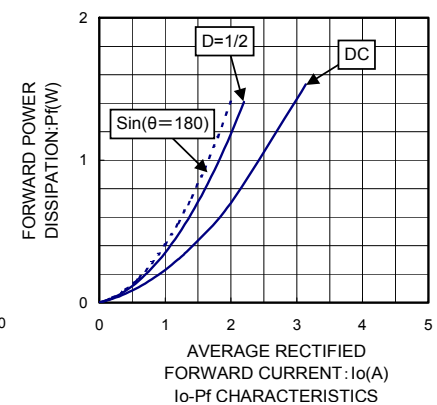
$I_{FSM}$ -CYCLE CHARACTERISTICS



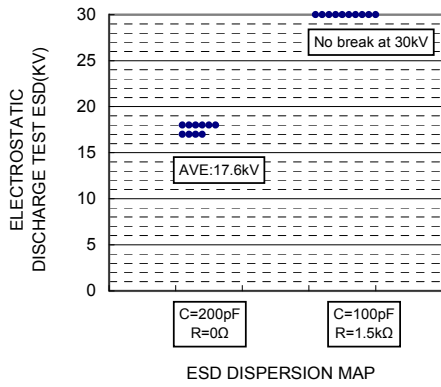
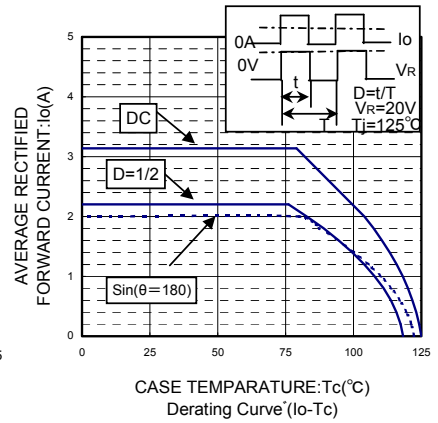
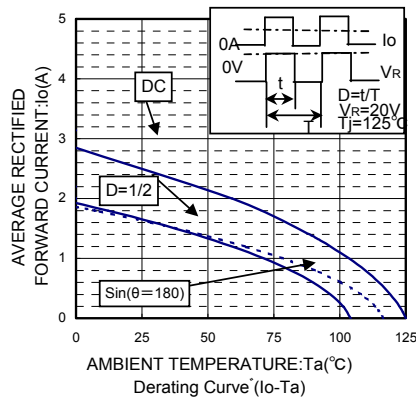
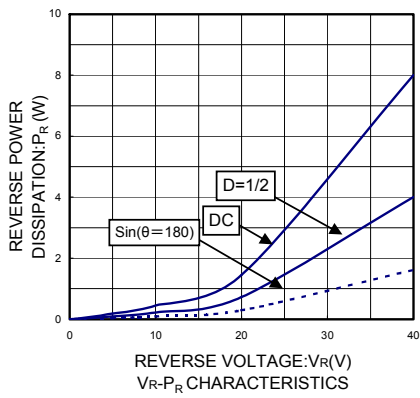
$I_{FSM}$ - $t$  CHARACTERISTICS



$R_{th}$ - $t$  CHARACTERISTICS



$I_o$ - $P$  CHARACTERISTICS



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