

# Schottky Barrier Diode

RB061US-30

● **Applications**

General rectification

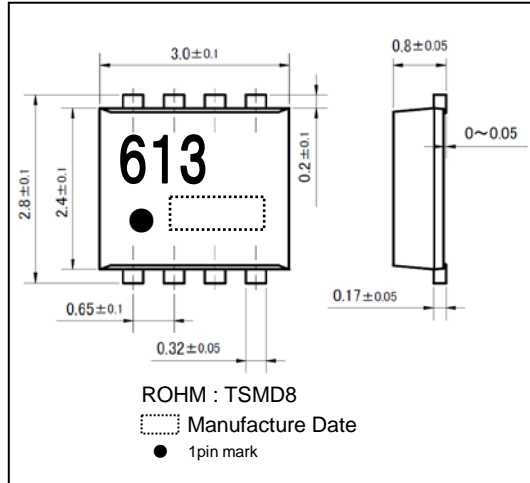
● **Features**

- 1) Small power mold type. (TSMD8)
- 2) Low  $V_F$
- 3) High reliability

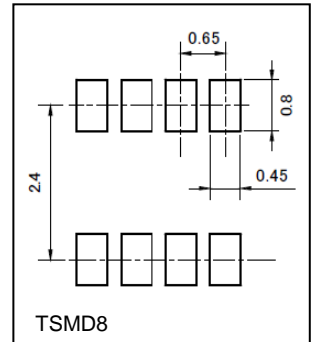
● **Structure**

Silicon epitaxial planar

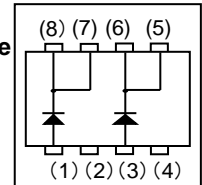
● **Dimensions (Unit : mm)**



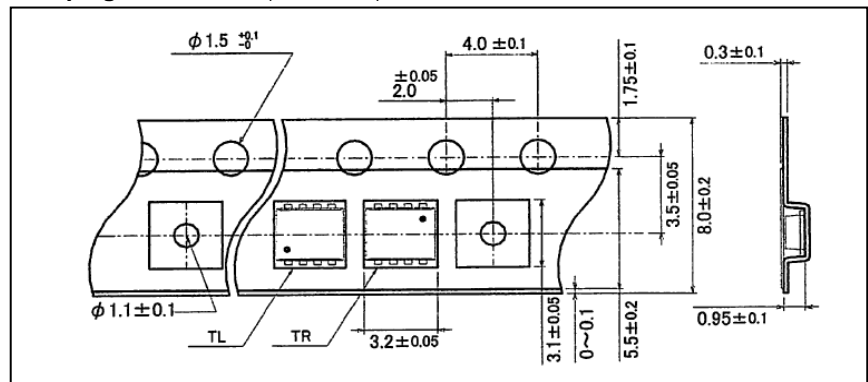
● **Land size figure (Unit : mm)**



● **Structure**



● **Taping dimensions (Unit : mm)**



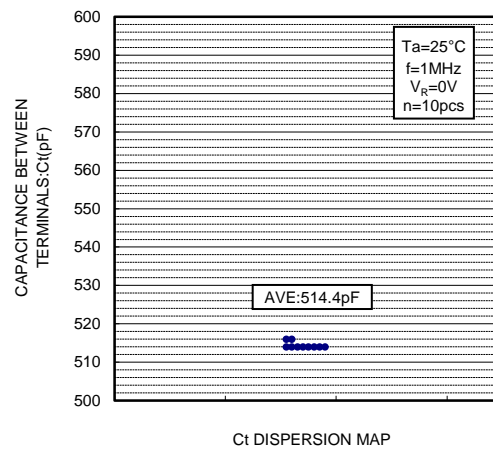
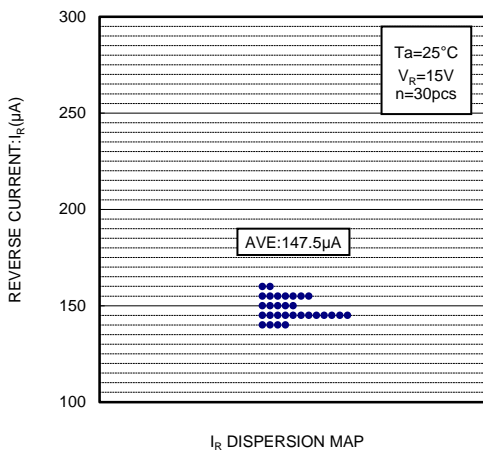
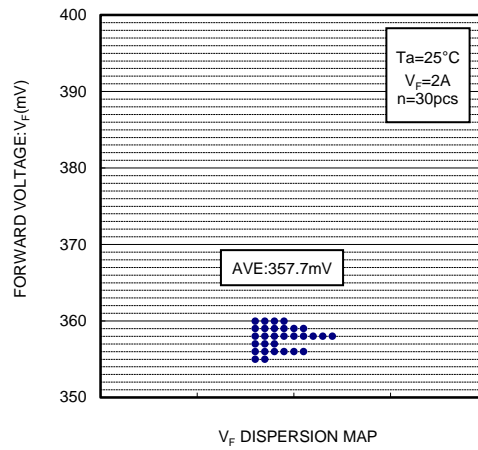
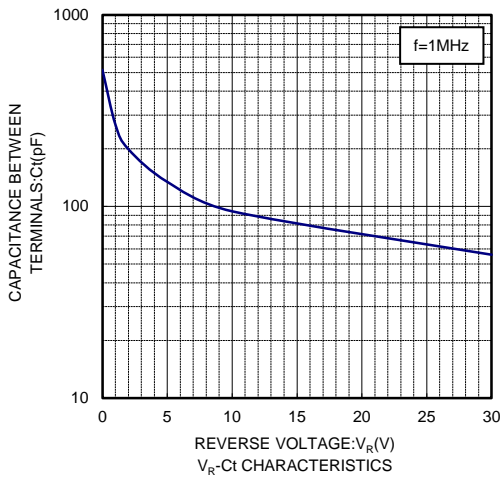
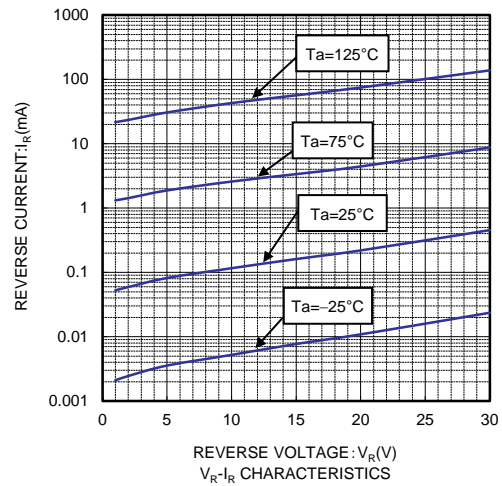
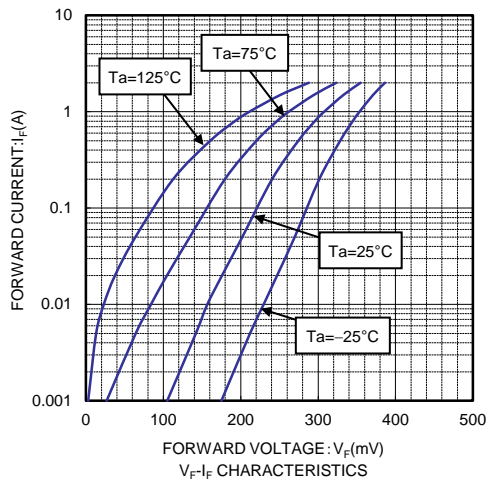
● **Absolute maximum ratings (Ta=25°C)**

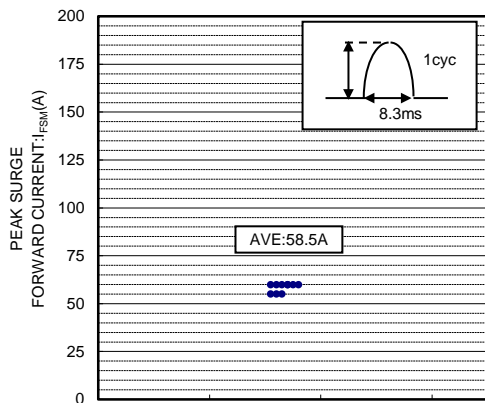
Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive)	$V_{RM}$	30	V
Reverse voltage (DC)	$V_R$	30	V
Average rectified forward current (*1)	$I_o$	2	A
Forward current surge peak (60Hz · 1cyc) (*1)	$I_{FSM}$	8	A
Junction temperature	$T_j$	125	°C
Storage temperature	$T_{stg}$	- 40 to +125	°C

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

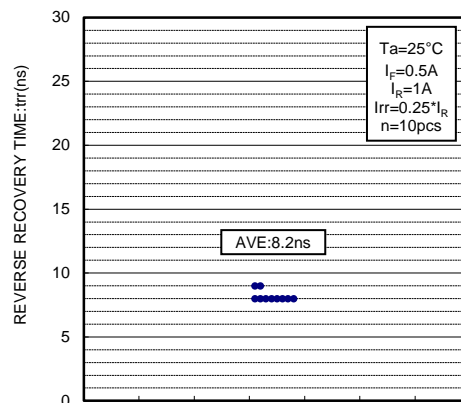
● **Electrical characteristics (Ta=25°C)**

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_{F1}$	-	0.30	0.35	V	$I_F=1.0A$
	$V_{F2}$	-	0.35	0.40	V	$I_F=2.0A$
Reverse current	$I_R$	-	280	900	μA	$V_R=15V$
Capacitance between terminal	$C_t$	-	80	-	pF	$V_R=20V, f=1MHz$
Reverse recovery time	$t_{rr}$	-	-	20	ns	$I_F=0.5A, I_R=1A, I_{rr}=0.25 \cdot I_R$

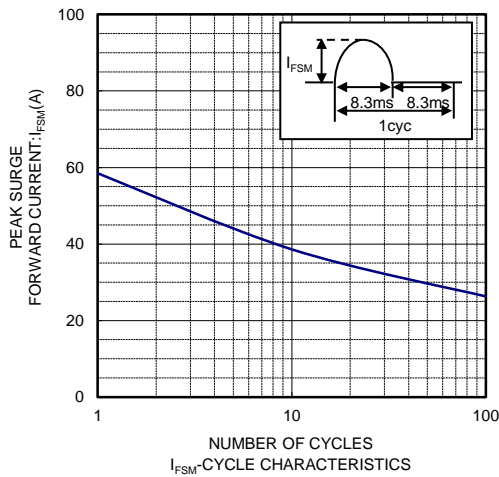




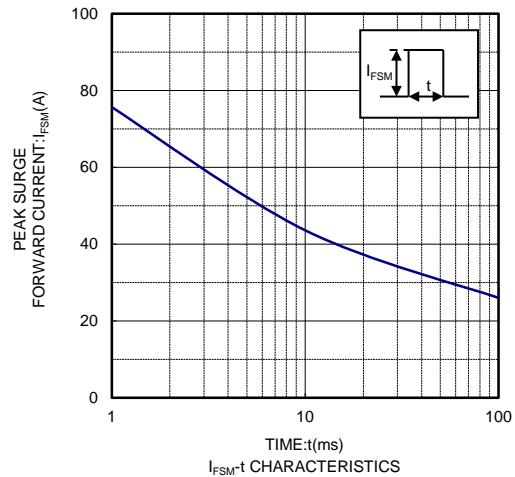
$I_{FSM}$  DISPERSION MAP



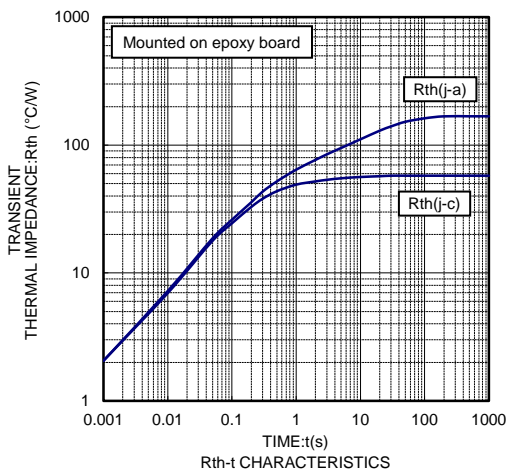
trr DISPERSION MAP



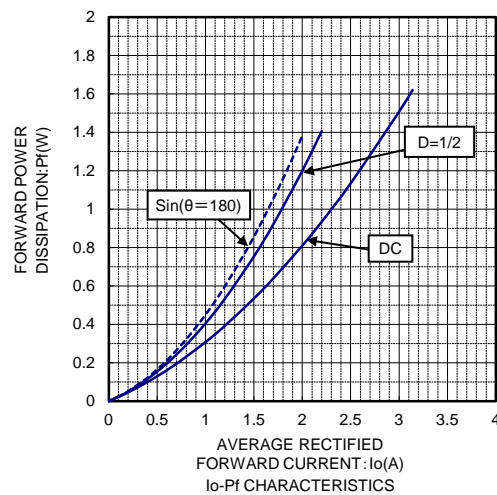
$I_{FSM}$  CYCLE CHARACTERISTICS



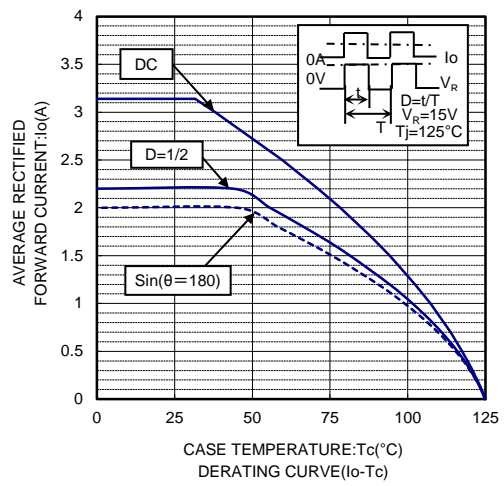
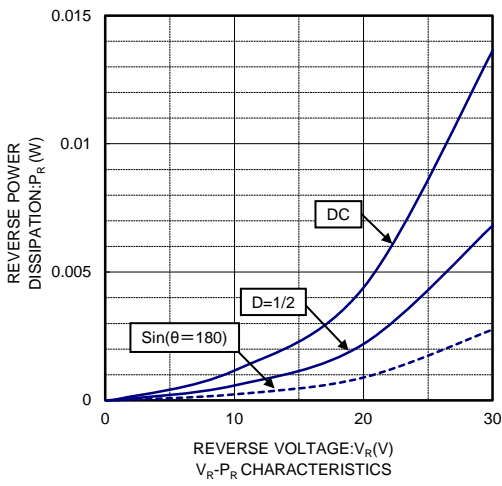
$I_{FSM}$ -t CHARACTERISTICS



$R_{th}$ -t CHARACTERISTICS



$I_o$ -Pf CHARACTERISTICS



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