

# Schottky barrier diode

## RSX301LA-30

### ●Applications

General rectification

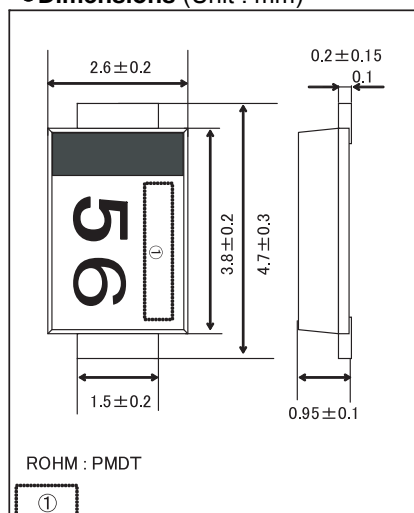
### ●Features

- 1) Small and Thin power mold type. (PMDT)
- 2) Low  $I_R$  & Low  $V_F$
- 3) High reliability.

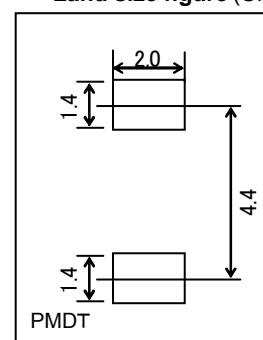
### ●Construction

Silicon epitaxial planer

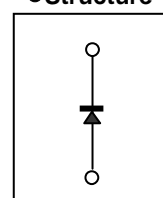
### ●Dimensions (Unit : mm)



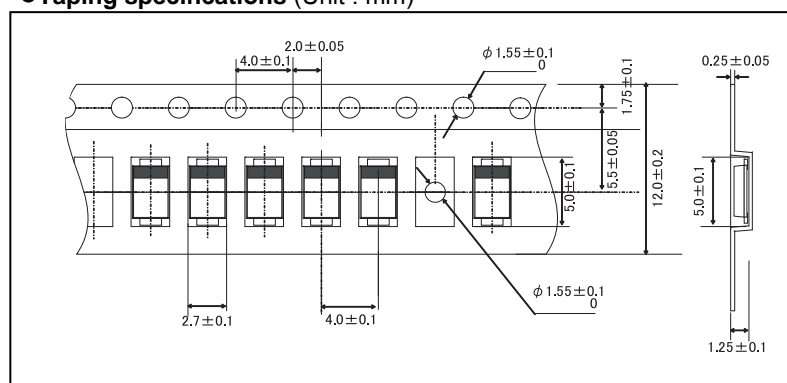
### ● Land size figure (Unit : mm)



### ●Structure



### ●Taping specifications (Unit : mm)



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

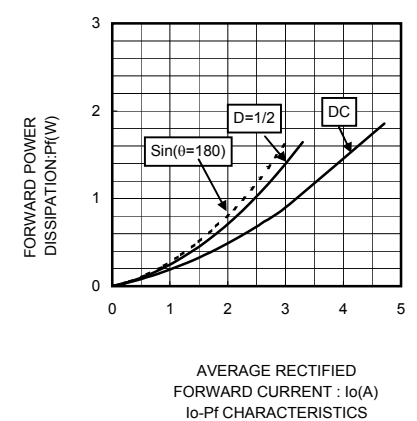
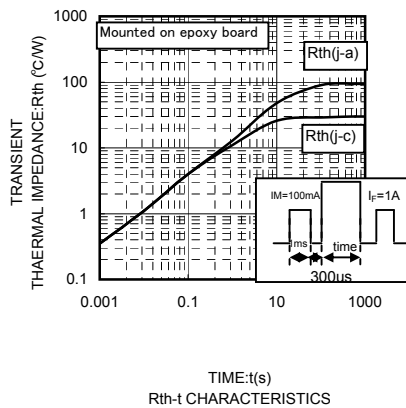
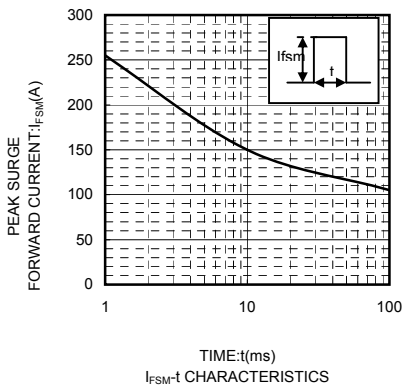
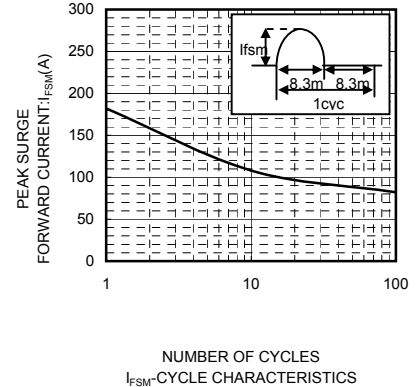
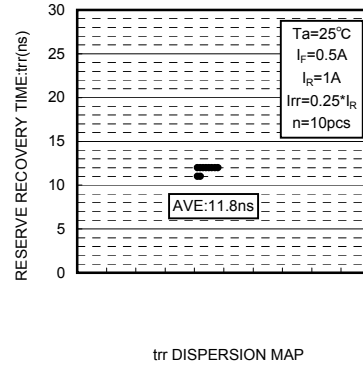
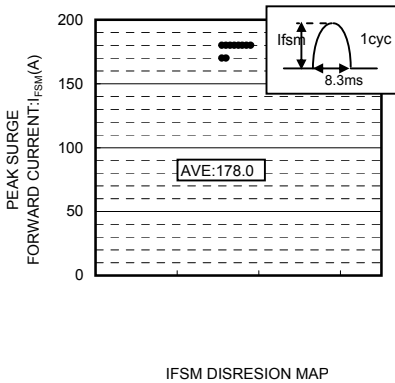
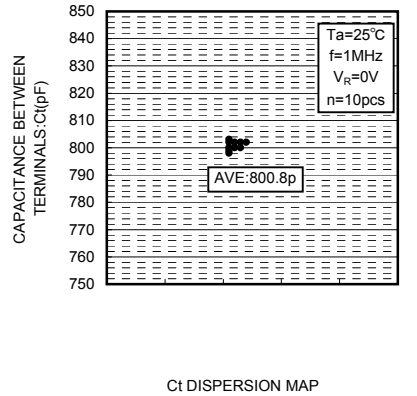
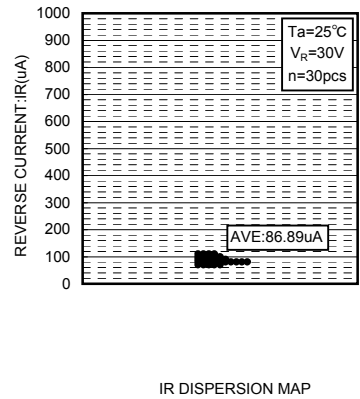
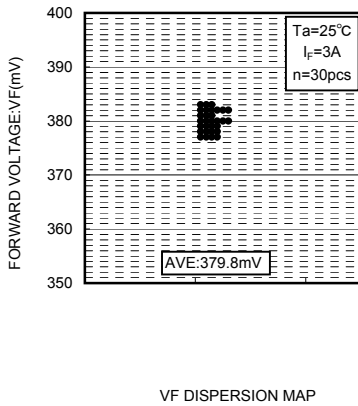
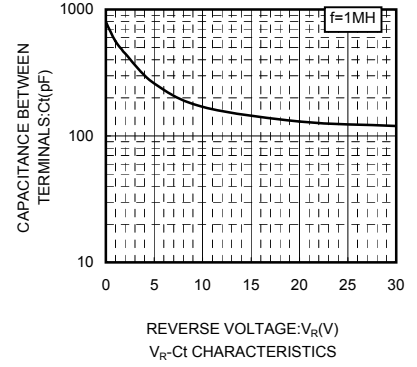
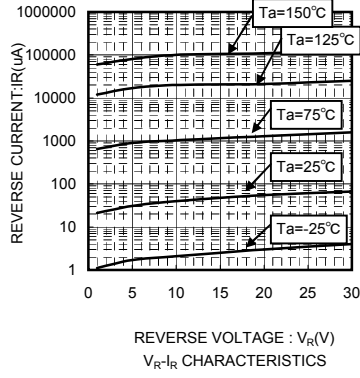
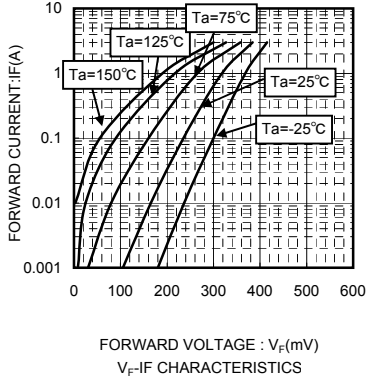
Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	$V_{RM}$	30	V
Reverse voltage (DC)	$V_R$	30	V
Average rectified forward current	$I_o$	3	A
Forward current saurge peak (60Hz / 1cyc)	$I_{FSM}$	70	A
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{stg}$	-40 to +150	°C

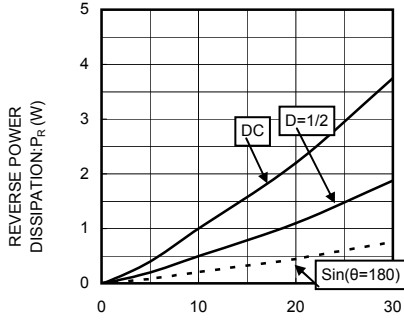
(\*1) $T_c=90^\circ\text{C}$  max Mounted on epoxy board. 180°Half sine wave

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

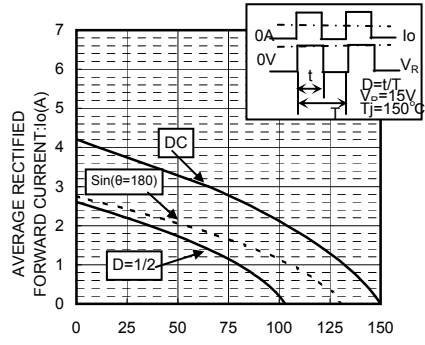
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_F$	-	-	0.42	V	$I_F=3.0\text{A}$
Reverse current	$I_{R1}$	-	-	90	$\mu\text{A}$	$V_R=15\text{V}$
	$I_{R2}$	-	-	200	$\mu\text{A}$	$V_R=30\text{V}$

● Electrical characteristics curves

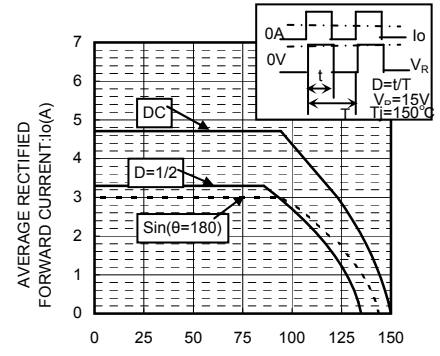




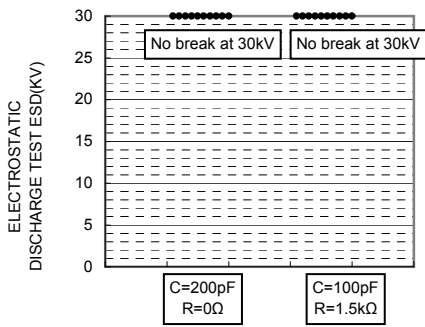
REVERSE VOLTAGE :  $V_R$ (V)  
VR- $P_R$  CHARACTERISTICS



AMBIENT TEMPERATURE:  $T_a$ (°C)  
Derating Curve\*( $I_o$ - $T_a$ )



CASE TEMPERATURE:  $T_c$ (°C)  
Derating Curve\*( $I_o$ - $T_c$ )



ESD DISPERSION MAP

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