

# Schottky barrier diode

## RSX301LA-30

**●Applications**

General rectification

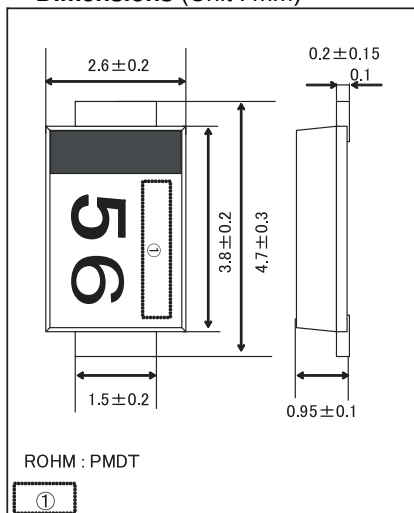
**●Features**

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

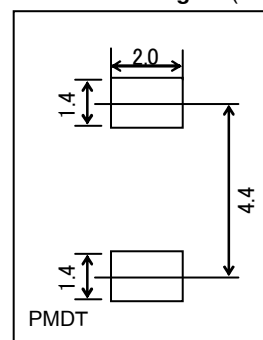
**●Construction**

Silicon epitaxial planer

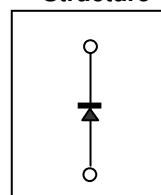
**●Dimensions (Unit : mm)**



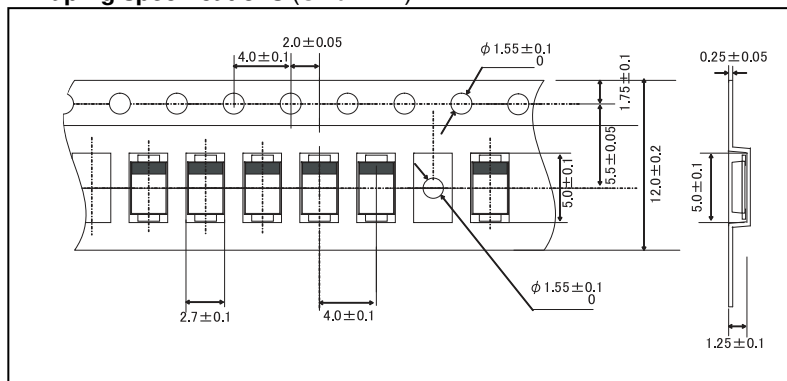
**● Land size figure (Unit : mm)**



**●Structure**



**●Taping specifications (Unit : mm)**



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

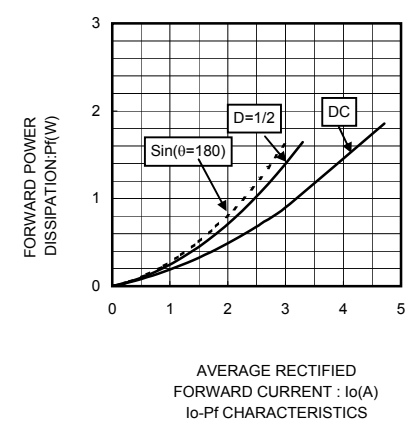
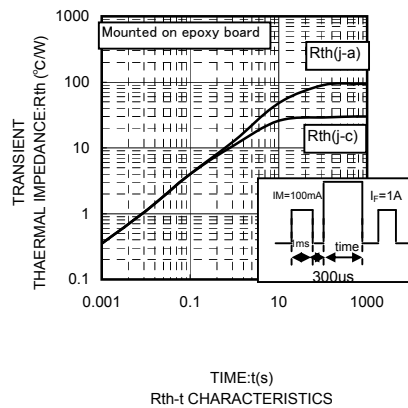
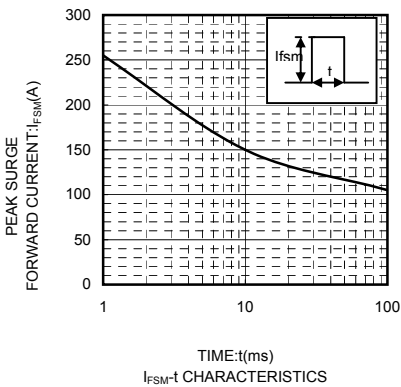
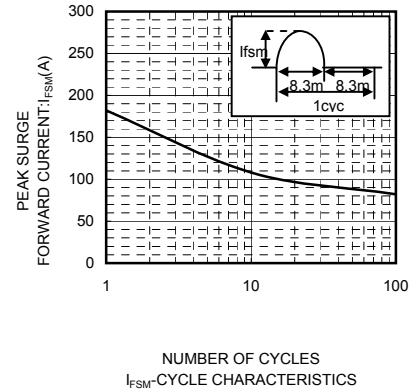
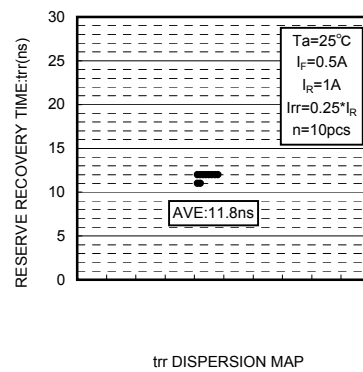
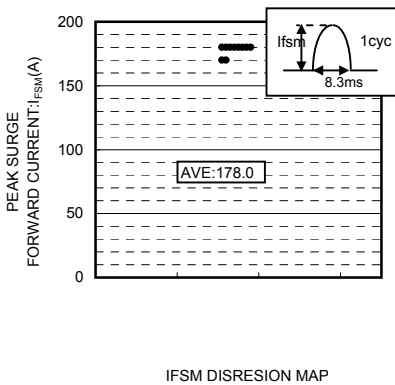
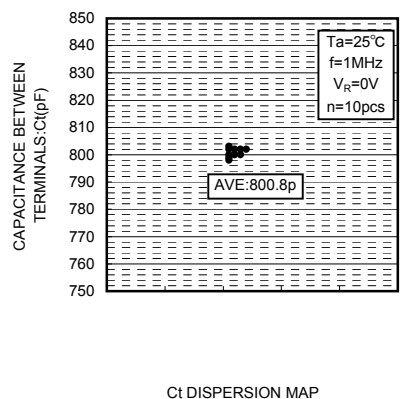
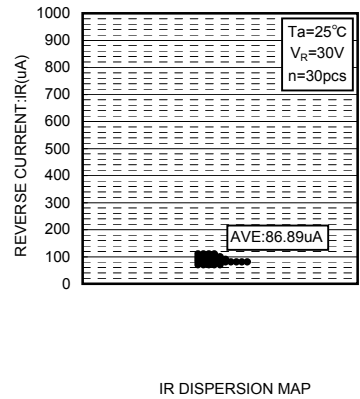
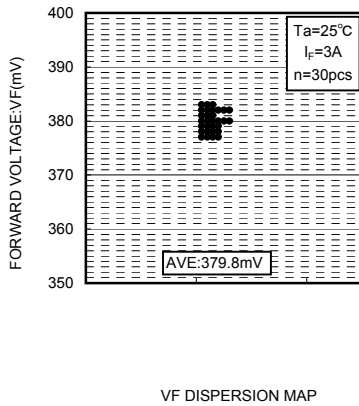
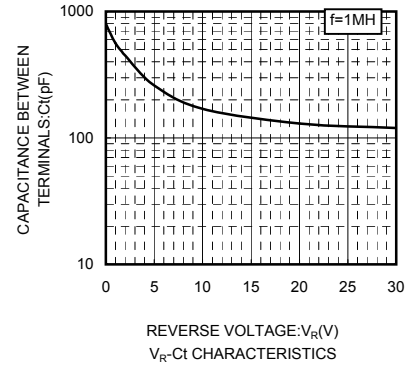
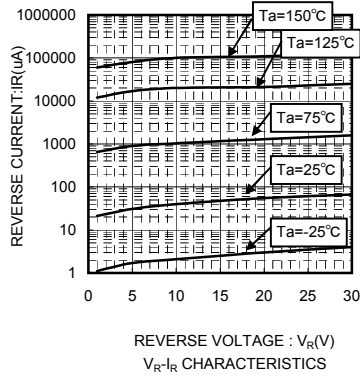
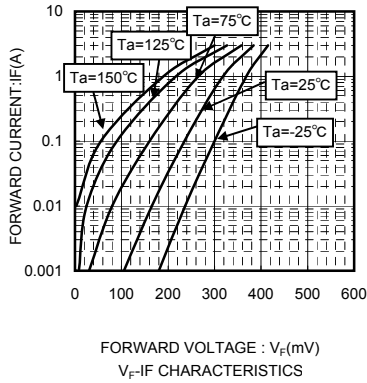
Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	$V_{RM}$	30	V
Reverse voltage (DC)	$V_R$	30	V
Average rectified forward current	$I_o$	3	A
Forward current saurge peak (60Hz / 1cyc)	$I_{FSM}$	70	A
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{stg}$	-40 to +150	°C

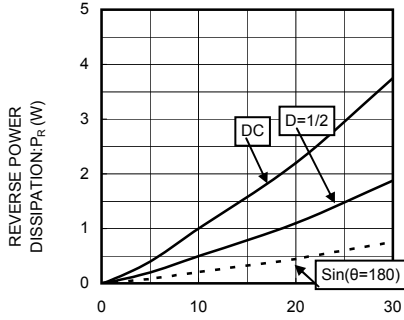
(\*1) $T_c=90^\circ\text{C}$  max Mounted on epoxy board. 180°Half sine wave

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

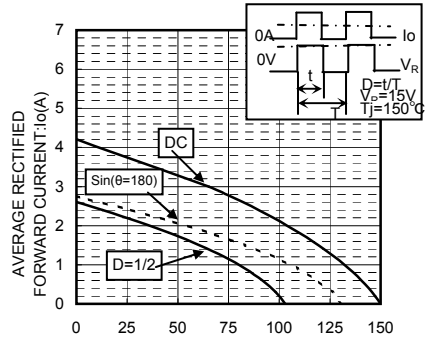
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_F$	-	-	0.42	V	$I_F=3.0\text{A}$
Reverse current	$I_{R1}$	-	-	90	$\mu\text{A}$	$V_R=15\text{V}$
	$I_{R2}$	-	-	200	$\mu\text{A}$	$V_R=30\text{V}$

●Electrical characteristics curves

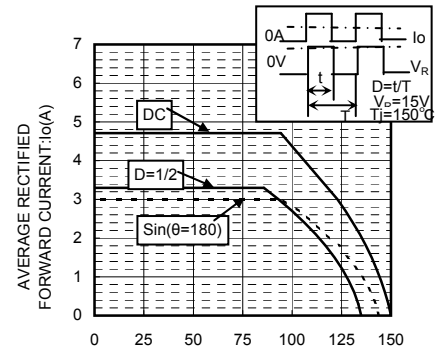




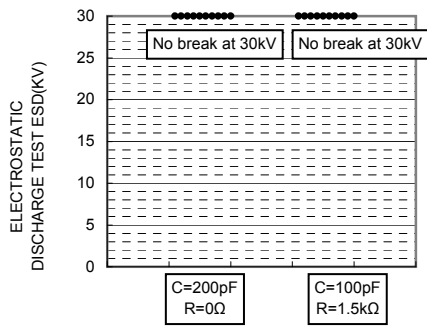
REVERSE VOLTAGE : V<sub>R</sub>(V)  
VR-P<sub>R</sub> CHARACTERISTICS



AMBIENT TEMPERATURE:T<sub>a</sub>(°C)  
Derating Curve\*(I<sub>o</sub>-T<sub>a</sub>)



CASE TEMPERATURE:T<sub>c</sub>(°C)  
Derating Curve\*(I<sub>o</sub>-T<sub>c</sub>)



ESD DISPERSION MAP

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