

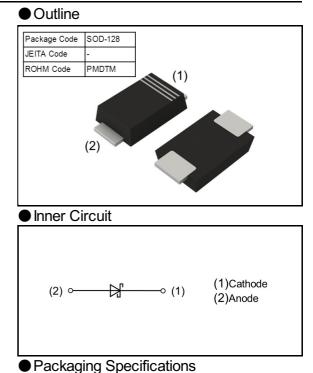
# RSX205LAM30

## Data sheet

V <sub>R</sub>	30	V
۱ <sub>0</sub>	2	А
IFSM	60	A

Features

High reliability Small power mold type Low  $V_F$  and low  $I_R$ 



- Application
  General rectification
- Structure
  Silicon epitaxial planar

### Packing

Packing	Embossed Tape	
Reel Size(mm)	180	
Taping Width(mm)	12	
Quantity(pcs)	3000	
Taping Code	TR	
Marking	58	

• Absolute Maximum Ratings ( $T_c=25^{\circ}C$  unless otherwise specified)

Parameter	Symbol	Conditions	Limits	Unit
Repetitive peak reverse voltage	V <sub>RM</sub>	Duty≦0.5	30	V
Reverse voltage	V <sub>R</sub>	Reverse direct voltage	30	V
Average rectified forward current	Ι <sub>ο</sub>	Glass epoxy mounted, 60Hz half sin waveform, resistive load, T <sub>c</sub> =115°c Max.	2	А
Peak forward surge current	IFSM	60Hz half sin waveform, Non-repetitive, one cycle, T <sub>a</sub> =25°c	60	А
Junction temperature <sup>(1)</sup>	Тј	-	150	°C
Storage temperature	T <sub>stg</sub>	-	-55 ~ 150	°C

Note(1) To avoid occurrence of thermal runaway, actual board is to be designed to fulfill dPd/dTj<1/Rth(j-a)-

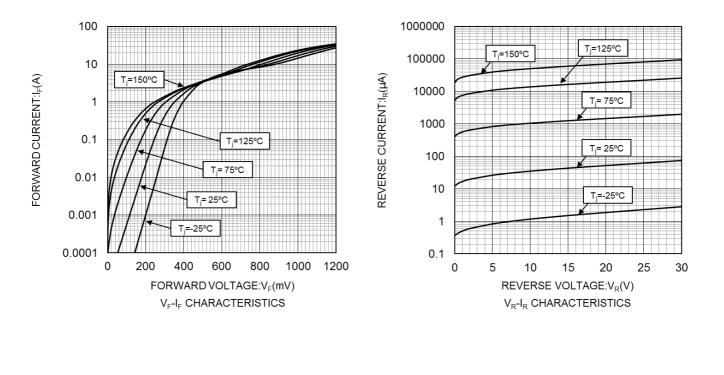
## Characteristics (T<sub>i</sub>=25°C unless otherwise specified)

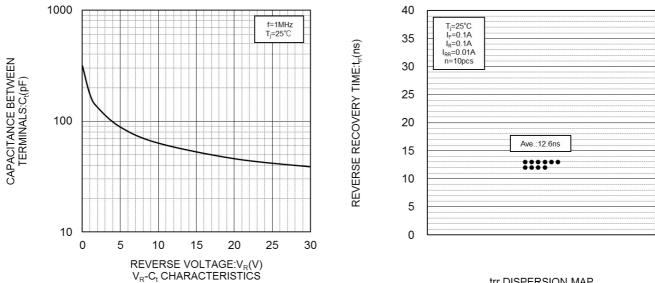
Parameter	Symbol	Conditions	Min.	Тур.	Max.	Unit
Forward voltage	VF	I <sub>F</sub> =2A	-	-	0.49	V
Reverse current	l <sub>R</sub>	V <sub>R</sub> =30V	-	-	200	μA

#### Attention

Compared with PN junction diodes, Schottky Barrier Diode is generally high reverse current (IR). The reverse loss of the diode might increase as temperature increasing that causes heat-up and further IR. This phenomenon might end up the thermal destruction(thermal runaway). Therefore please give consideration to the reverse loss and the ambient temperature when using this product.

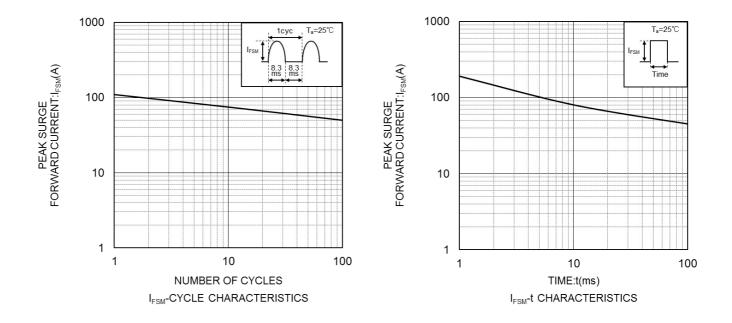
## Characteristic Curves

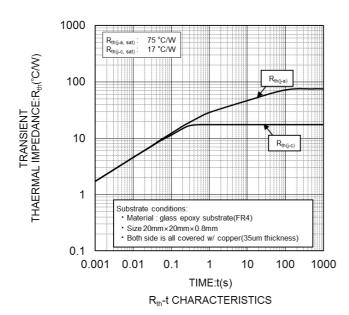




trr DISPERSION MAP

## Characteristic Curves

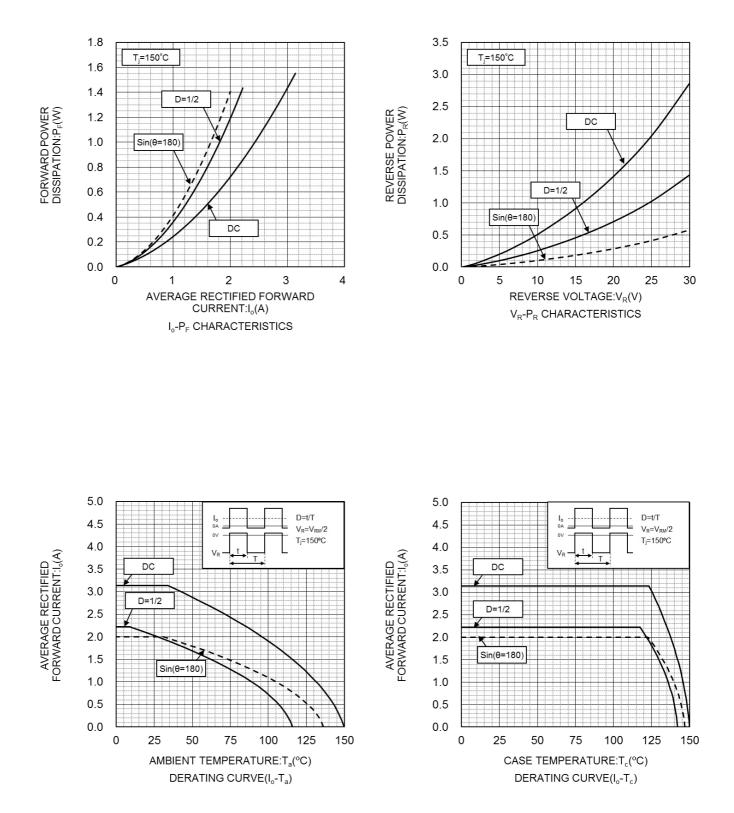




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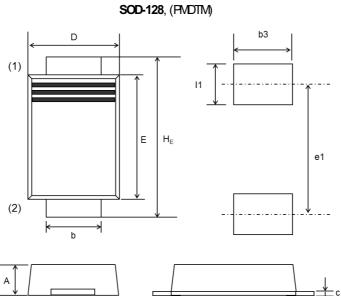


## Characteristic Curves





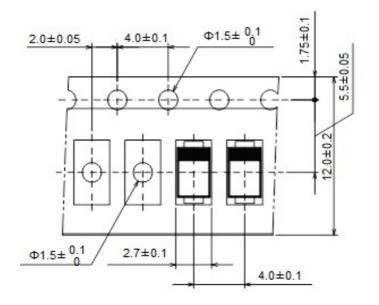
## Dimensions

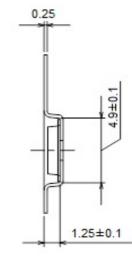


$\rightarrow$ $ _{L_p} \leftarrow$						
DIM	Milimeters		Inches			
DIN	Min.	Average	Max.	Min.	Average	Max.
A	0.85	0.95	1.05	0.033	0.037	0.041
b	1.30	1.50	1.70	0.051	0.059	0.067
с	0.12	0.17	0.27	0.005	0.007	0.011
D	2.30	2.50	2.70	0.091	0.098	0.106
E	3.50	3.70	3.90	0.138	0.146	0.154
HE	4.56	4.70	4.84	0.180	0.185	0.191
Lp	-	0.75	-	-	0.030	-
11	-	1.40	-	-	0.055	-
b3	-	2.00	-	-	0.079	-
e1	-	4.40	-	-	0.173	-

(1) The marking bar indicates the cathode.(2) The direction indicates the anode.

•Taping (Unit:mm)





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  - [e] Use of our Products in proximity to heat-producing components, plastic cords, or other flammable items
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  - [h] Use of the Products in places subject to dew condensation
- 4. The Products are not subject to radiation-proof design.
- 5. Please verify and confirm characteristics of the final or mounted products in using the Products.
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- 7. De-rate Power Dissipation depending on ambient temperature. When used in sealed area, confirm that it is the use in the range that does not exceed the maximum junction temperature.
- 8. Confirm that operation temperature is within the specified range described in the product specification.
- 9. ROHM shall not be in any way responsible or liable for failure induced under deviant condition from what is defined in this document.

#### Precaution for Mounting / Circuit board design

- 1. When a highly active halogenous (chlorine, bromine, etc.) flux is used, the residue of flux may negatively affect product performance and reliability.
- 2. In principle, the reflow soldering method must be used on a surface-mount products, the flow soldering method must be used on a through hole mount products. If the flow soldering method is preferred on a surface-mount products, please consult with the ROHM representative in advance.

For details, please refer to ROHM Mounting specification

#### **Precautions Regarding Application Examples and External Circuits**

- 1. If change is made to the constant of an external circuit, please allow a sufficient margin considering variations of the characteristics of the Products and external components, including transient characteristics, as well as static characteristics.
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#### **Precaution for Electrostatic**

This Product is electrostatic sensitive product, which may be damaged due to electrostatic discharge. Please take proper caution in your manufacturing process and storage so that voltage exceeding the Products maximum rating will not be applied to Products. Please take special care under dry condition (e.g. Grounding of human body / equipment / solder iron, isolation from charged objects, setting of lonizer, friction prevention and temperature / humidity control).

#### Precaution for Storage / Transportation

- 1. Product performance and soldered connections may deteriorate if the Products are stored in the places where:
  - [a] the Products are exposed to sea winds or corrosive gases, including Cl<sub>2</sub>, H<sub>2</sub>S, NH<sub>3</sub>, SO<sub>2</sub>, and NO<sub>2</sub>
  - [b] the temperature or humidity exceeds those recommended by ROHM
  - [c] the Products are exposed to direct sunshine or condensation
  - [d] the Products are exposed to high Electrostatic
- 2. Even under ROHM recommended storage condition, solderability of products out of recommended storage time period may be degraded. It is strongly recommended to confirm solderability before using Products of which storage time is exceeding the recommended storage time period.
- 3. Store / transport cartons in the correct direction, which is indicated on a carton with a symbol. Otherwise bent leads may occur due to excessive stress applied when dropping of a carton.
- 4. Use Products within the specified time after opening a humidity barrier bag. Baking is required before using Products of which storage time is exceeding the recommended storage time period.

#### **Precaution for Product Label**

A two-dimensional barcode printed on ROHM Products label is for ROHM's internal use only.

#### **Precaution for Disposition**

When disposing Products please dispose them properly using an authorized industry waste company.

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