# Schottky Barrier Diode

RB088NS100 Data Sheet

### Application

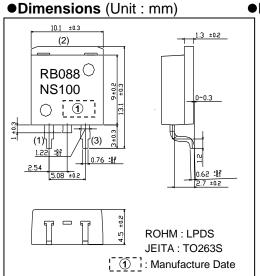
Switching power supply

#### Features

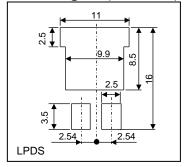
- 1) Cathode common type
- 2) High reliability
- 3) Super low I<sub>R</sub>

#### Construction

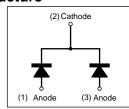
Silicon epitaxial planar type



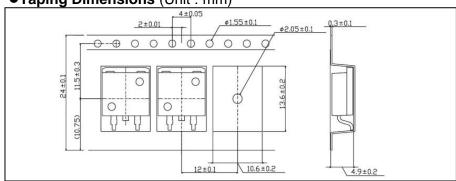
●Land Size Figure (Unit : mm)



#### Structure



● Taping Dimensions (Unit: mm)



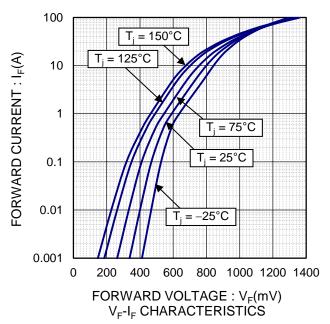
## ● Absolute Maximum Ratings (T<sub>c</sub>= 25°C)

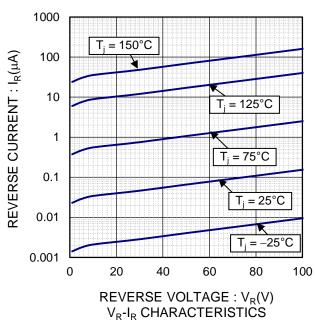
Parameter	Symbol	Conditions	Limits	Unit					
Repetitive peak reverse voltage	$V_{RM}$	Duty≦0.5	110	V					
Reverse voltage	$V_R$	Direct reverse voltage	100	V					
Average forward rectified current	I <sub>o</sub>	Glass epoxy board mounted, 60Hz half sin wave, resistive load, $I_{\rm O}/2$ per diode, $T_{\rm c}$ =137°C Max.	10	Α					
Non-repetitive forward current surge peak	I <sub>FSM</sub>	60Hz half sin wave, Non-repetitive at T <sub>a</sub> =25°C, 1cycle, per diode	100	Α					
Operating junction temperature	T <sub>j</sub>	-	150	°C					
Storage temperature	T <sub>stg</sub>	-	-55 to +150	°C					

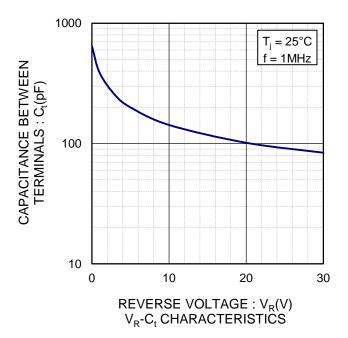
## ●Electrical and Thermal Characteristics (T<sub>i</sub>= 25°C)

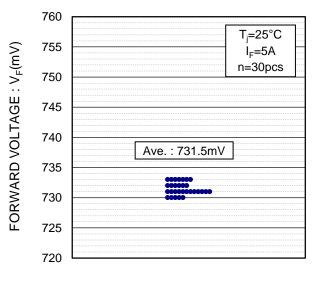
Parameter	Symbol	Conditions	Min.	Тур.	Max.	Unit
Forward voltage	$V_{F}$	I <sub>F</sub> =5A	-	-	0.87	V
Reverse current	I <sub>R</sub>	V <sub>R</sub> =100V	-	-	5	μА
Thermal resistance	R <sub>th(j-c)</sub>	Junction to case	1	1	2	°C/W

#### **•**Electrical Characteristic Curves



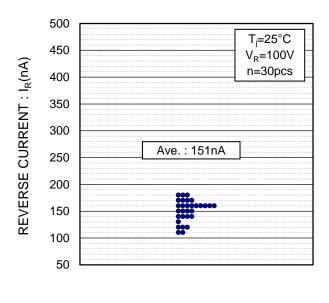


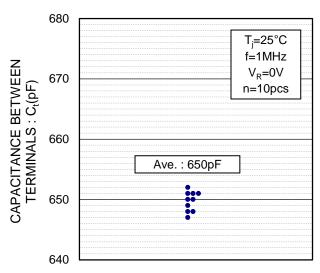




V<sub>F</sub> DISPERSION MAP

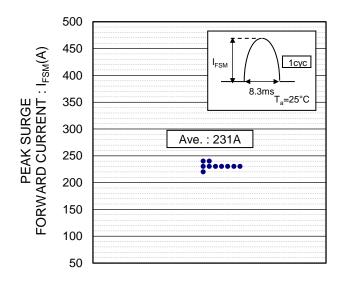
#### • Electrical Characteristic Curves



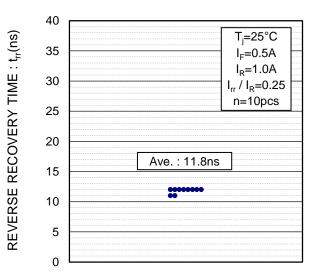


I<sub>R</sub> DISPERSION MAP

C<sub>t</sub> DISPERSION MAP

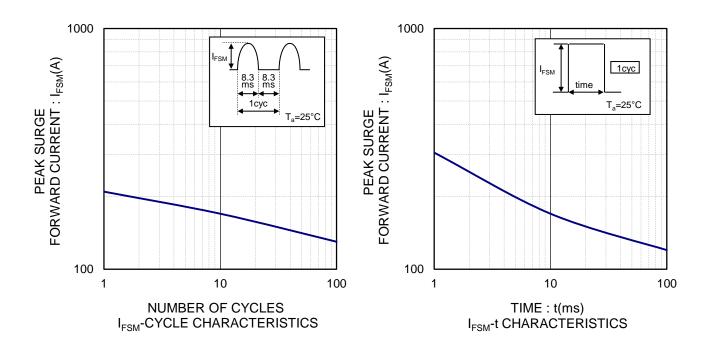


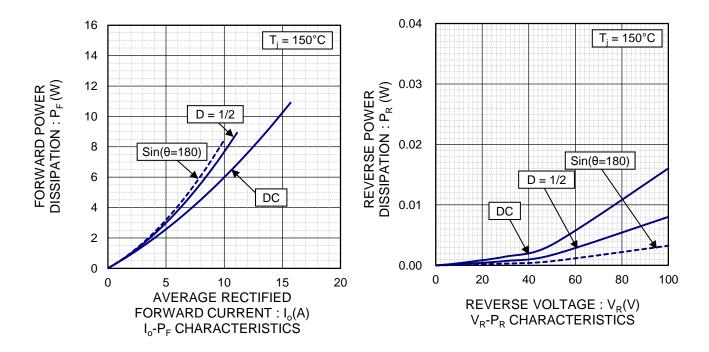
I<sub>FSM</sub> DISPERSION MAP



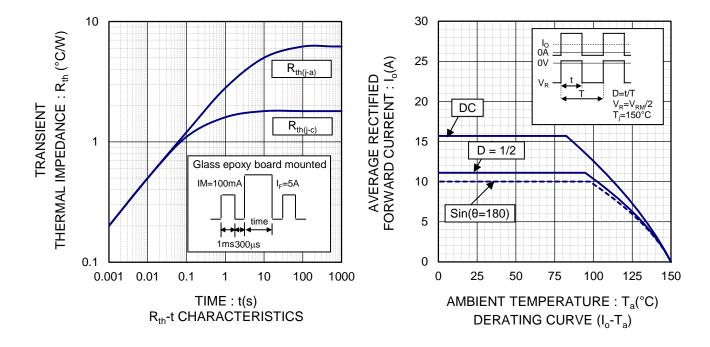
t<sub>rr</sub> DISPERSION MAP

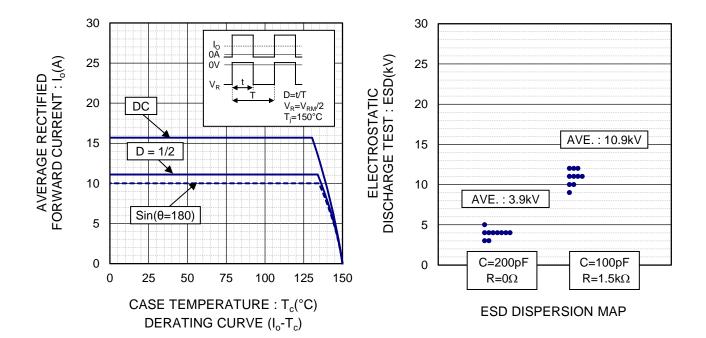
#### **•**Electrical Characteristic Curves





#### **•**Electrical Characteristic Curves





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