

# Schottky Barrier Diode

## RBQ20NS65A

●Applications

General rectification

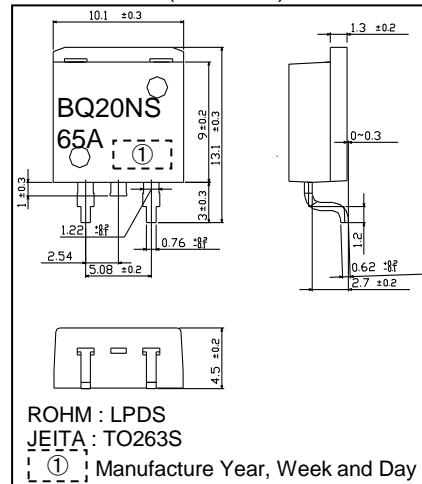
●Features

- 1) Cathode Common Dual type.(LPDS)
- 2) Low  $I_R$ .

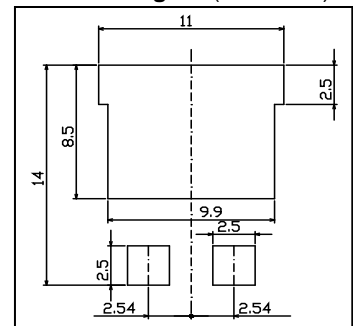
●Construction

Silicon epitaxial planer

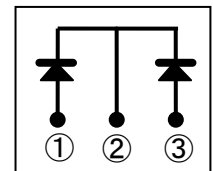
●Dimensions (Unit : mm)



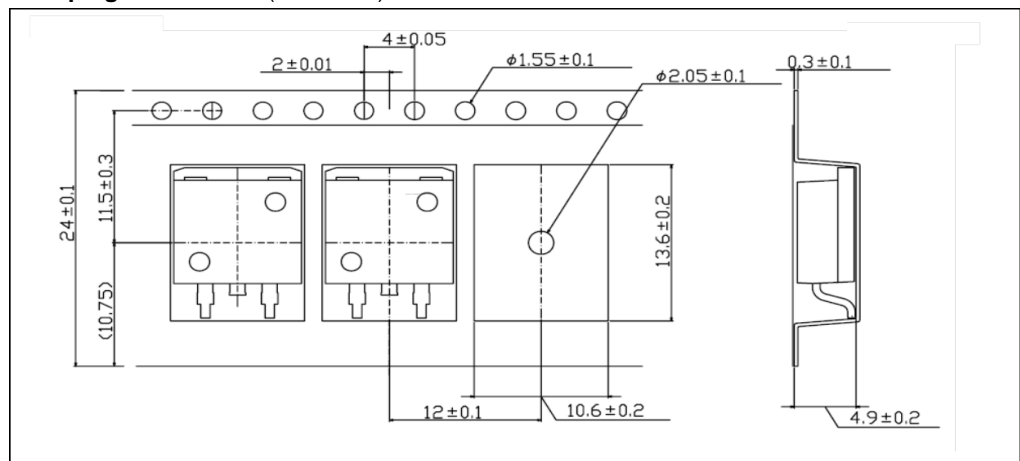
●Land size figure (Unit : mm)



●Structure



●Taping dimensions (Unit : mm)



●Absolute maximum ratings ( $T_c=25^\circ\text{C}$ )

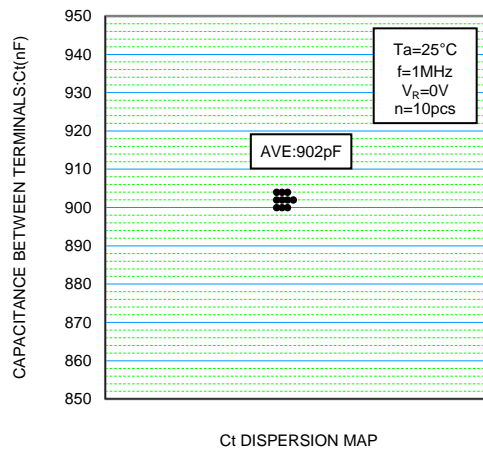
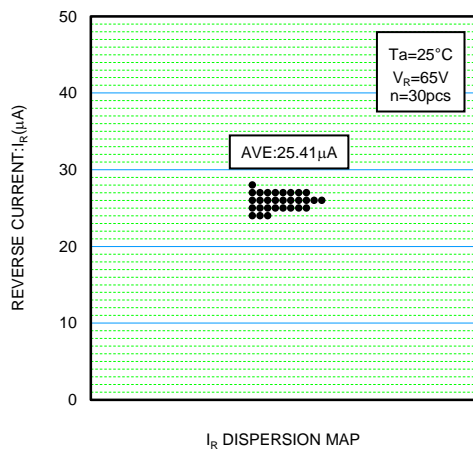
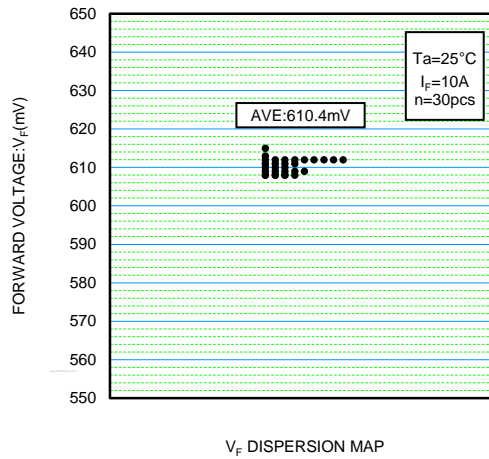
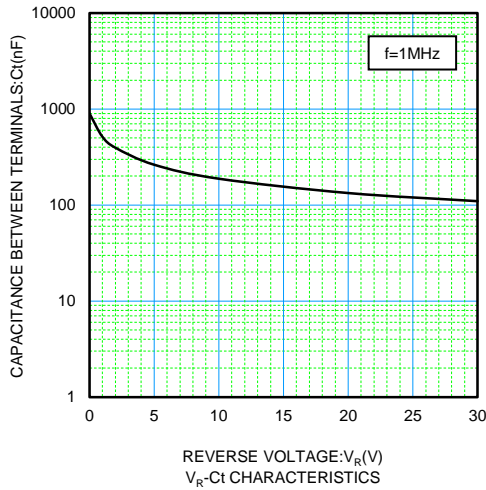
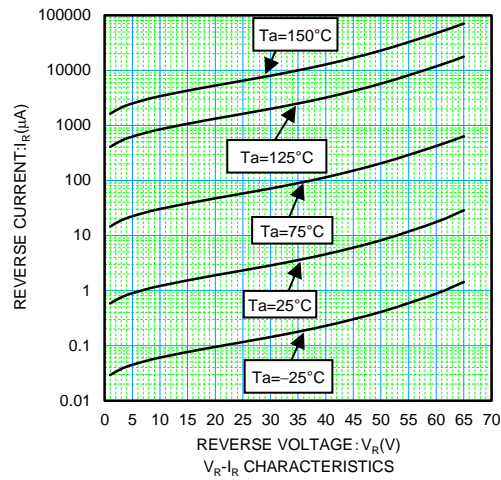
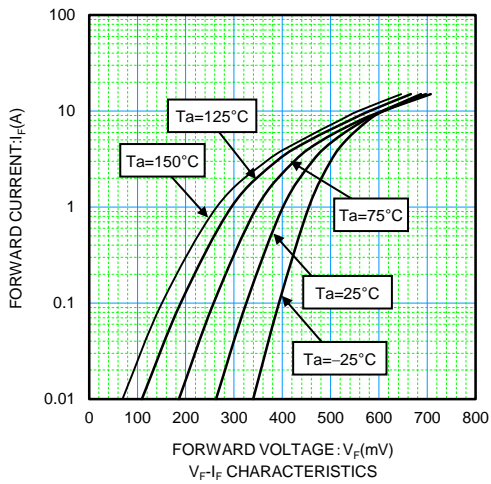
Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive)	$V_{RM}$	65	V
Reverse voltage (DC)	$V_R$	65	V
Average rectified forward current (*1)	$I_o$	20	A
Forward current surge peak (60Hz · 1cyc) (*2)	$I_{FSM}$	100	A
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-40 to +150	$^\circ\text{C}$

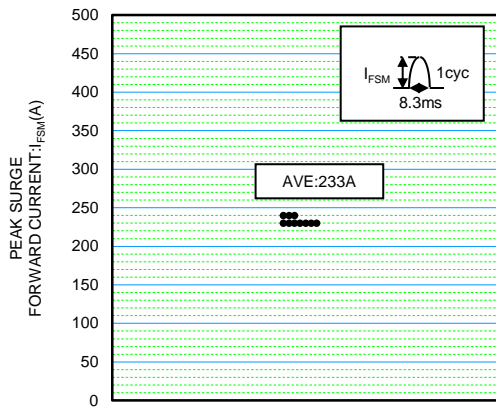
(\*1) 60Hz half sin wave, 1/2  $I_o$  per diode.

(\*2) 60Hz half sin wave, one cycle, non-repetitive at  $T_j=25^\circ\text{C}$ .

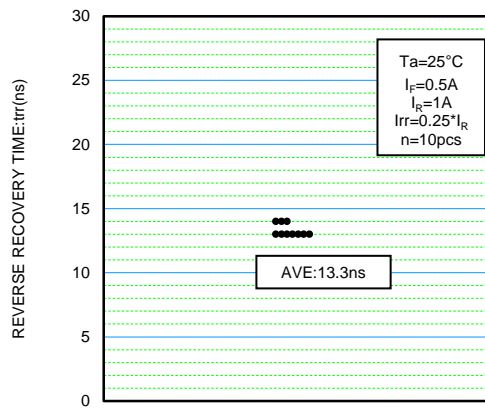
●Electrical characteristics ( $T_j=25^\circ\text{C}$ )

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_F$	-	-	0.69	V	$I_F=10\text{A}$
Reverse current	$I_R$	-	-	0.3	mA	$V_R=65\text{V}$

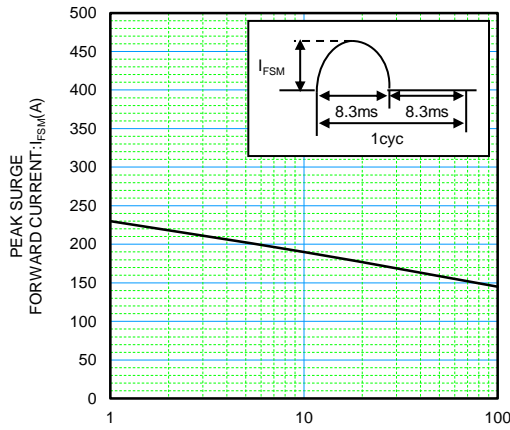




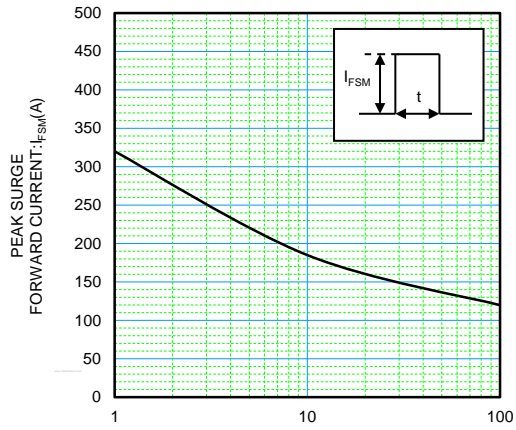
$I_{FSM}$  DISRESION MAP



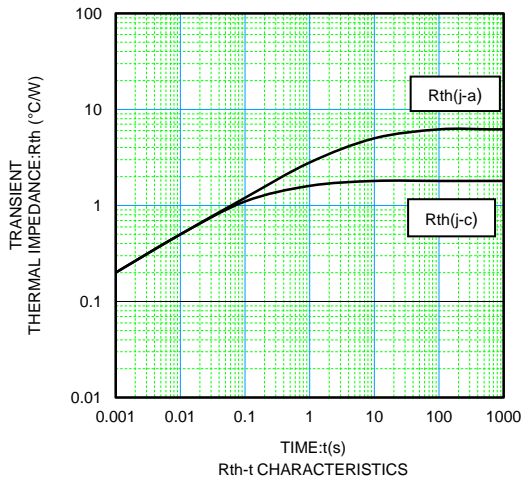
trr DISPERSION MAP



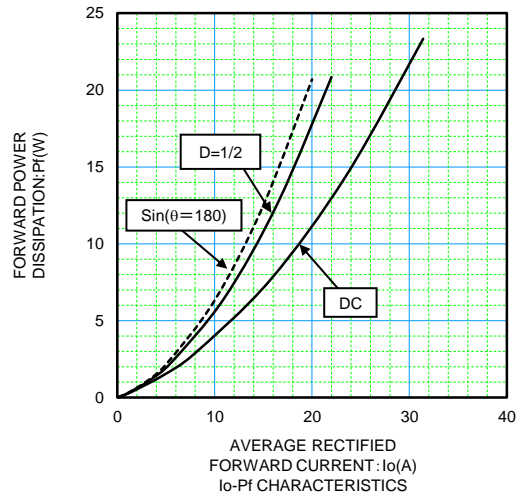
$I_{FSM}$ -CYCLE CHARACTERISTICS



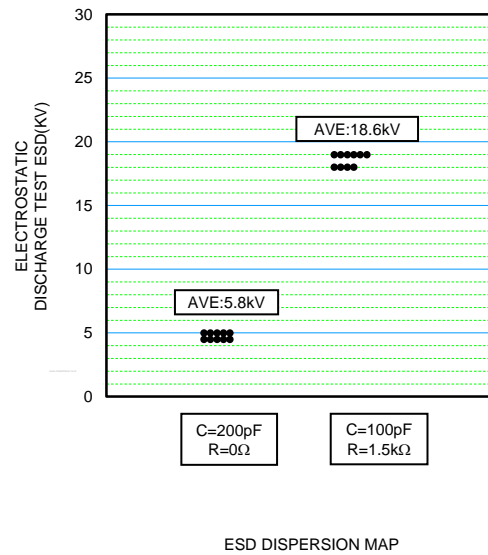
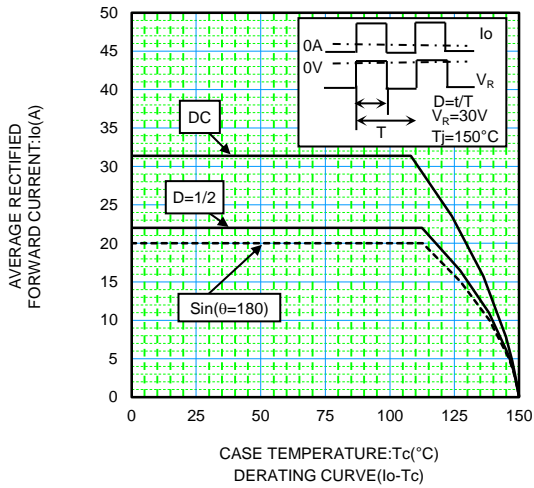
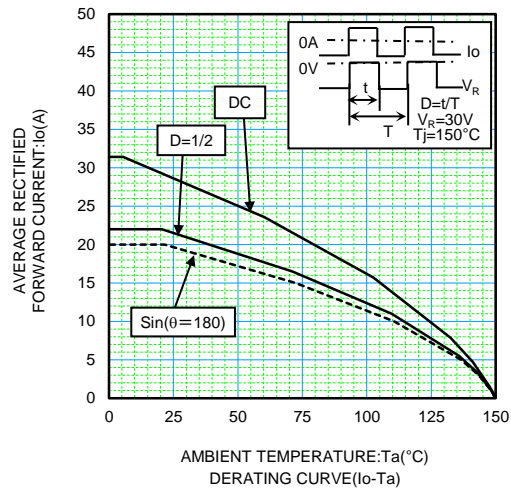
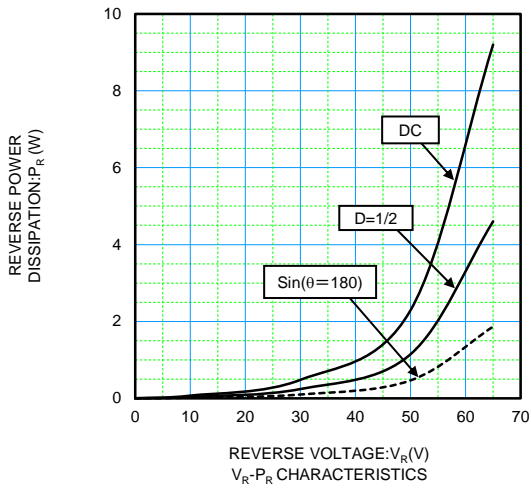
$I_{FSM}$ -t CHARACTERISTICS



Rth-t CHARACTERISTICS



AVERAGE RECTIFIED FORWARD CURRENT:  $I_o$ (A)  $I_o$ -Pf CHARACTERISTICS



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