

# Schottky Barrier Diode

## RBQ30NS65A

● **Applications**

General rectification

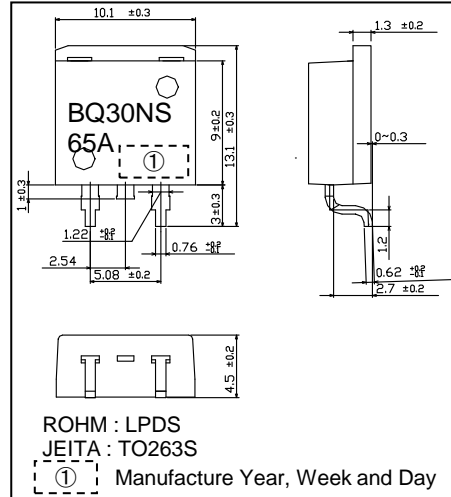
● **Features**

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

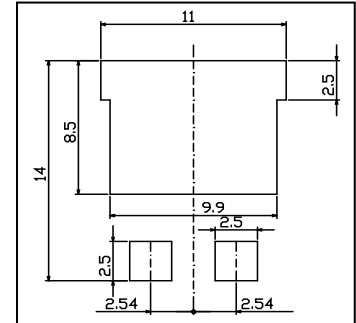
● **Construction**

Silicon epitaxial planar

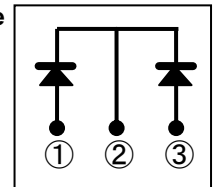
● **Dimensions (Unit : mm)**



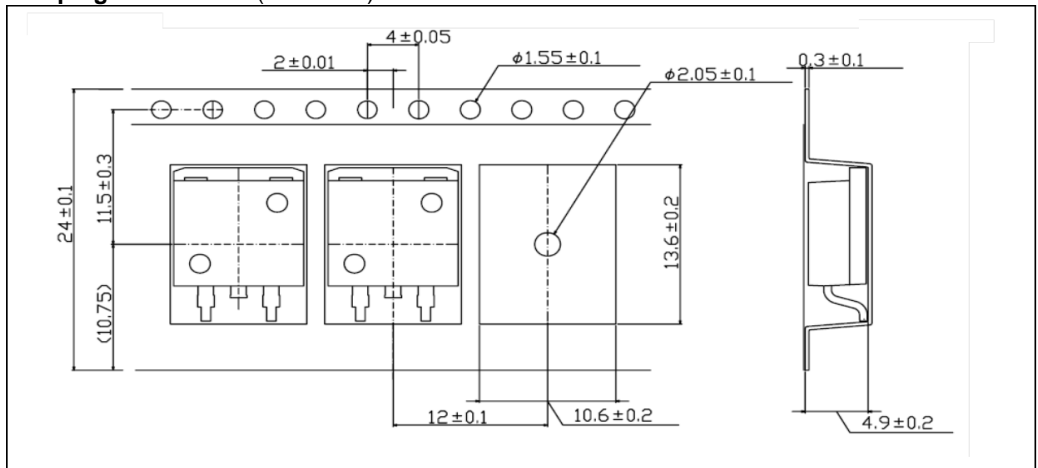
● **Land size figure (Unit : mm)**



● **Structure**



● **Taping dimensions (Unit : mm)**



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

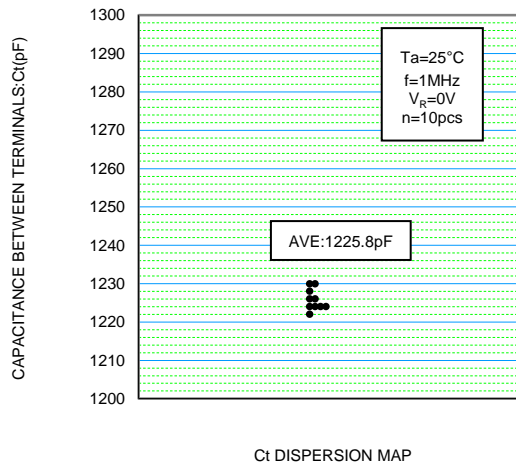
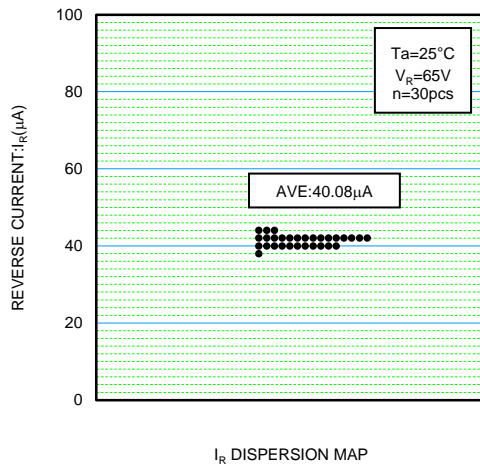
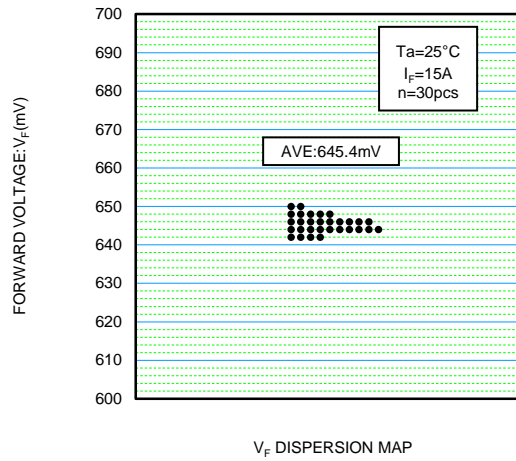
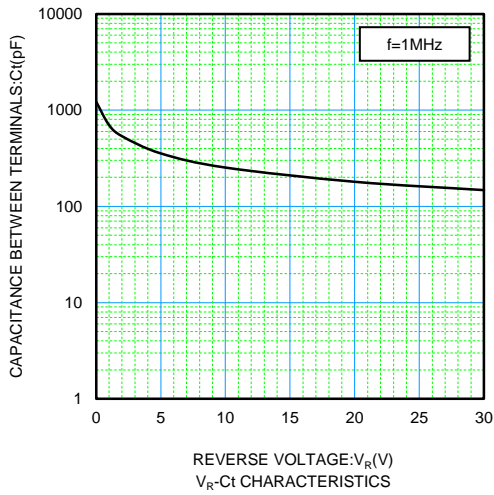
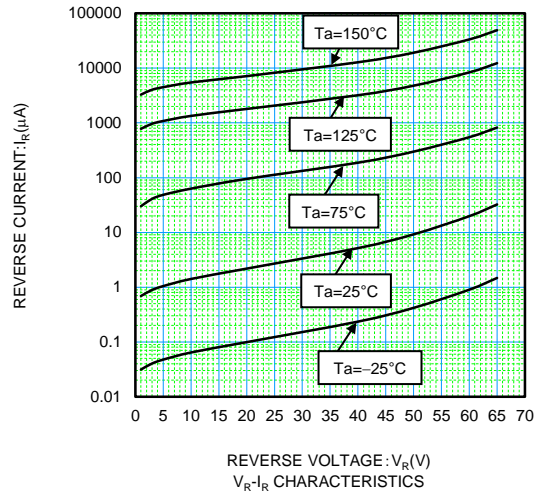
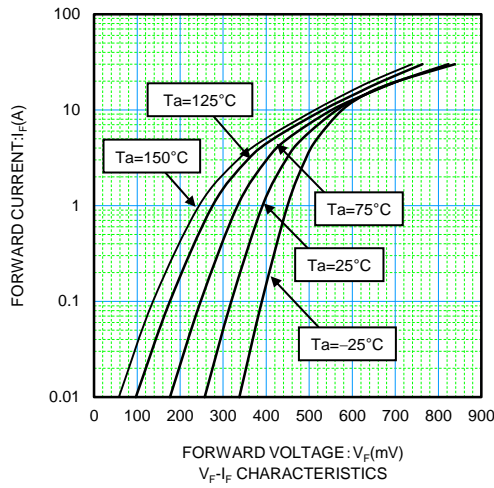
Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive)	$V_{RM}$	65	V
Reverse voltage (DC)	$V_R$	65	V
Average rectified forward current (*1)	$I_o$	30	A
Forward current surge peak (60Hz · 1cyc) (*2)	$I_{FSM}$	100	A
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{stg}$	-40 to +150	°C

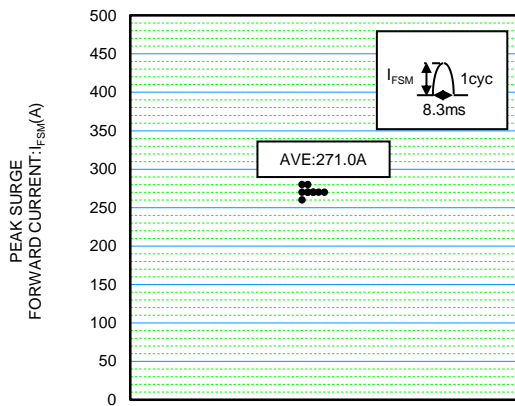
(\*1) 60Hz half sin wave, 1/2  $I_o$  per diode.

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

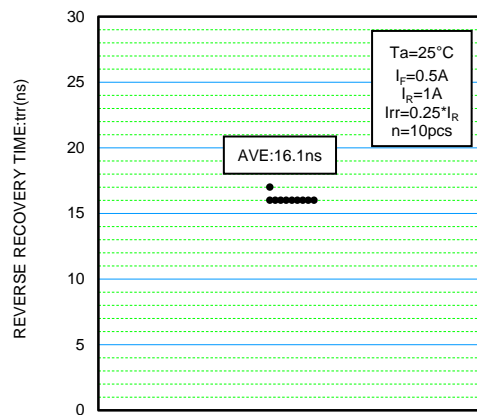
● **Electrical characteristics (Tj=25°C)**

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_F$	-	-	0.69	V	$I_F=15\text{A}$
Reverse current	$I_R$	-	-	0.45	mA	$V_R=65\text{V}$

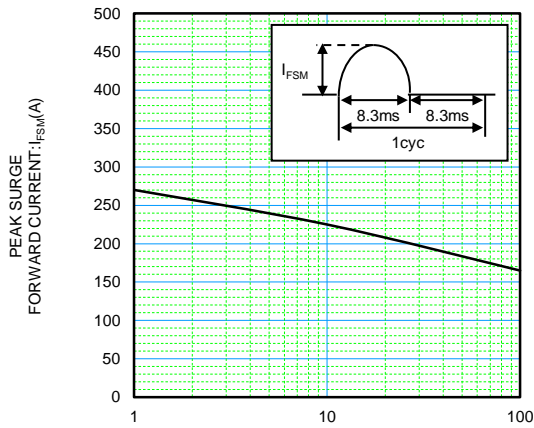




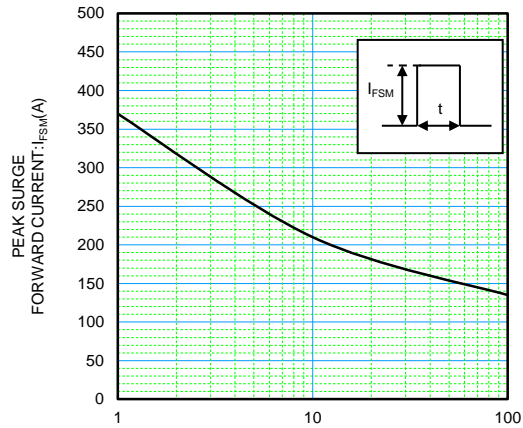
$I_{FSM}$  DISPERSION MAP



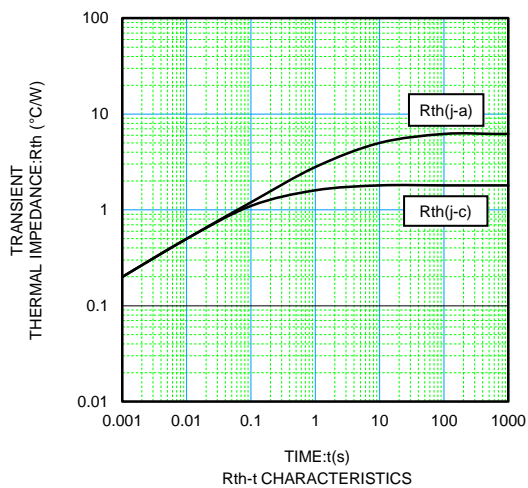
trr DISPERSION MAP



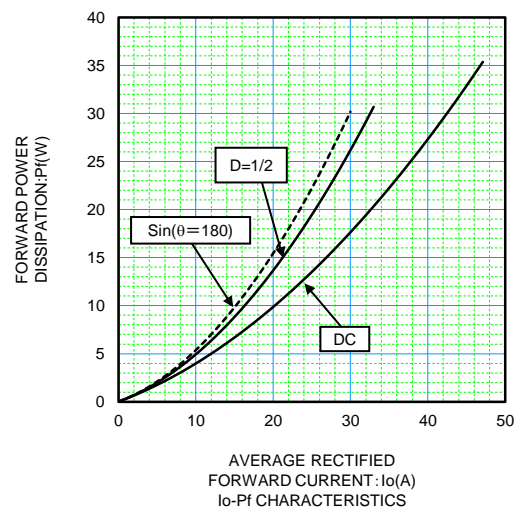
$I_{FSM}$  CYCLE CHARACTERISTICS



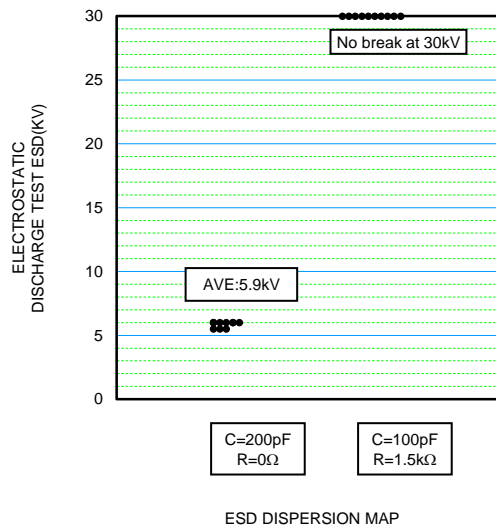
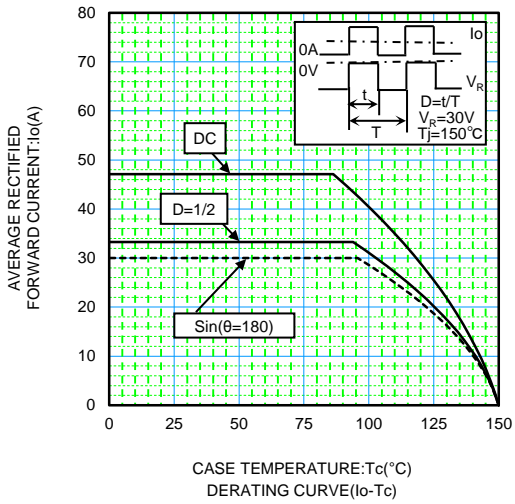
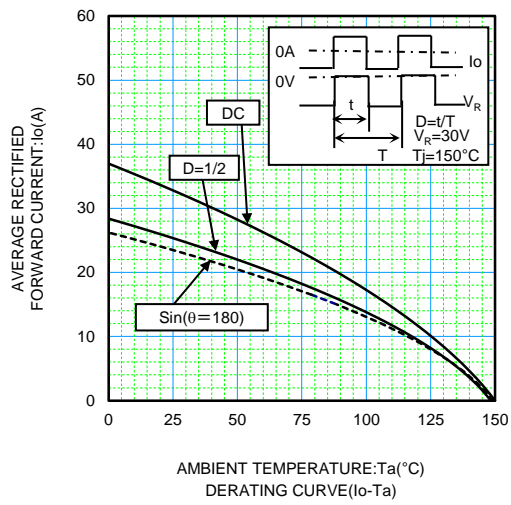
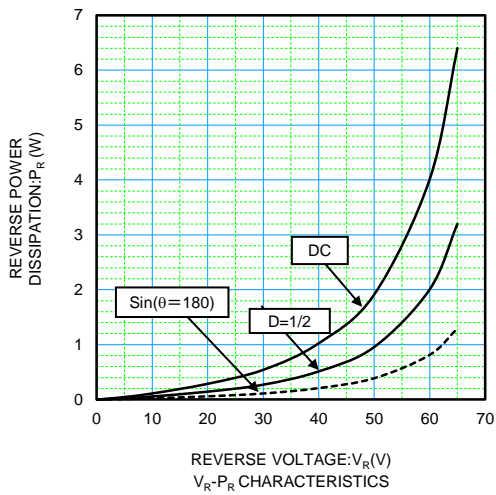
$I_{FSM}$ -t CHARACTERISTICS



Rth-t CHARACTERISTICS



Io-Pf CHARACTERISTICS



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