

Schottky Barrier Diode

RBQ10NS45A

●Applications

General rectification

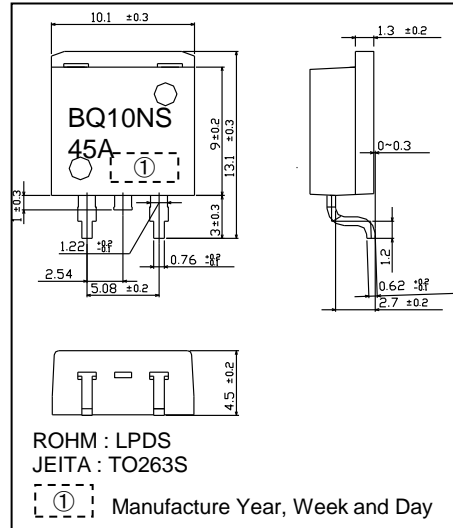
●Features

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

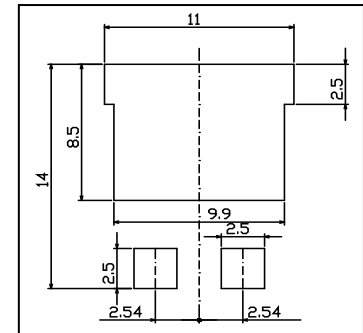
●Construction

Silicon epitaxial planer

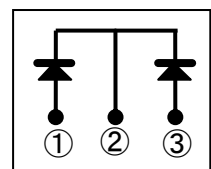
●Dimensions (Unit : mm)



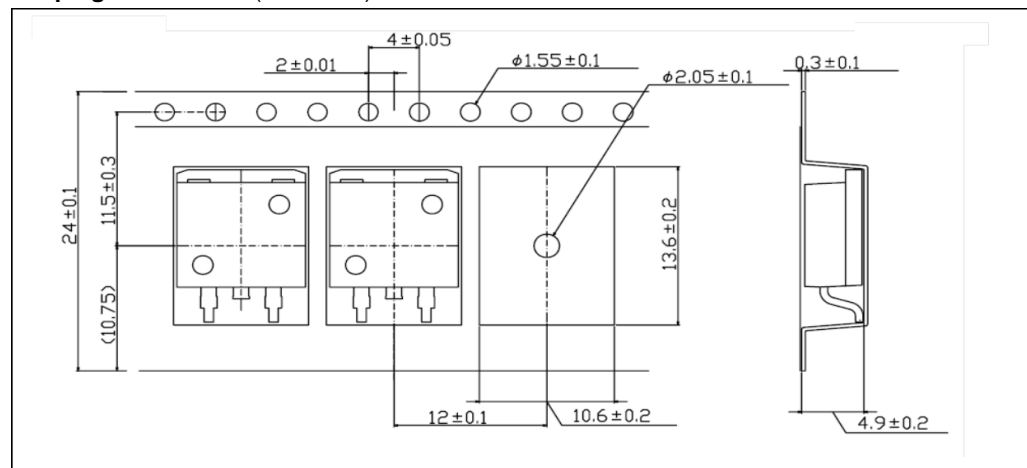
●Land size figure (Unit : mm)



●Structure



●Taping dimensions (Unit : mm)



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

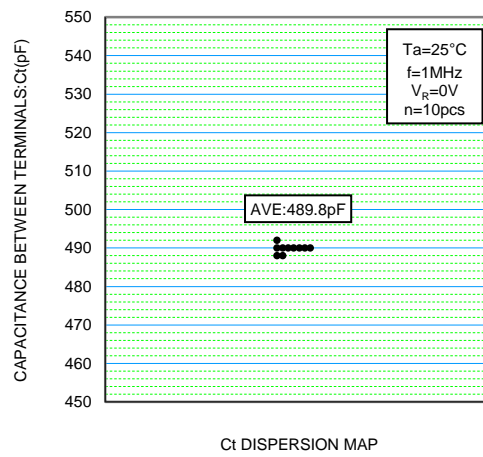
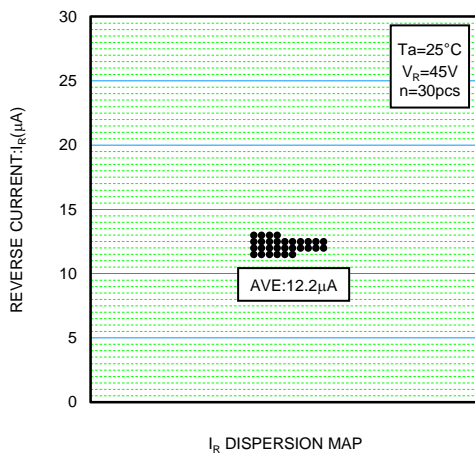
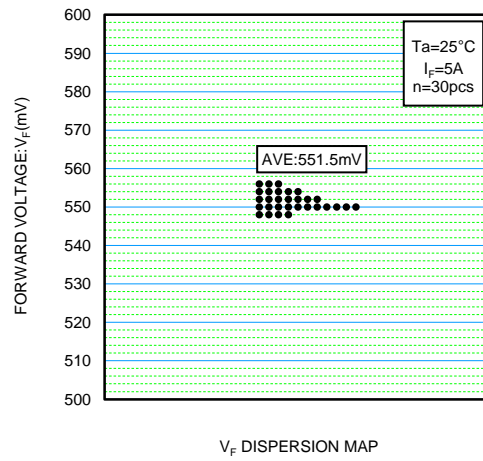
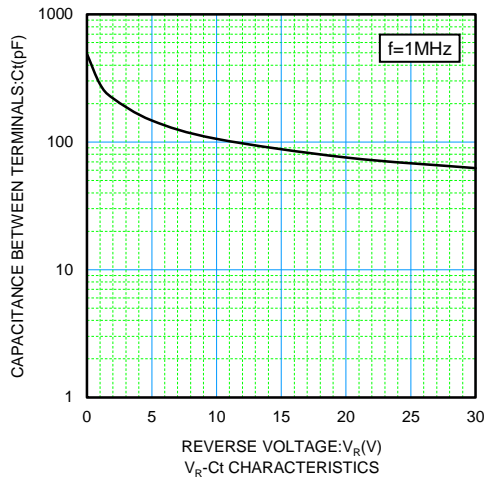
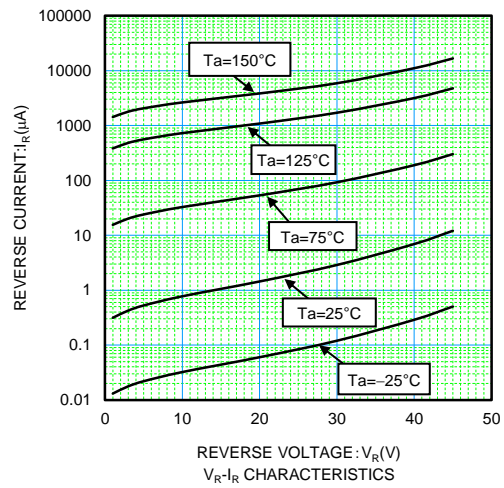
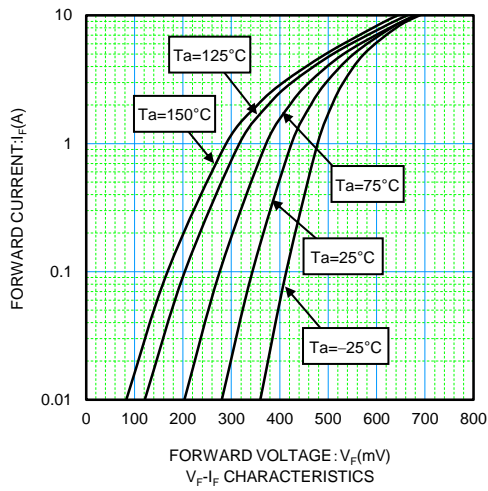
Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive)	V_{RM}	45	V
Reverse voltage (DC)	V_R	45	V
Average rectified forward current (*1)	I_O	10	A
Forward current surge peak (60Hz·1cyc) (*2)	I_{FSM}	50	A
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-40 to +150	$^\circ\text{C}$

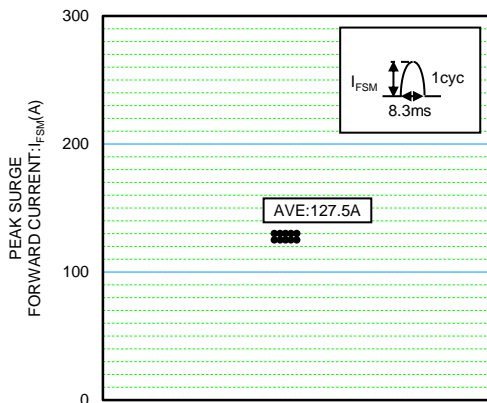
(*1) 60Hz half sin wave, 1/2 I_O per diode.

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

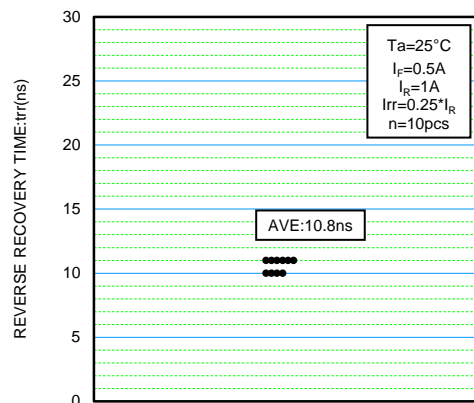
●Electrical characteristics ($T_j=25^\circ\text{C}$)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	-	-	0.65	V	$I_F=5\text{A}$
Reverse current	I_R	-	-	0.15	mA	$V_R=45\text{V}$

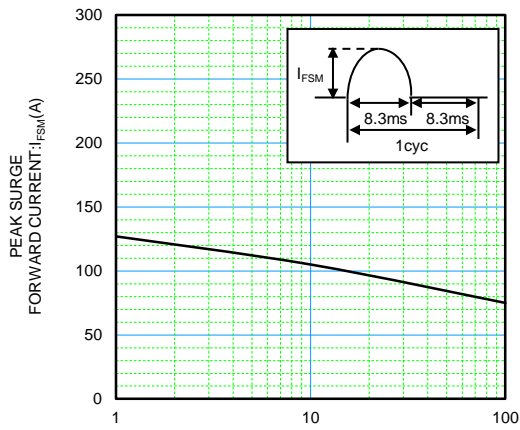




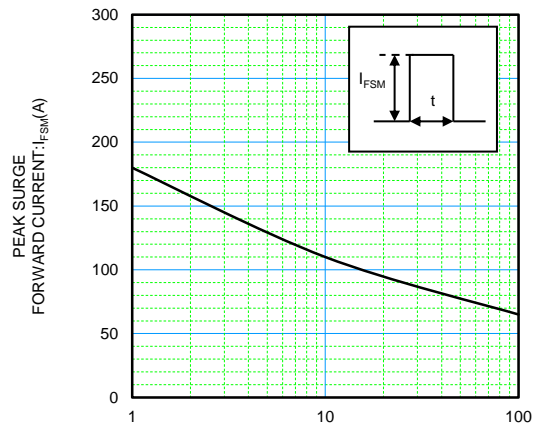
I_{FSM} DISRESION MAP



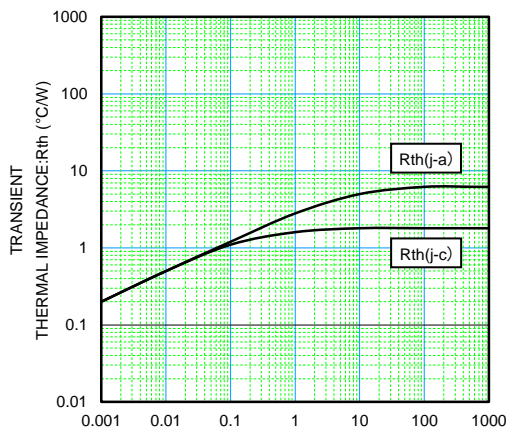
t_{rr} DISPERSION MAP



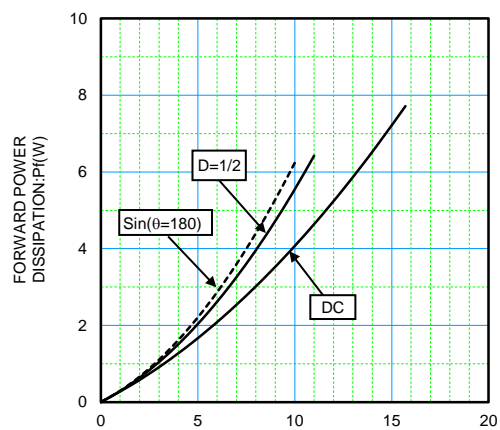
I_{FSM} CYCLE CHARACTERISTICS



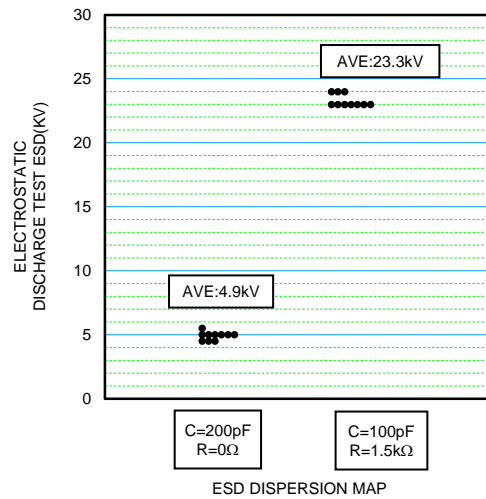
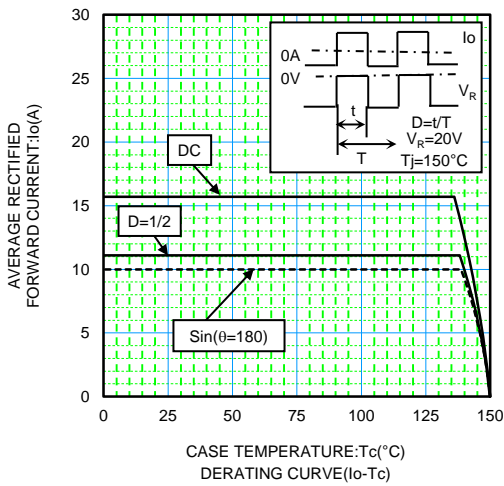
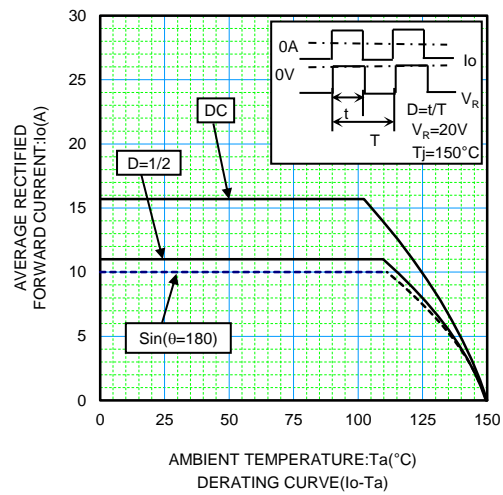
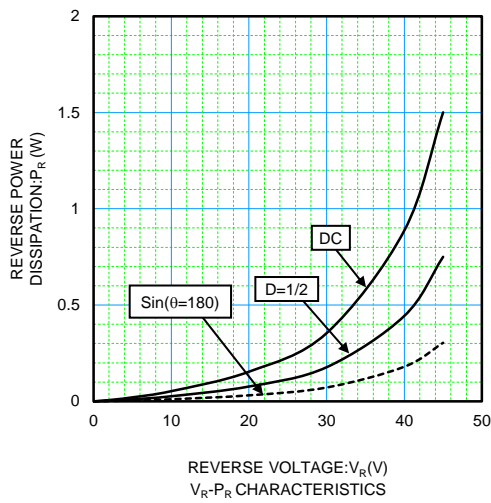
$I_{FSM} \cdot t$ CHARACTERISTICS



R_{th-t} CHARACTERISTICS



I_o - P_f CHARACTERISTICS



Notes

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