

Schottky Barrier Diode

RBQ20T45A

●Applications

General rectification

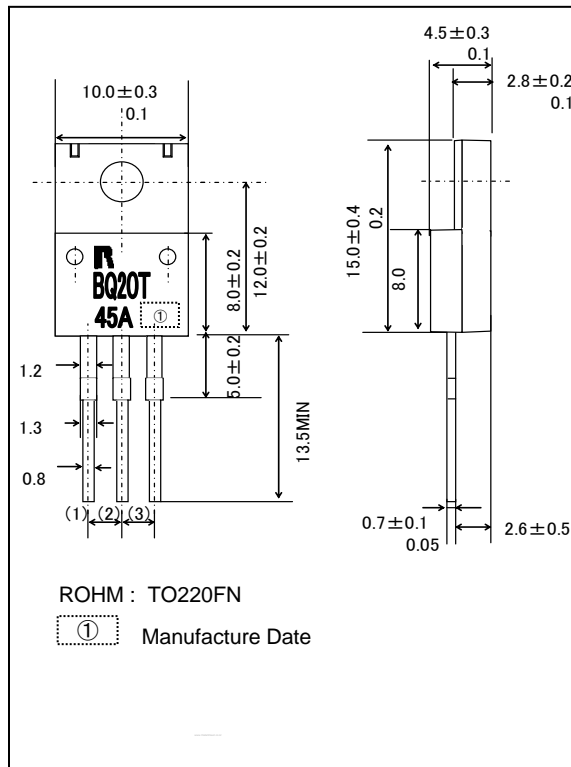
●Features

- 1) Cathode common type.
- 2) Low I_R
- 3) High reliability

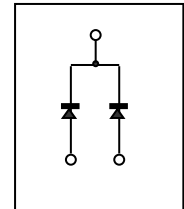
●Construction

Silicon epitaxial planer

●Dimensions (Unit : mm)



●Structure



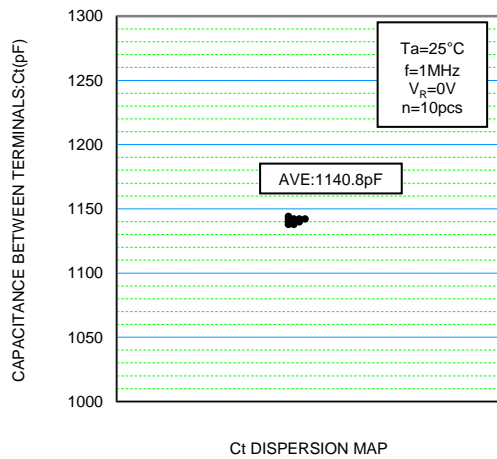
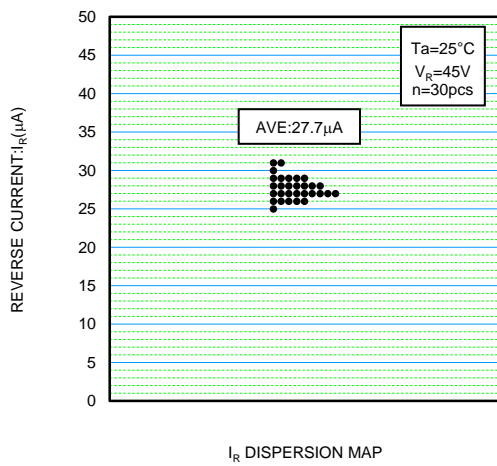
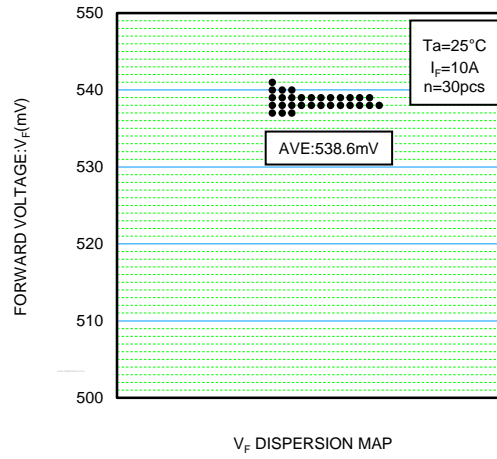
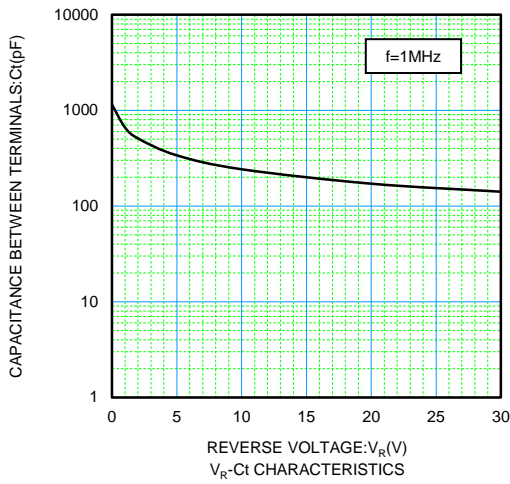
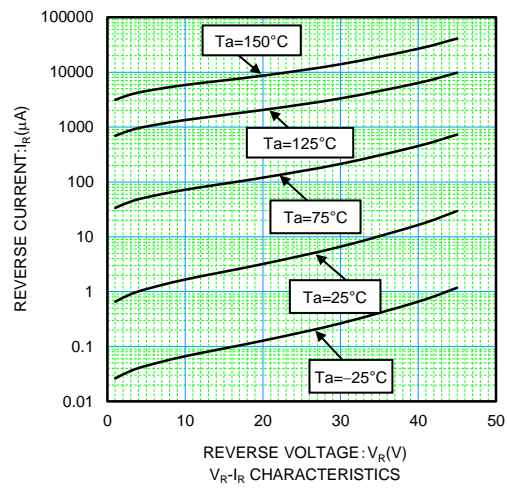
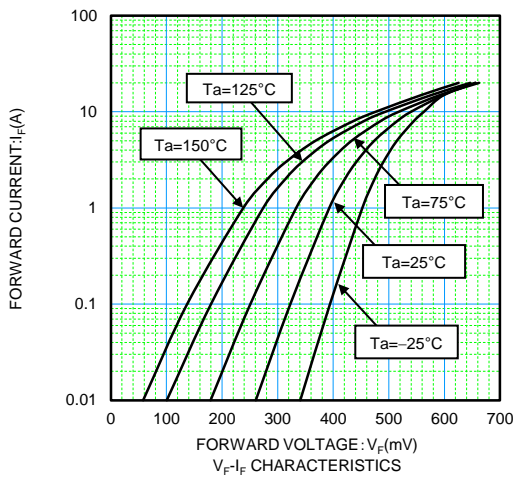
●Absolute maximum ratings ($T_c=25^\circ\text{C}$)

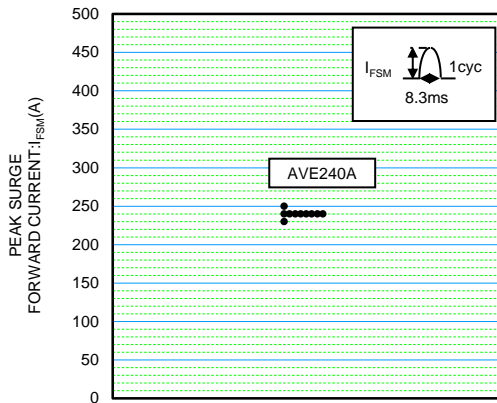
Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive)	V_{RM}	45	V
Reverse voltage (DC)	V_R	45	V
Average rectified forward current (*1)	I_o	20	A
Forward current surge peak (60Hz · 1cyc)	I_{FSM}	100	A
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-40 to +150	$^\circ\text{C}$

(*1) Rating of per diode : $I_o/2$

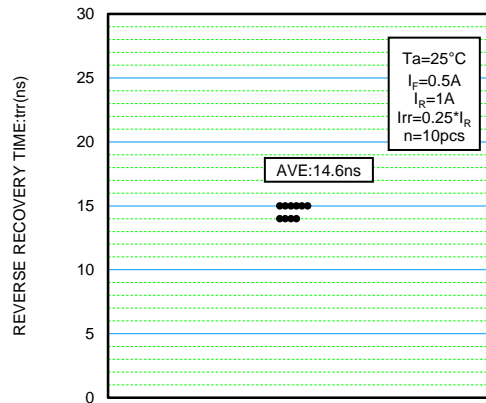
●Electrical characteristics ($T_j=25^\circ\text{C}$)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	-	-	0.65	V	$I_F=10\text{A}$
Reverse current	I_R	-	-	300	μA	$V_R=45\text{V}$

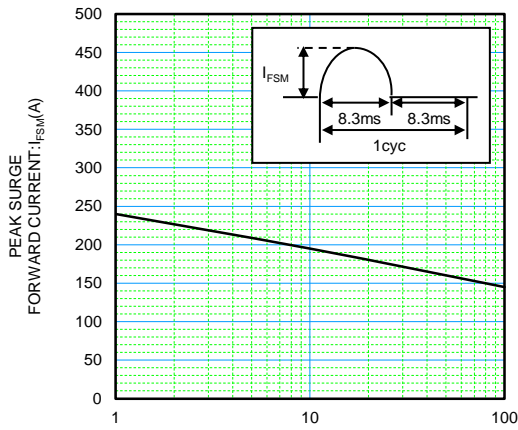




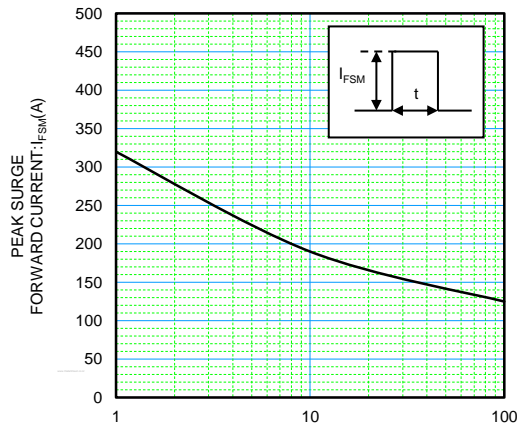
I_{FSM} DISRESION MAP



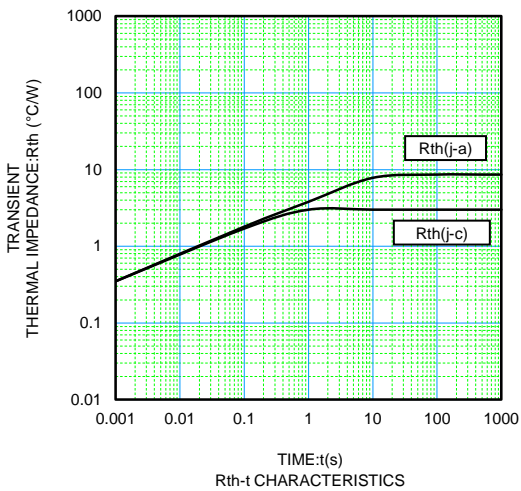
trr DISPERSION MAP



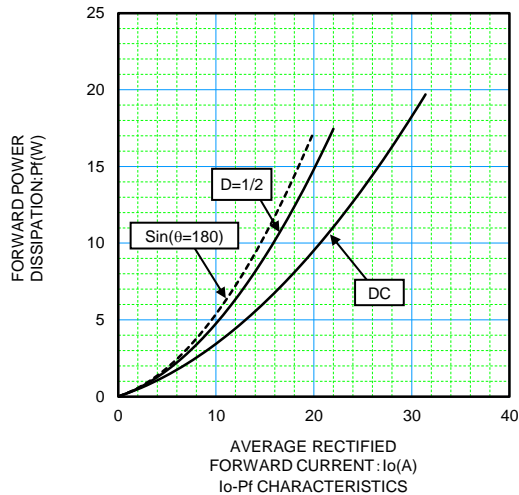
I_{FSM} CYCLE CHARACTERISTICS



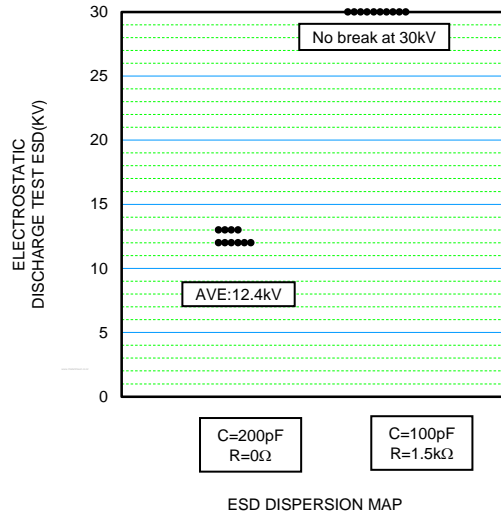
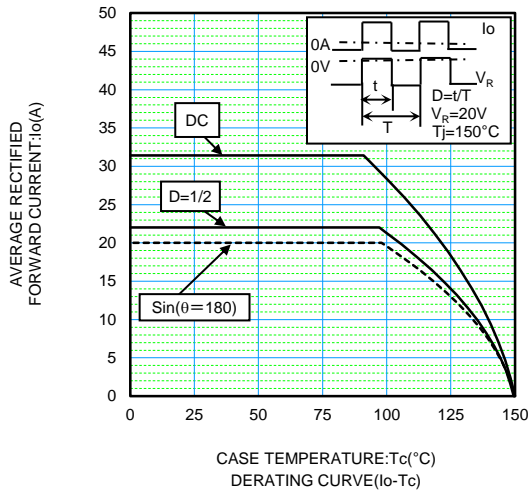
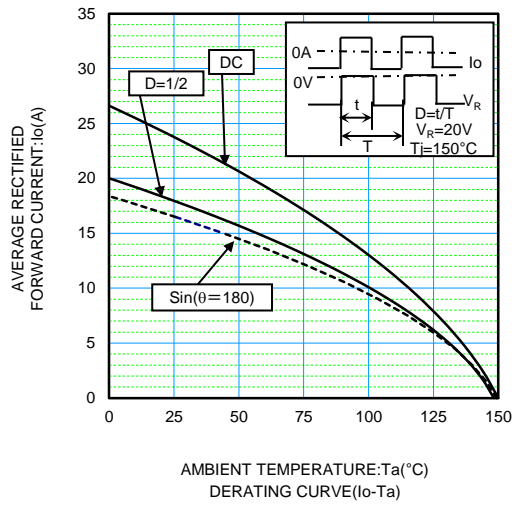
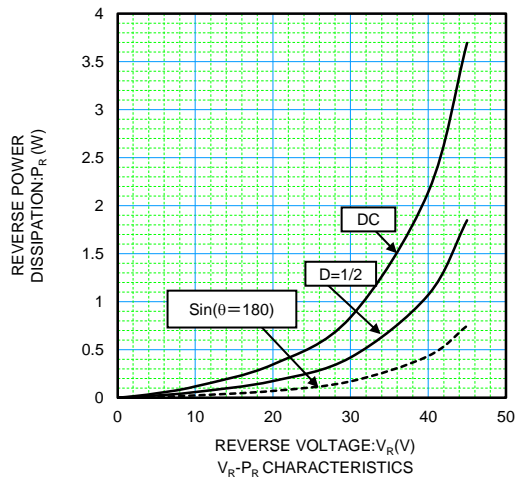
I_{FSM} -t CHARACTERISTICS



Rth-t CHARACTERISTICS



I_o -Pf CHARACTERISTICS



Notes

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