

Schottky Barrier Diode

RBQ30T45A

●Applications

General rectification

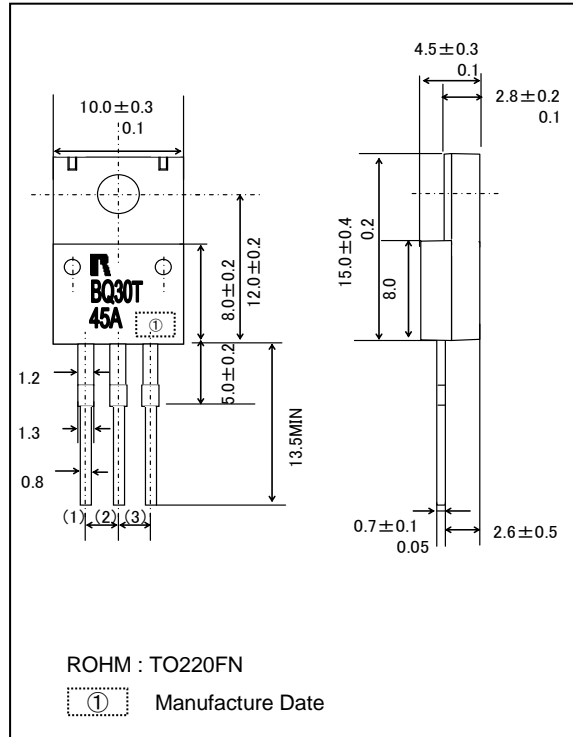
●Features

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

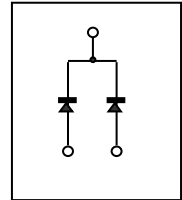
●Construction

Silicon epitaxial planer

●Dimensions (Unit : mm)



●Structure



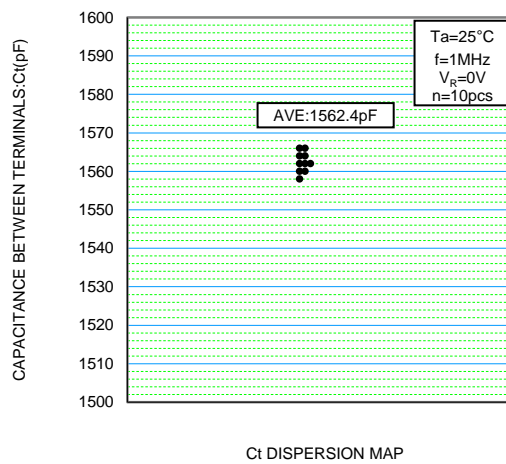
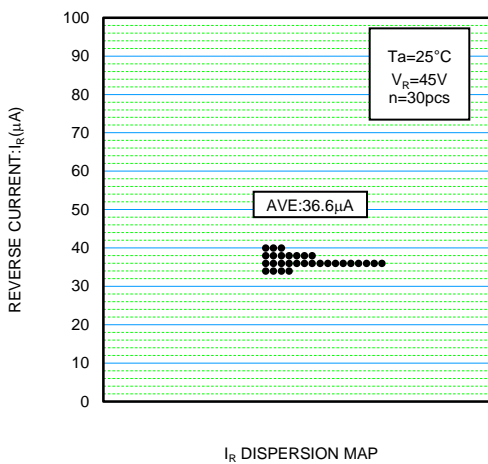
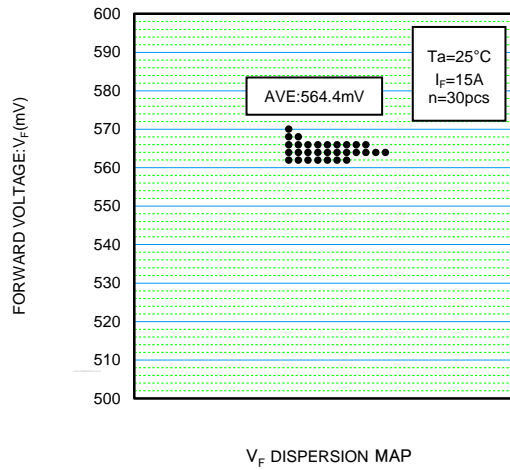
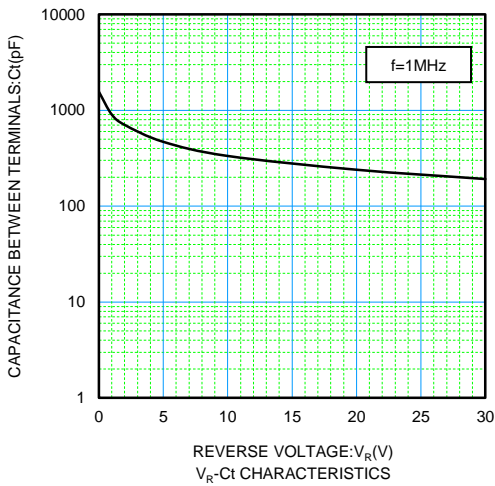
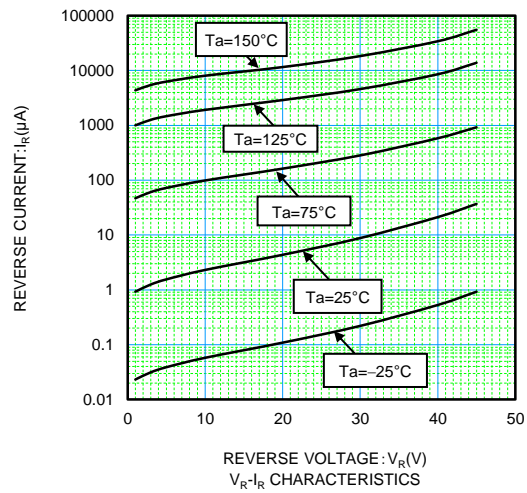
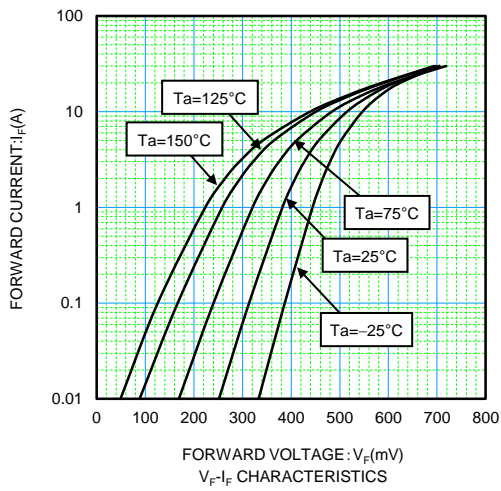
●Absolute maximum ratings (Tc=25°C)

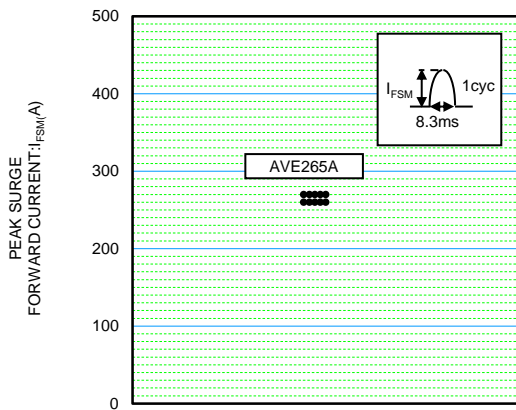
Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive)	V_{RM}	45	V
Reverse voltage (DC)	V_R	45	V
Average rectified forward current (*1)	I_o	30	A
Forward current surge peak (60Hz · 1cyc)	I_{FSM}	100	A
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-40 to +150	°C

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

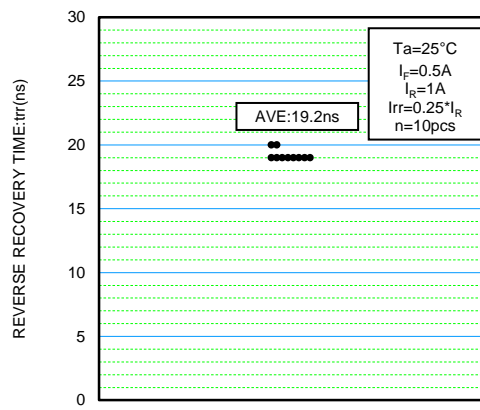
●Electrical characteristics (Tj=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	-	-	0.65	V	$I_F=15A$
Reverse current	I_R	-	-	450	μA	$V_R=45V$

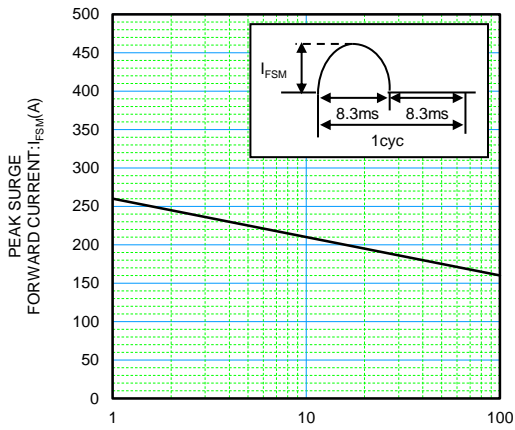




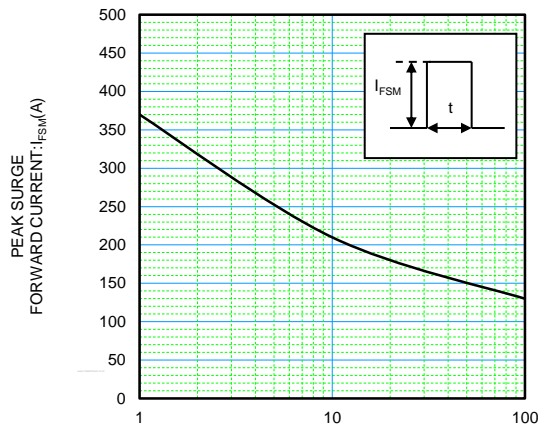
I_{FSM} DISRESION MAP



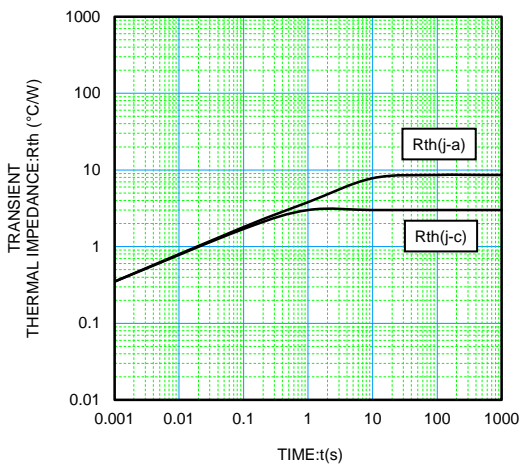
trr DISPERSION MAP



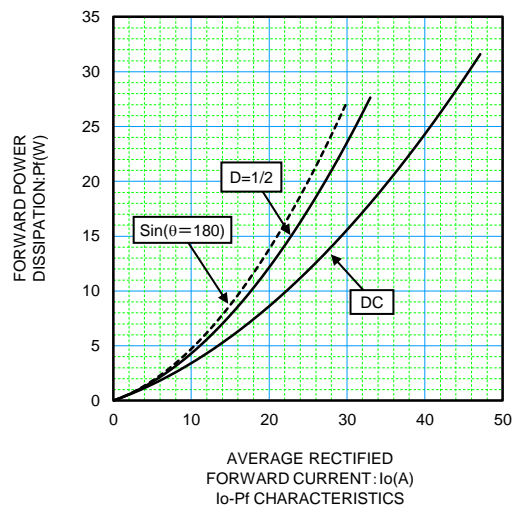
I_{FSM} CYCLE CHARACTERISTICS



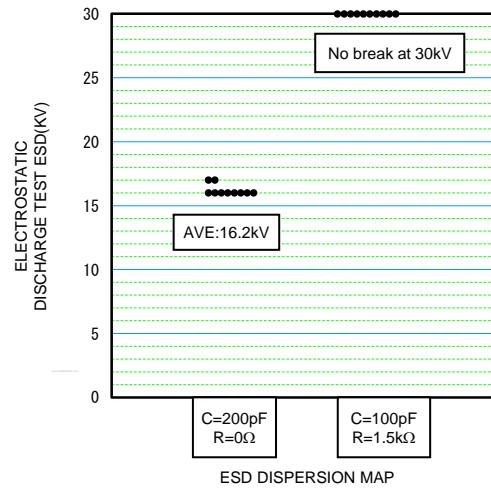
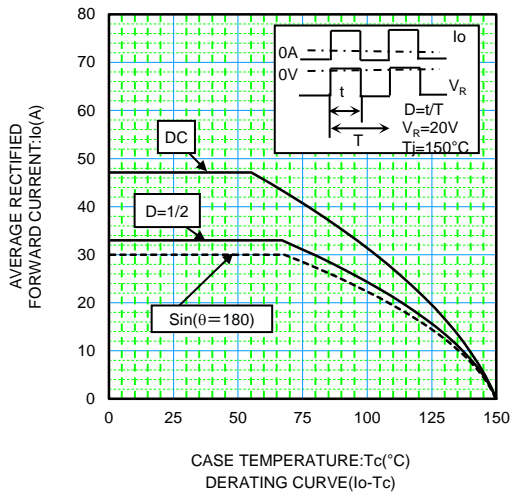
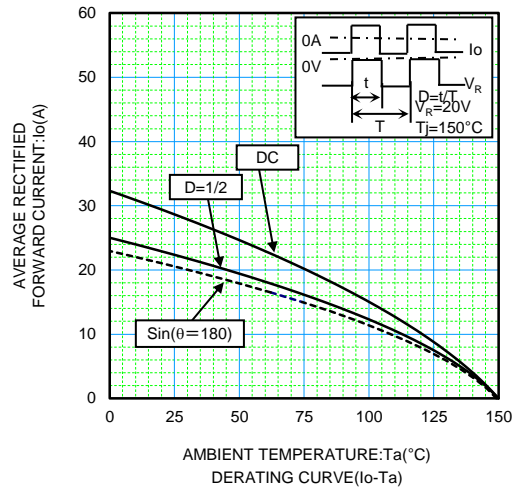
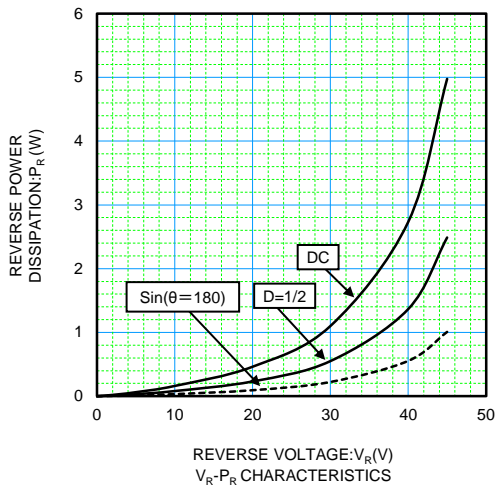
I_{FSM} -t CHARACTERISTICS



R_{th} -t CHARACTERISTICS



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



Notes

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