

Schottky Barrier Diode

RB225T-40

●Applications

Switching power supply

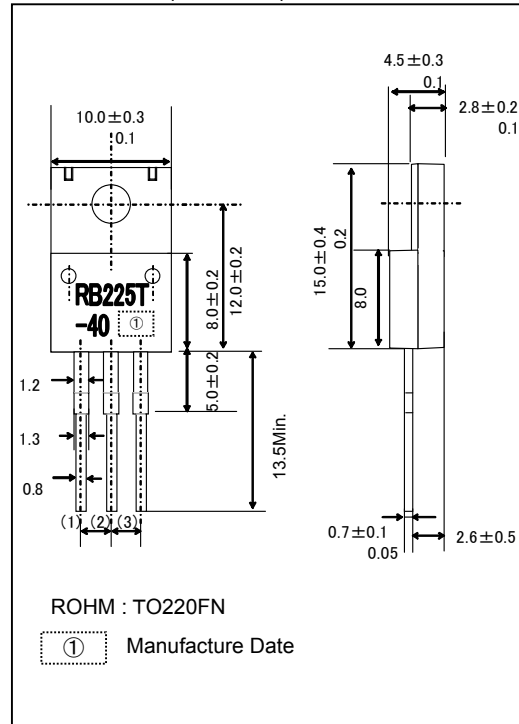
●Features

- 1)Cathode common type.(TO-220)
- 2)Low I_R
- 3)High reliability

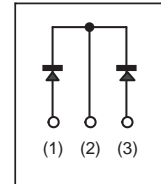
●Construction

Silicon epitaxial planer

●Dimensions(Unit : mm)



●Structure



●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive)	V _{RM}	40	V
Reverse voltage (DC)	V _R	40	V
Average rectified forward current(*1)	I _o	30	A
Forward current surge peak (60Hz·1cyc)(*1)	I _{FSM}	100	A
Junction temperature	T _j	150	°C
Storage temperature	T _{stg}	-40 to +150	°C

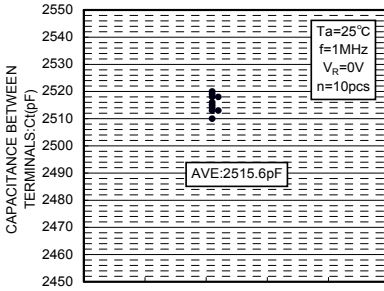
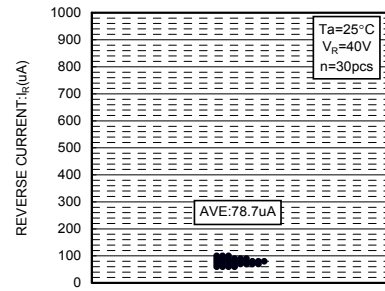
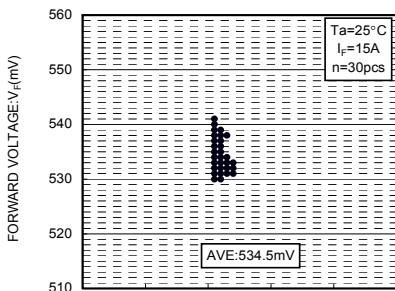
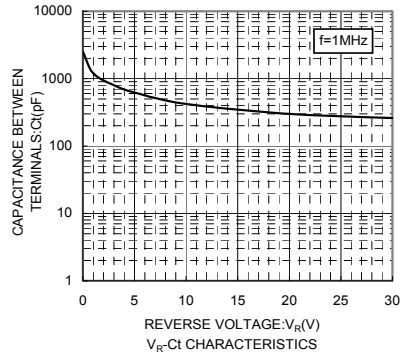
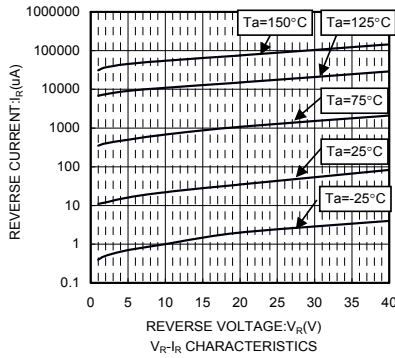
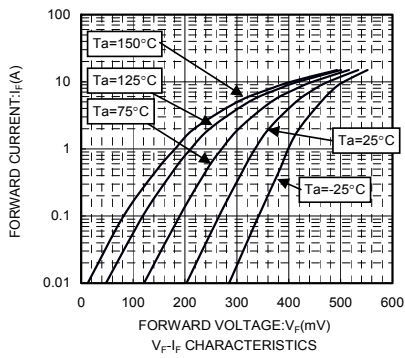
(*1)T_c=105°Cmax Per chip:I_o/2

●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V _F	-	-	0.63	V	I _F =15A
Reverse current	I _R	-	-	500	μA	V _R =40V
Thermal impedance	θ _{jc}	-	-	(1.75)	°C/W	junction to case

() : tentative

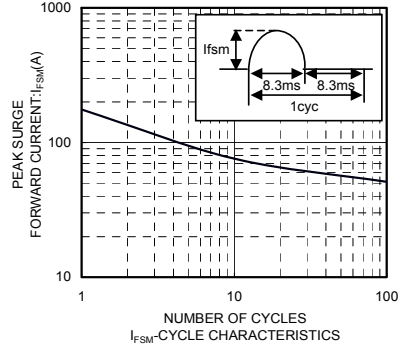
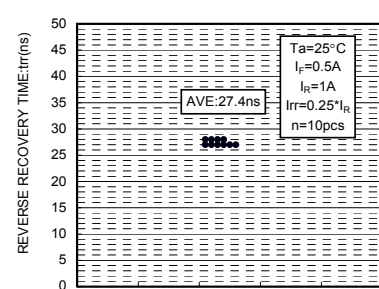
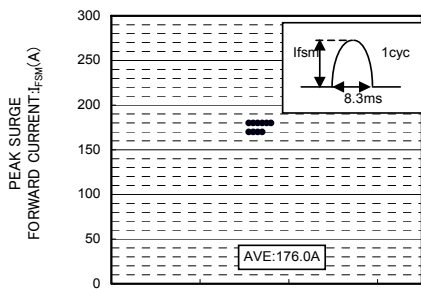
●Electrical characteristic curves



V_F DISPERSION MAP

I_R DISPERSION MAP

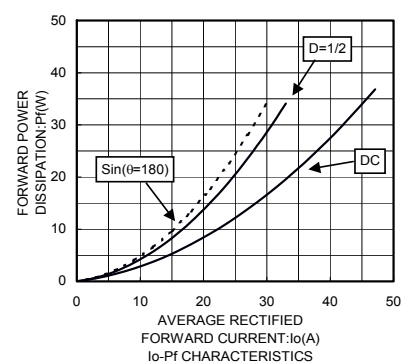
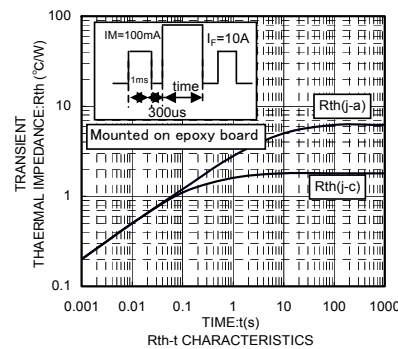
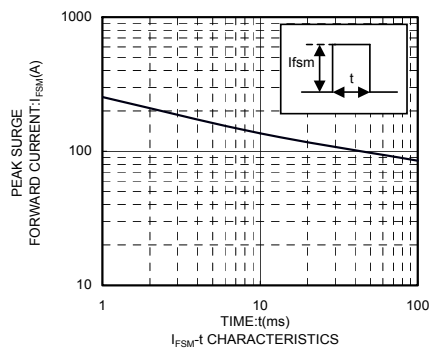
C_t DISPERSION MAP



I_{FSM} DISPERSION MAP

t_{rr} DISPERSION MAP

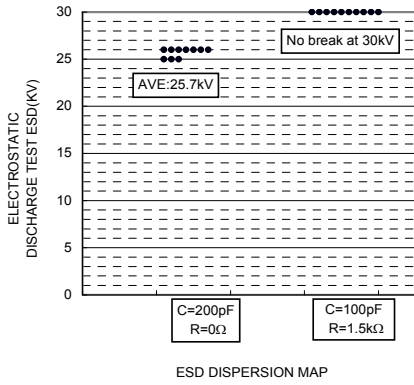
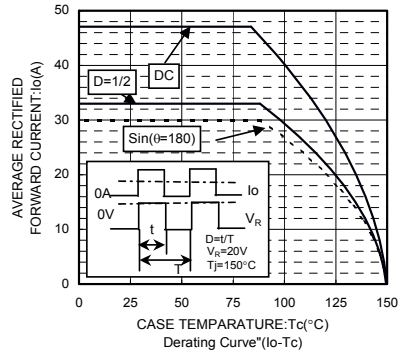
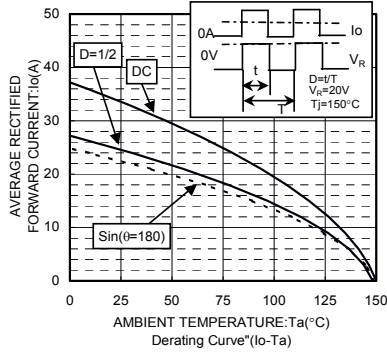
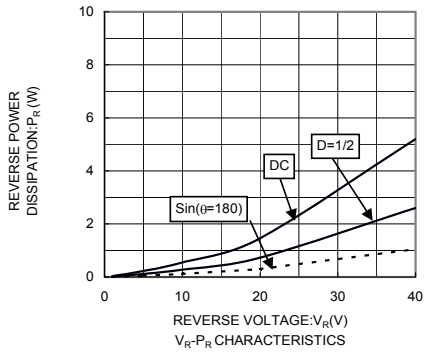
I_{FSM} -CYCLE CHARACTERISTICS



I_{FSM} - t CHARACTERISTICS

R_{th} - t CHARACTERISTICS

I_o - P_f CHARACTERISTICS



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