

# Schottky barrier diode

## RB225T100

### ●Applications

Switching power supply

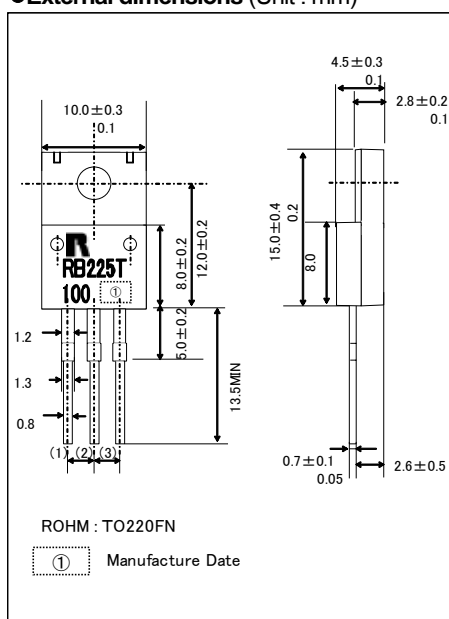
### ●Features

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

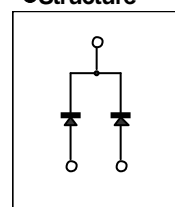
### ●Construction

Silicon epitaxial planar

### ●External dimensions (Unit : mm)



### ●Structure



### ●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	$V_{RM}$	100	V
Reverse voltage (DC)	$V_R$	100	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

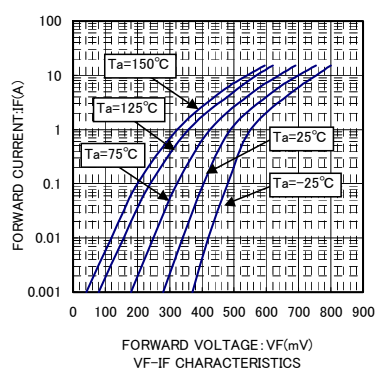
(\*1) $T_c=100^{\circ}\text{Cmax}$  Rating of per diode :  $I_O/2$

### ●Electrical characteristic (Ta=25°C)

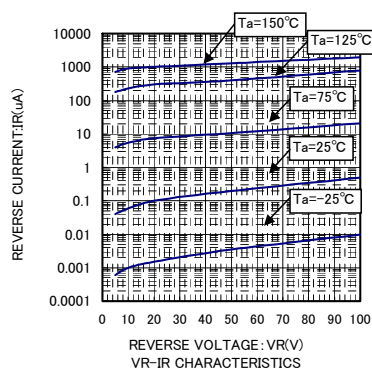
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_F$	-	-	0.86	V	$I_F=15\text{A}$
Reverse current	$I_R$	-	-	400	$\mu\text{A}$	$V_R=100\text{V}$
Thermal impedance	$\theta_{jc}$	-	-	1.75	°C/W	junction to case

## Diodes

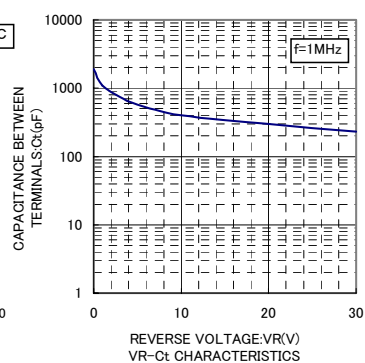
## ●Electrical characteristic curves



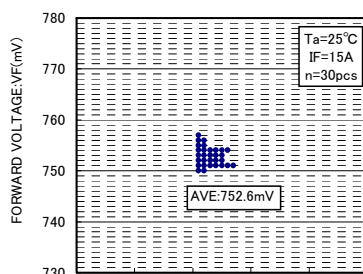
VF分布



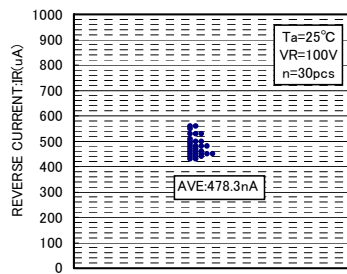
IR分布



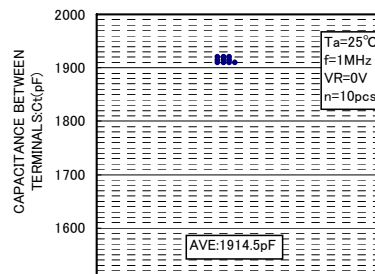
Ct分布



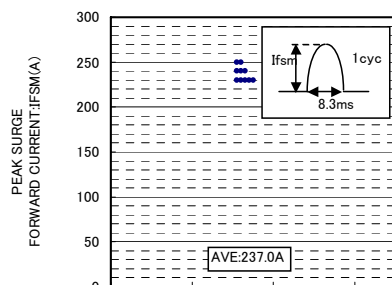
VF DISPERSION MAP



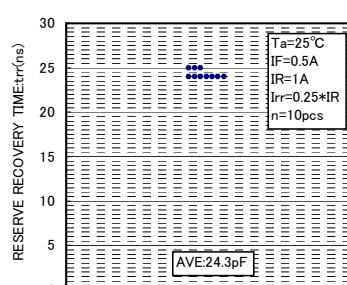
IR DISPERSION MAP



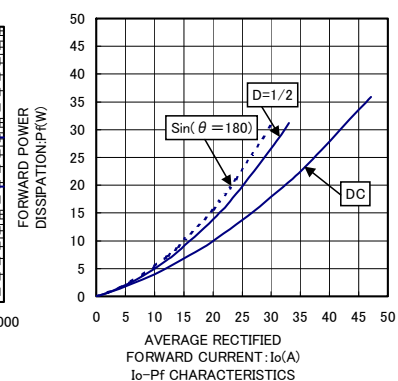
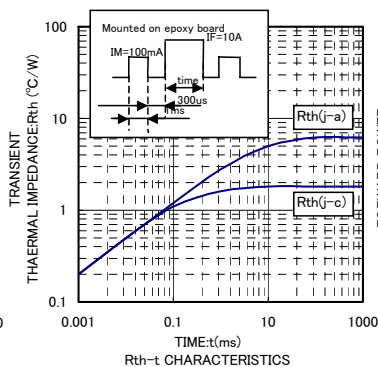
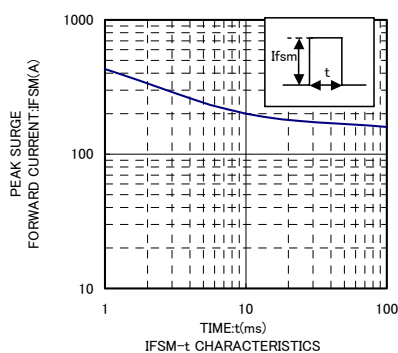
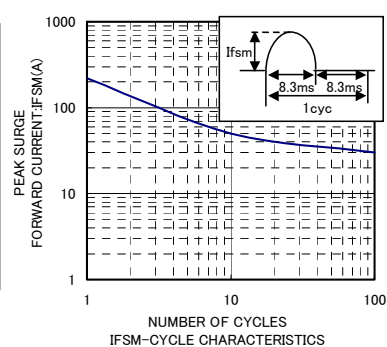
Ct DISPERSION MAP



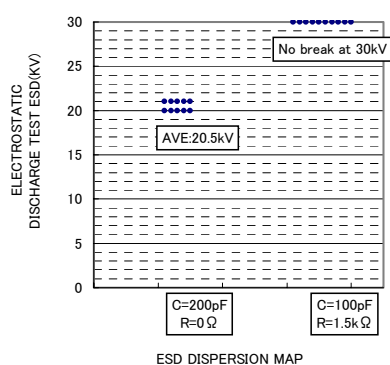
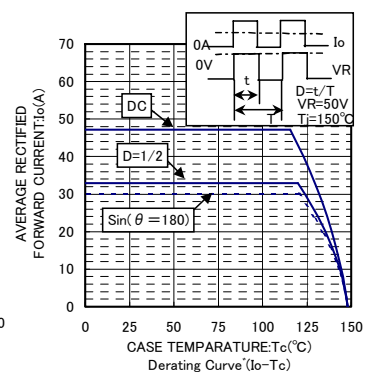
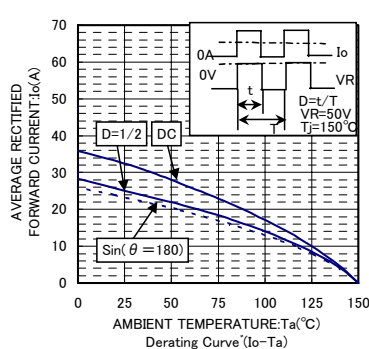
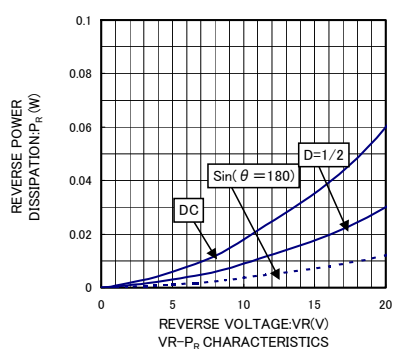
IFSM DISERSION MAP



trr DISPERSION MAP



## Diodes



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