

# Schottky barrier diode

## RB085T-90

### ●Applications

Switching power supply

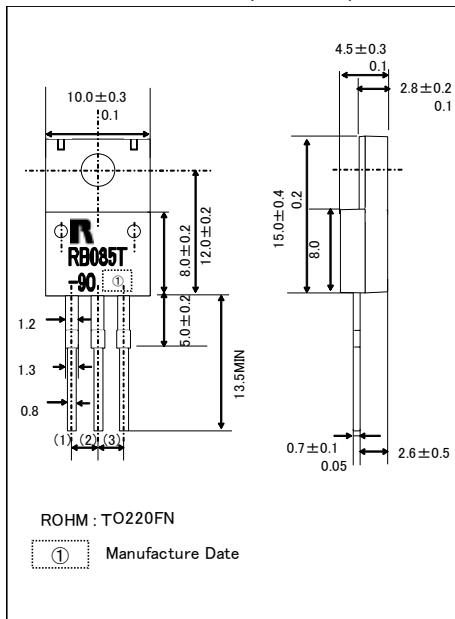
### ●Features

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

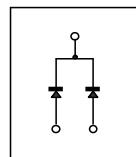
### ●Construction

Silicon epitaxial planar

### ●External dimensions (Unit : mm)



### ●Structure



### ●Absolute maximum ratings ( $T_a=25^\circ C$ )

Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	$V_{RM}$	90	V
Reverse voltage (DC)	$V_R$	90	V
Average rectified forward current (*1)	$I_o$	10	A
Forward current surge peak (60Hz·1cyc) (*1)	$I_{FSM}$	100	A
Junction temperature	$T_j$	150	$^\circ C$
Storage temperature	$T_{stg}$	-40 to +150	$^\circ C$

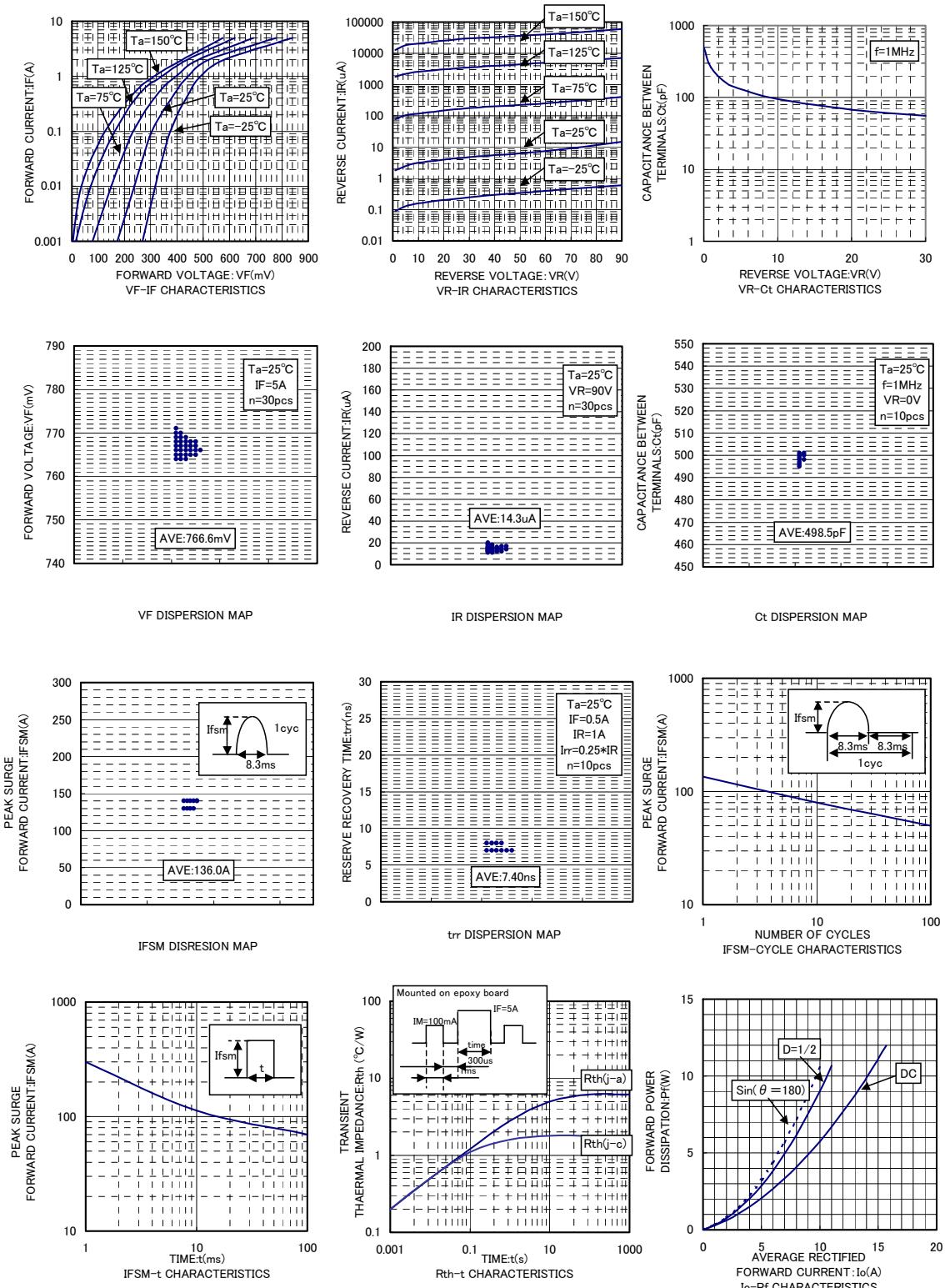
(\*1)  $T_c=100^\circ C$  max Per chip :  $I_o/2$

### ●Electrical characteristic ( $T_a=25^\circ C$ )

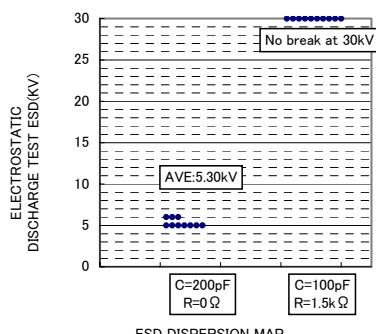
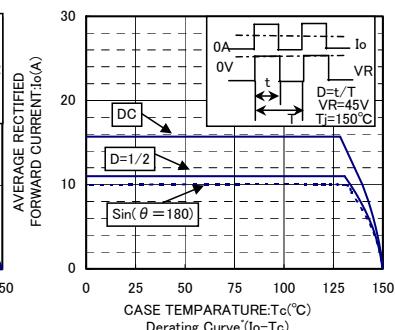
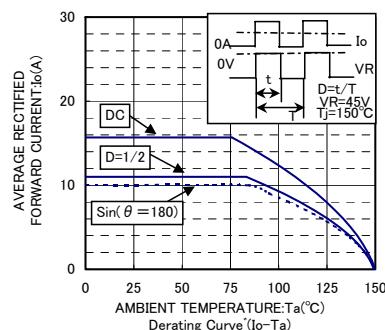
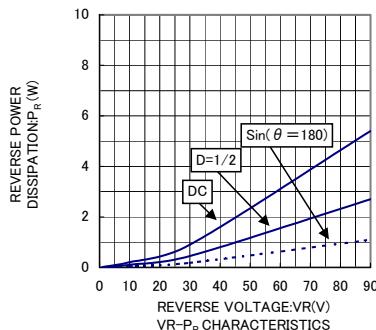
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward characteristics	$V_F$	-	-	0.83	V	$I_F=5A$
Reverse characteristics	$I_R$	-	-	150	$\mu A$	$V_R=90V$
Thermal impedance	$\theta_{JC}$	-	-	2.5	$^\circ C/W$	junction to case

## Diodes

## ● Electrical characteristic curves



## Diodes



## Appendix

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