

# Schottky barrier diode

## RB085T-40

●Applications

Switching power supply

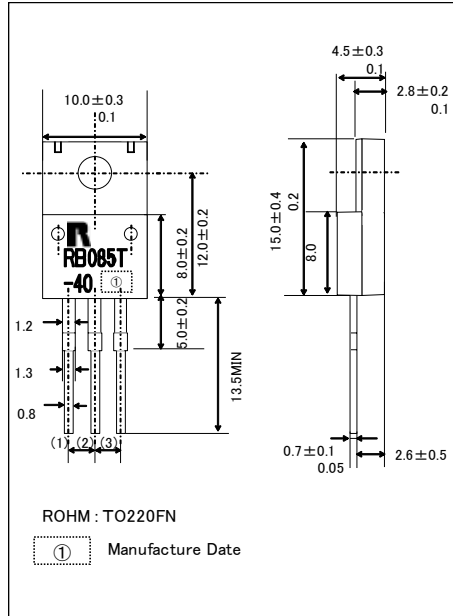
●Features

- 1) Cathode common type.  
(TO-220)
- 2) Low I<sub>r</sub>
- 3) High reliability

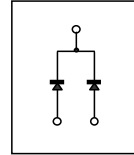
●Construction

Silicon epitaxial planar

●Dimensions (Unit : mm)



●Structure



●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	V <sub>RM</sub>	45	V
Reverse voltage (DC)	V <sub>R</sub>	40	V
Average rectified forward current (*1)	I <sub>o</sub>	10	A
Forward current surge peak (60Hz · 1cyc) (*1)	I <sub>FSM</sub>	100	A
Junction temperature	T <sub>j</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-40 to +150	°C

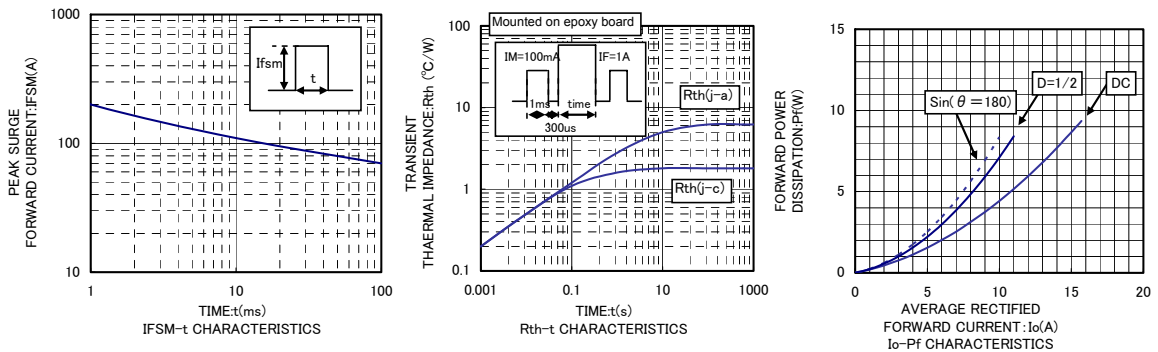
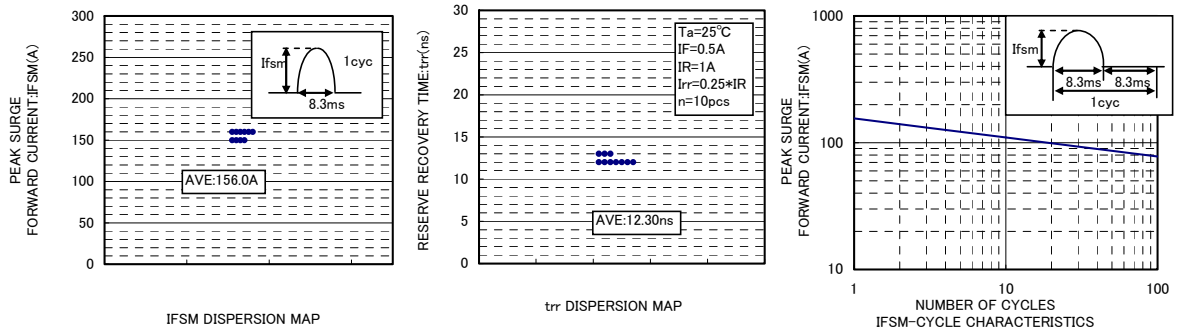
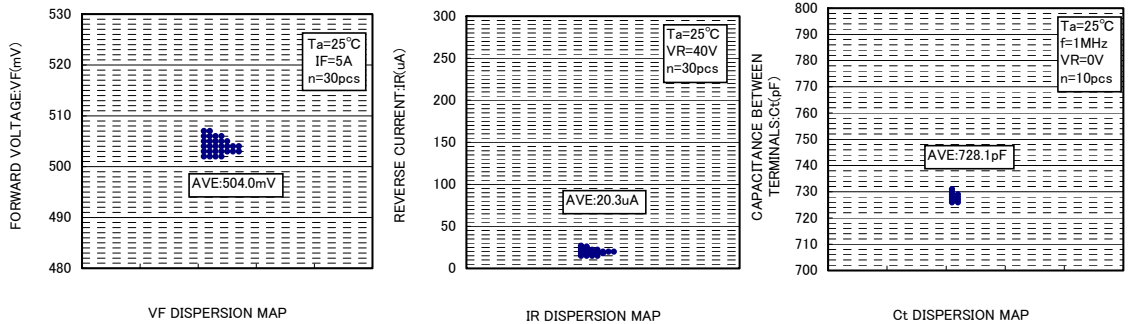
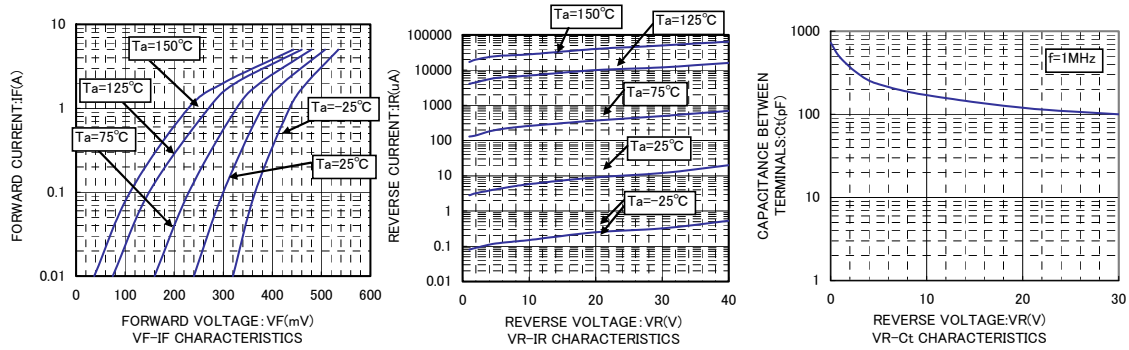
(\*1)Business frequencies, Rating of R-load, 1/2 I<sub>o</sub> per diode, T<sub>c</sub>=132°C

●Electrical characteristic (Ta=25°C)

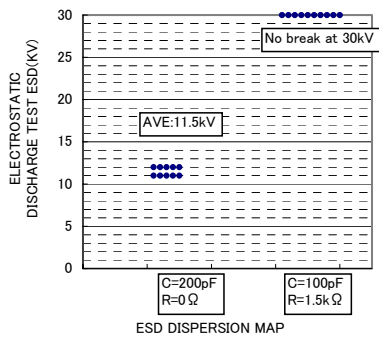
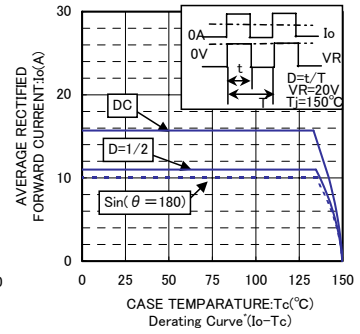
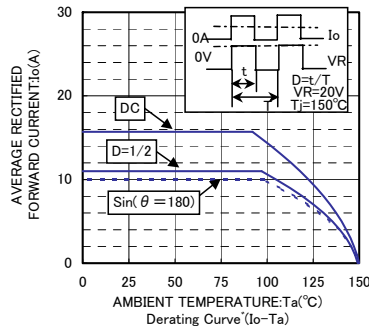
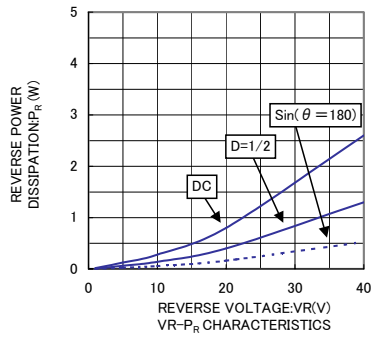
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V <sub>F</sub>	-	-	0.55	V	I <sub>F</sub> =5A
Reverse current	I <sub>R</sub>	-	-	200	μA	V <sub>R</sub> =40V
Thermal impedance	θ <sub>jc</sub>	-	-	2.5	°C/W	junction to case

Diodes

●Electrical characteristic curves



Diodes



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