

### ●Application

Switching power supply

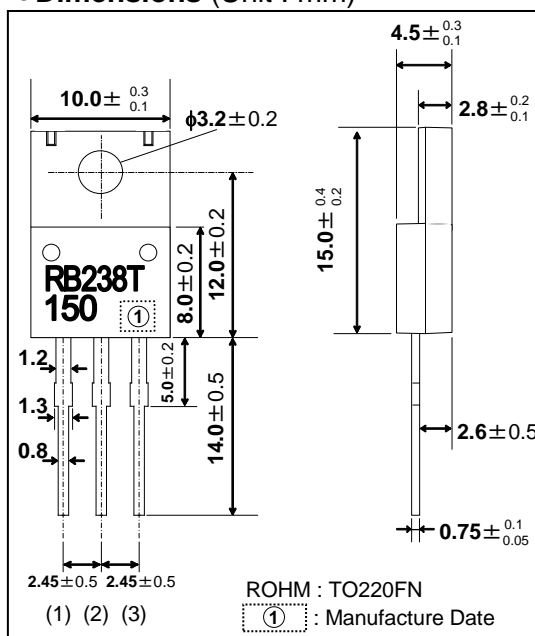
### ●Features

- 1) Cathode common type
- 2) High reliability
- 3) Super low  $I_R$

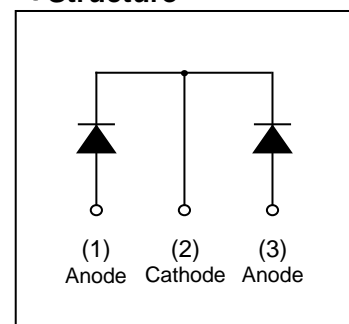
### ●Construction

Silicon epitaxial planar type

### ●Dimensions (Unit : mm)



### ●Structure



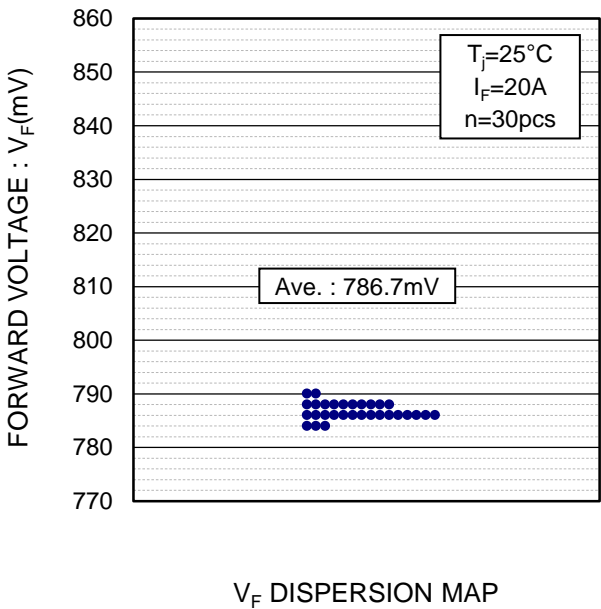
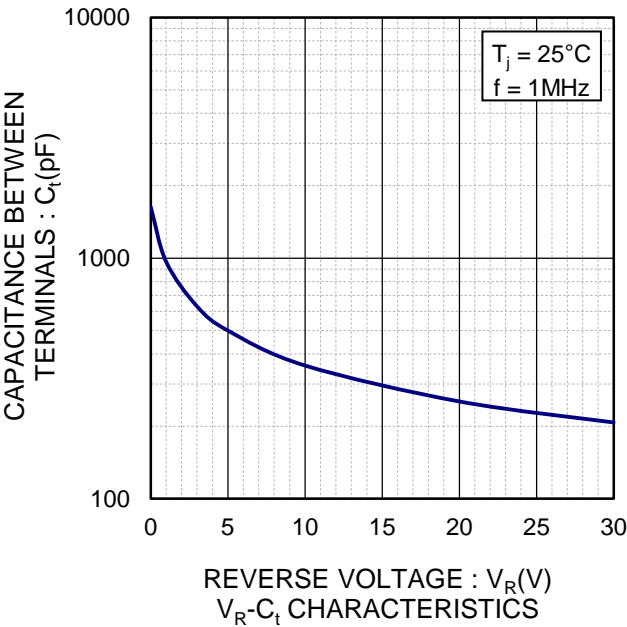
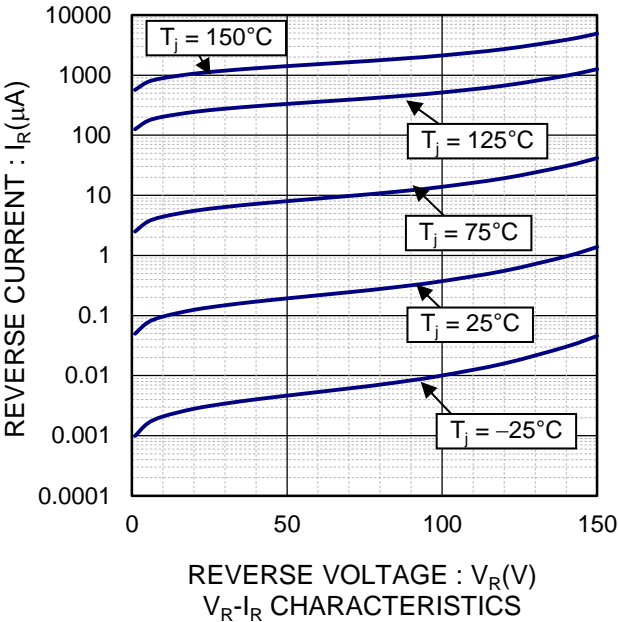
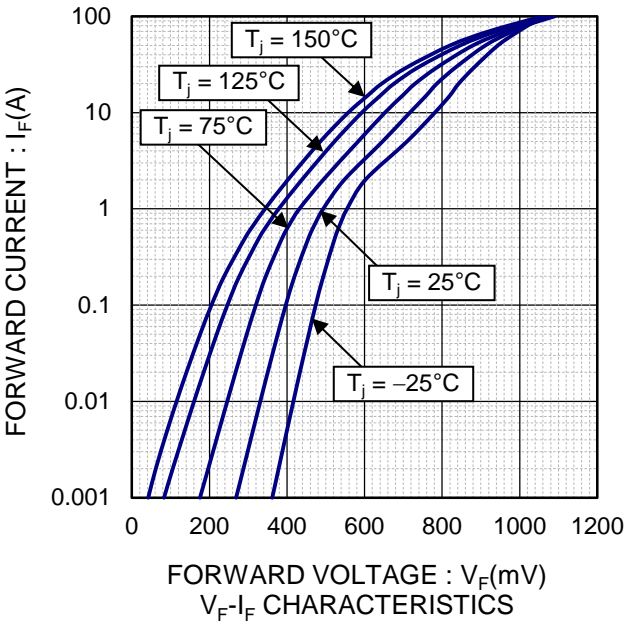
### ●Absolute Maximum Ratings ( $T_c = 25^\circ\text{C}$ )

Parameter	Symbol	Conditions	Limits	Unit
Repetitive peak reverse voltage	$V_{RM}$	Duty $\leq 0.5$	150	V
Reverse voltage	$V_R$	Direct reverse voltage	150	V
Average forward rectified current	$I_o$	Glass epoxy board mounted, 60Hz half sin wave, resistive load, $T_c = 85^\circ\text{C}$ Max., $I_o/2$ per diode	40	A
Non-repetitive forward current surge peak	$I_{FSM}$	60Hz half sin wave, Non-repetitive at $T_a = 25^\circ\text{C}$ , 1 cycle, per diode	100	A
Operating junction temperature	$T_j$	-	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-	-55 to +150	$^\circ\text{C}$

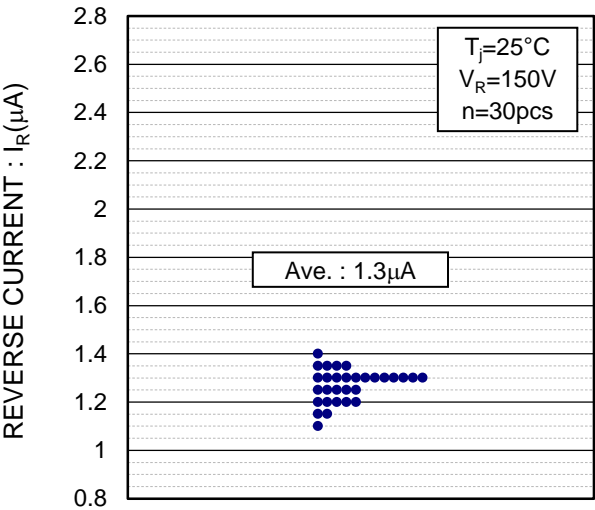
### ●Electrical and Thermal Characteristics ( $T_j = 25^\circ\text{C}$ )

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage	$V_F$	$I_F = 20\text{A}$	-	-	0.87	V
Reverse current	$I_R$	$V_R = 150\text{V}$	-	-	30	$\mu\text{A}$
Thermal resistance	$R_{th(j-c)}$	Junction to case	-	-	2	$^\circ\text{C} / \text{W}$

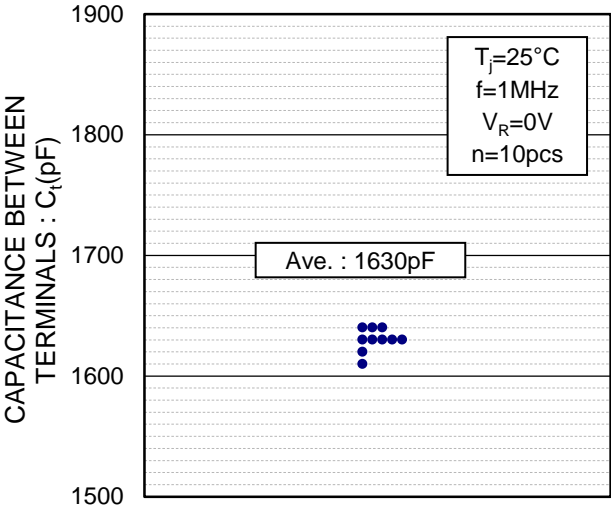
●Electrical Characteristic Curves



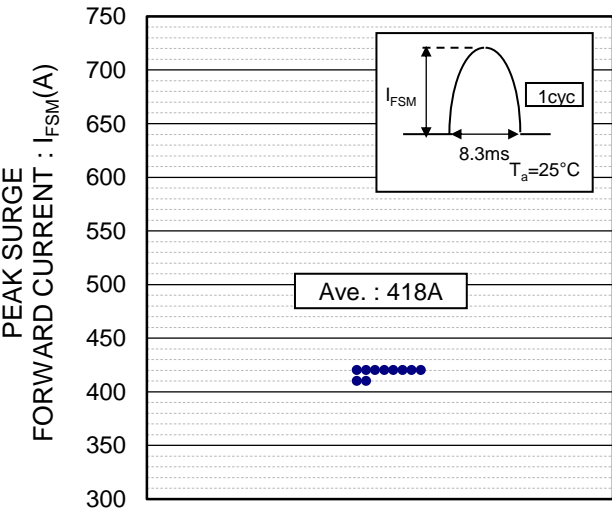
●Electrical Characteristic Curves



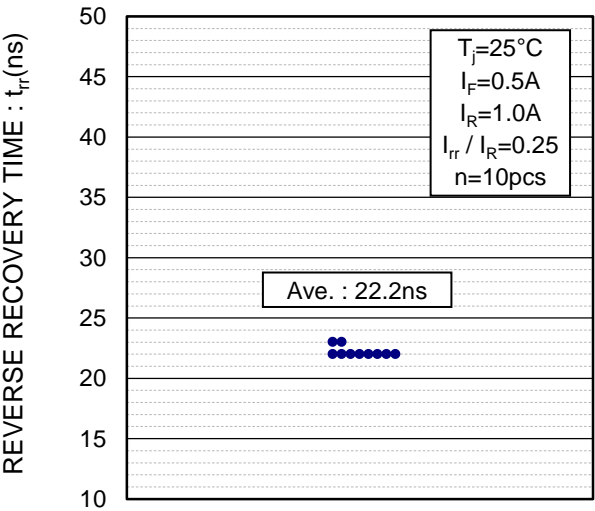
$I_R$  DISPERSION MAP



$C_t$  DISPERSION MAP

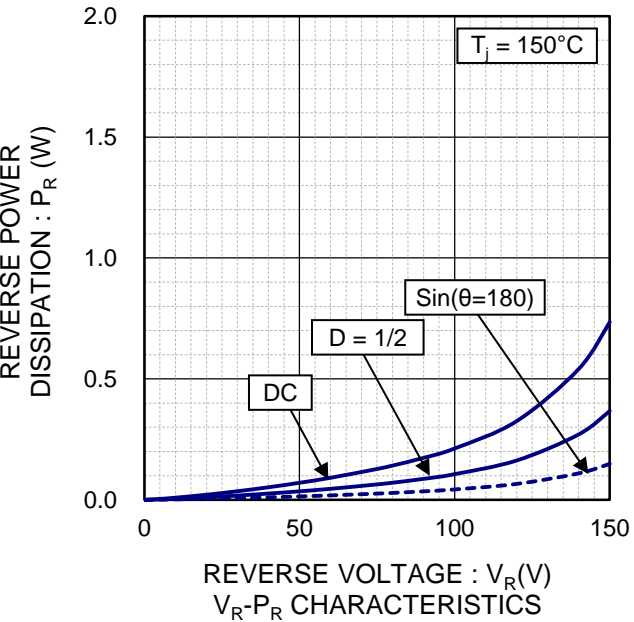
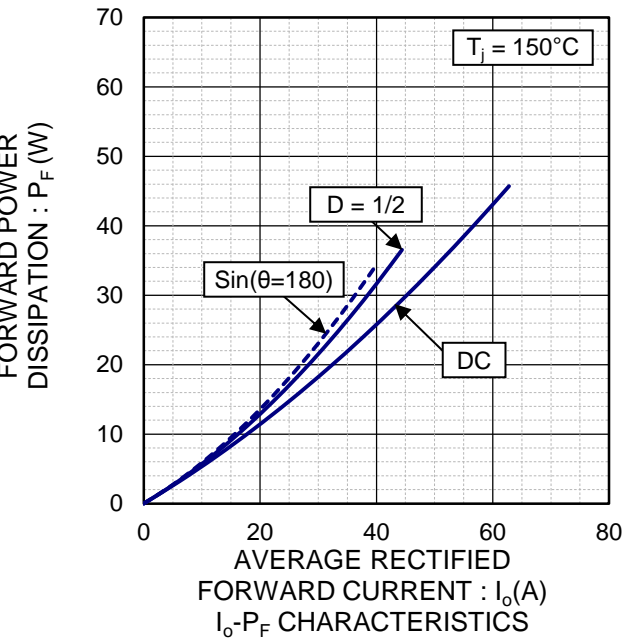
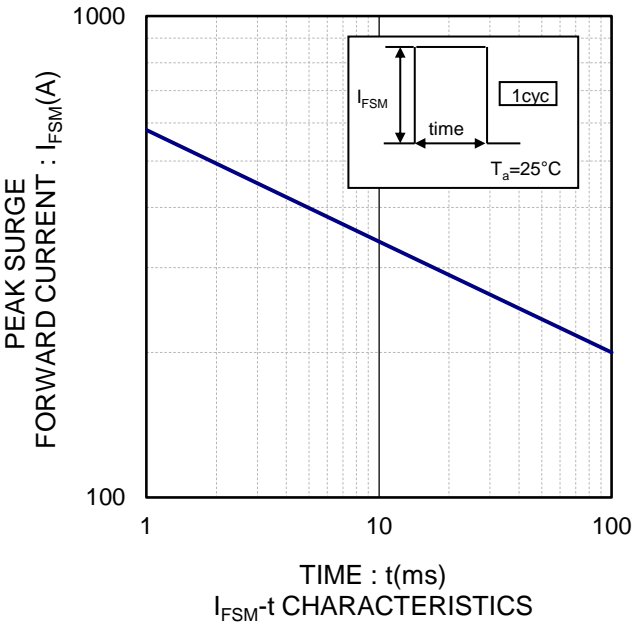
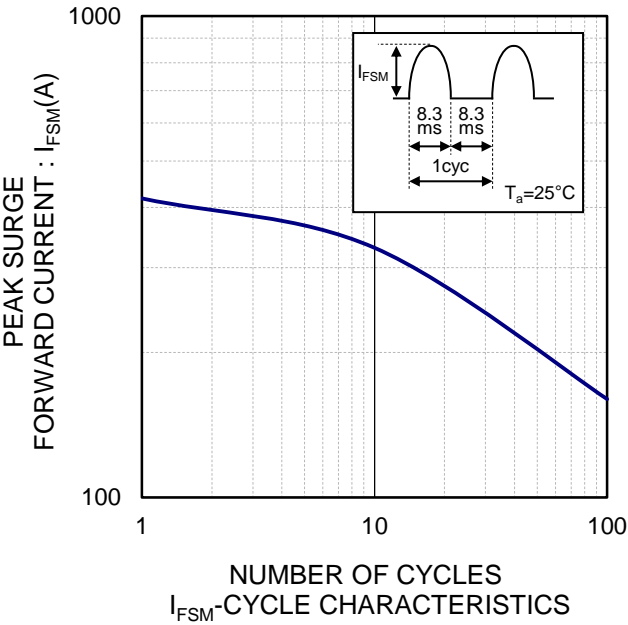


$I_{FSM}$  DISPERSION MAP

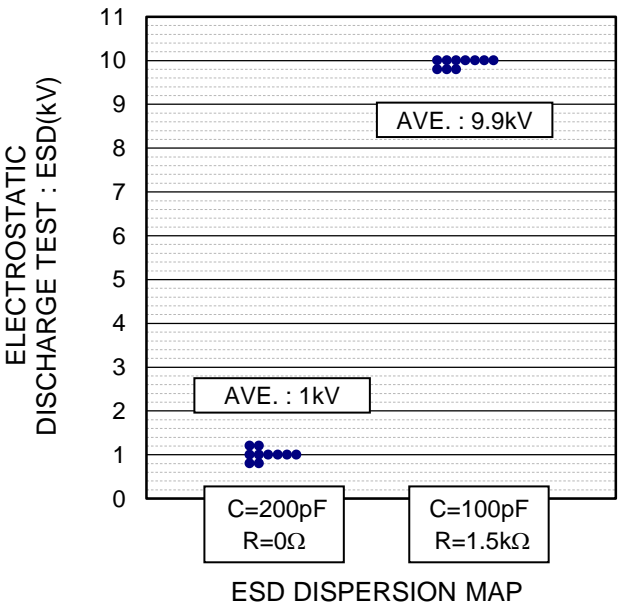
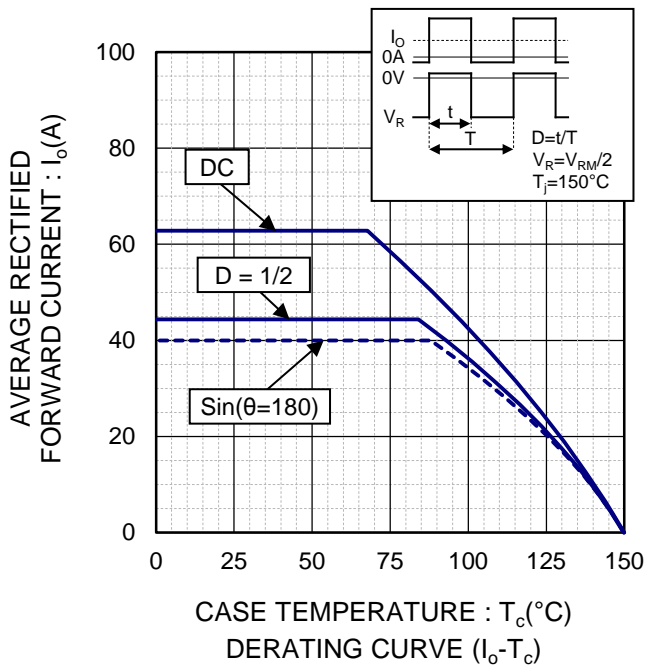
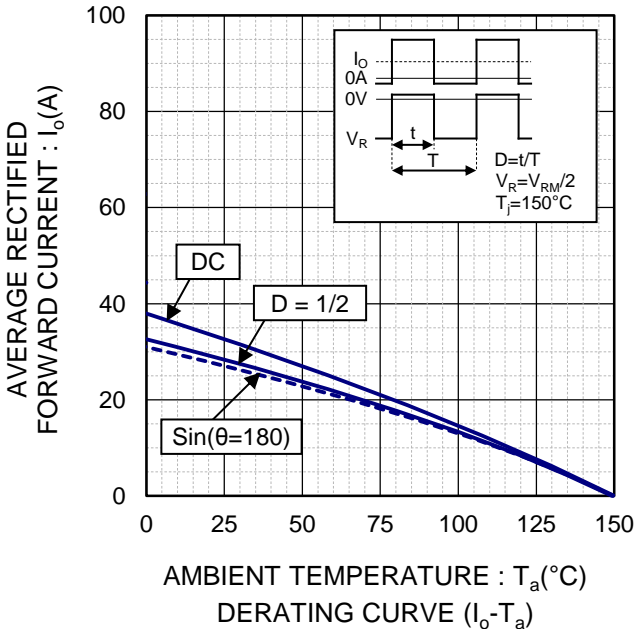
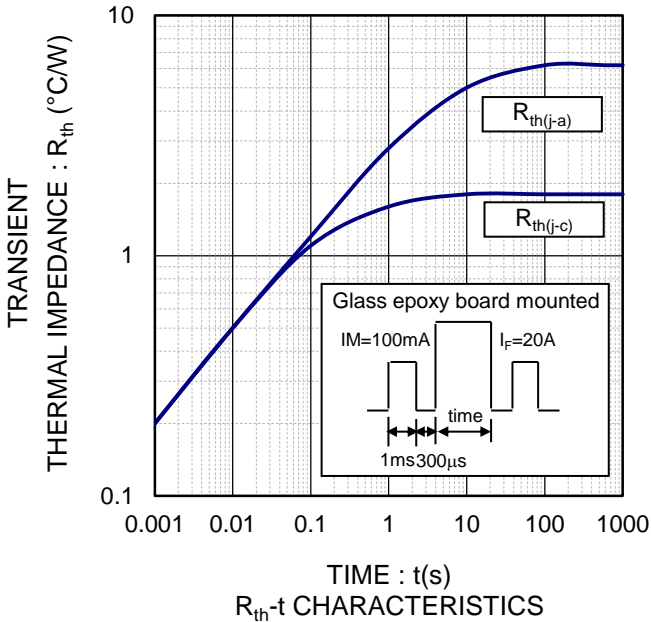


$t_{rr}$  DISPERSION MAP

●Electrical Characteristic Curves



●Electrical Characteristic Curves



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