

●Application

Switching power supply

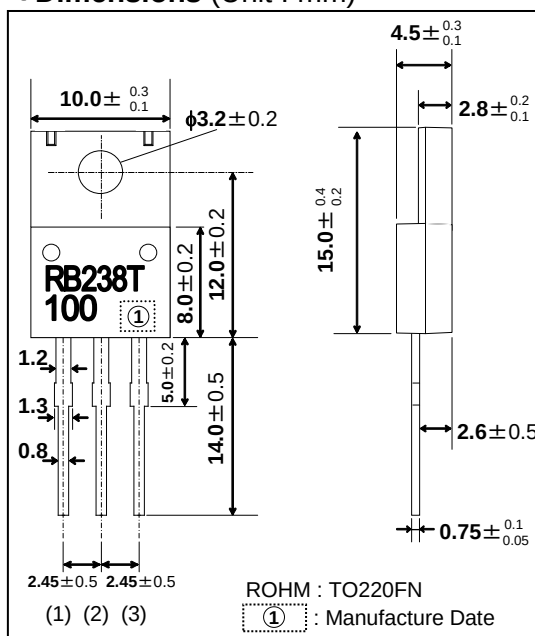
●Features

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

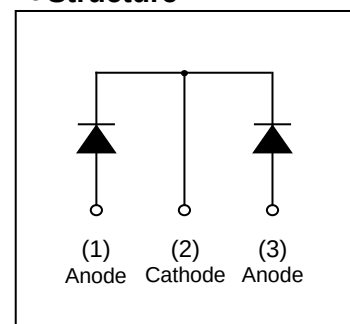
●Construction

Silicon epitaxial planar type

●Dimensions (Unit : mm)



●Structure



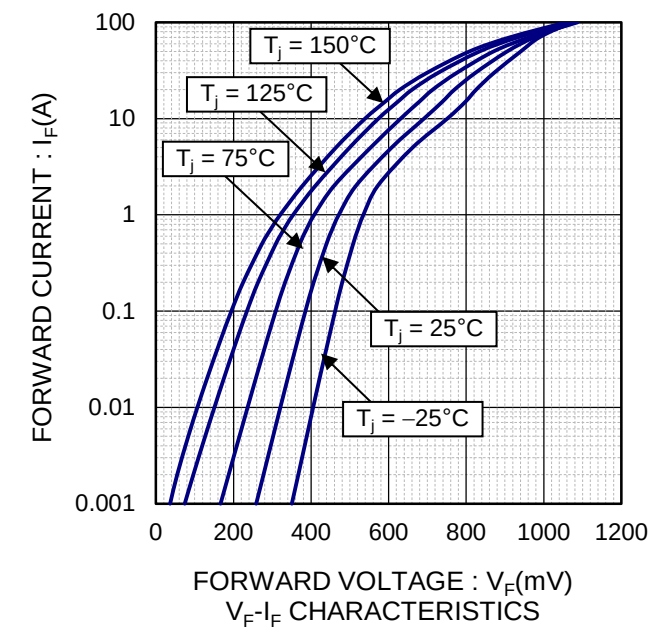
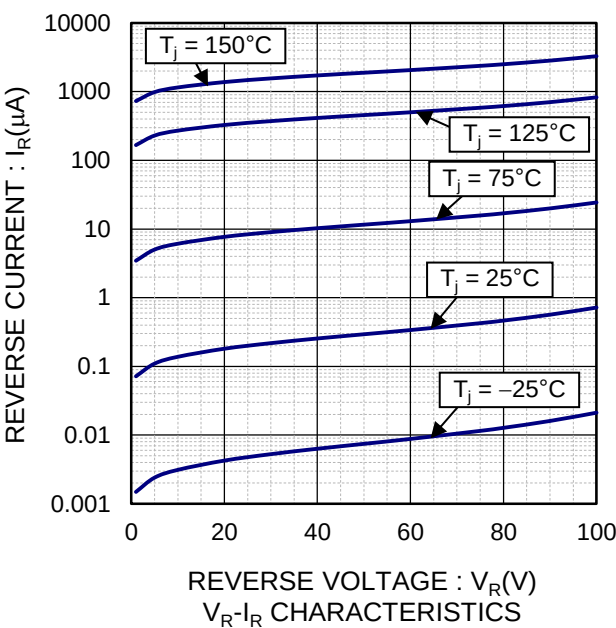
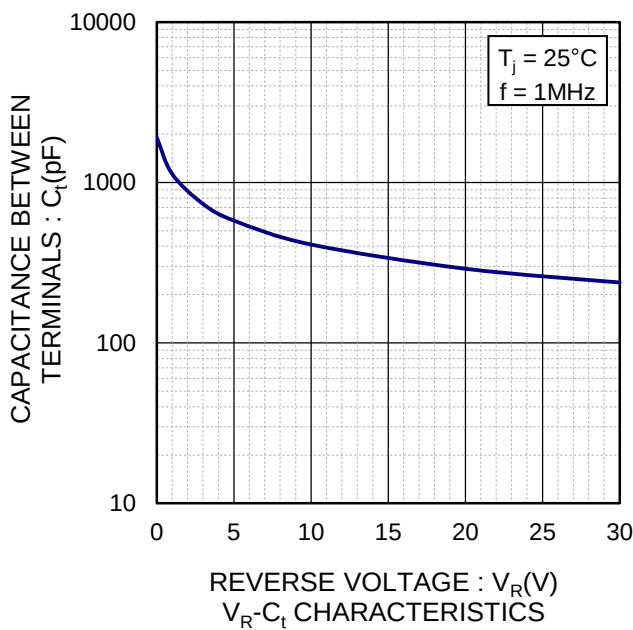
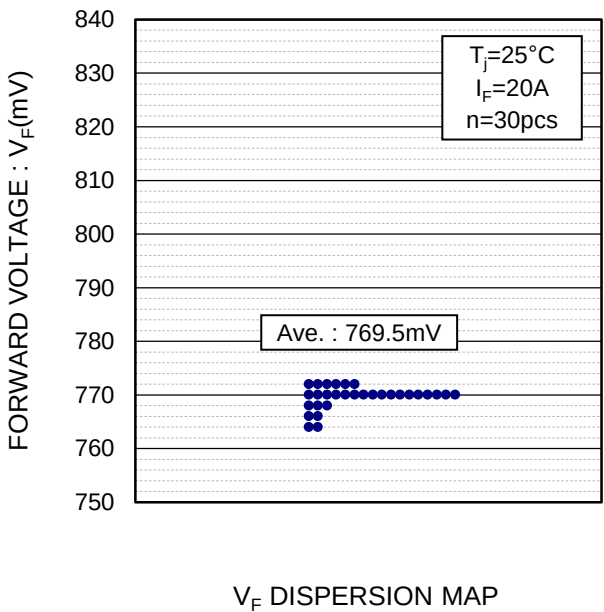
●Absolute Maximum Ratings ($T_c = 25^\circ\text{C}$)

Parameter	Symbol	Conditions	Limits	Unit
Repetitive peak reverse voltage	V_{RM}	Duty ≤ 0.5	110	V
Reverse voltage	V_R	Direct reverse voltage	100	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 $T_a = 25^\circ\text{C}$, 1cycle, per diode	100	A
Operating junction temperature	T_j	-	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-	-55 to +150	$^\circ\text{C}$

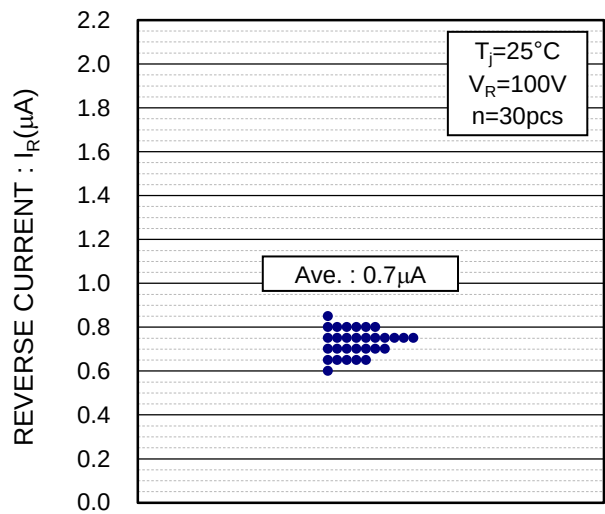
●Electrical and Thermal Characteristics ($T_j = 25^\circ\text{C}$)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage	V_F	$I_F = 20\text{A}$	-	-	0.86	V
Reverse current	I_R	$V_R = 100\text{V}$	-	-	20	μA
Thermal resistance	$R_{th(j-c)}$	Junction to case	-	-	2	$^\circ\text{C} / \text{W}$

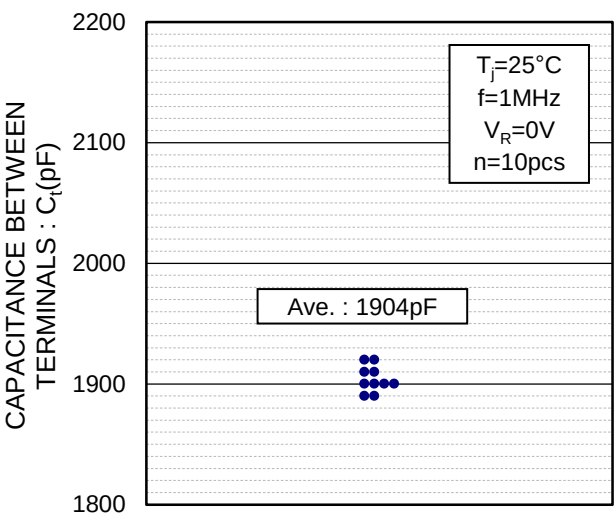
●Electrical Characteristic Curves



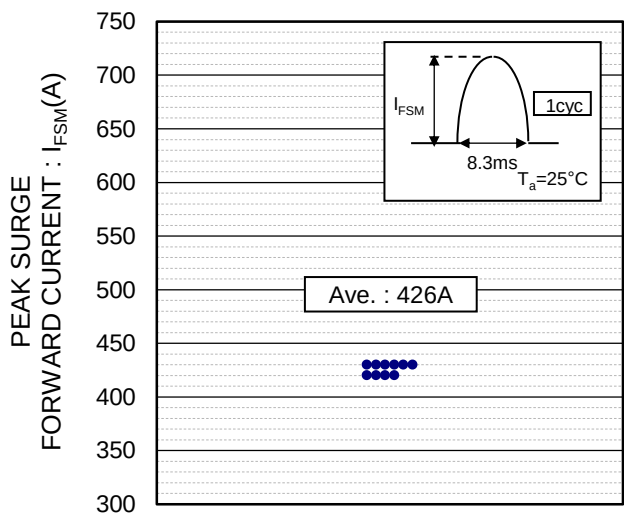
●Electrical Characteristic Curves



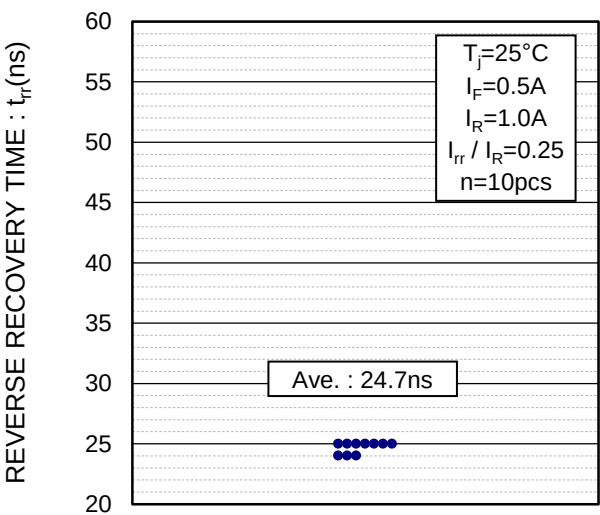
I_R DISPERSION MAP



C_t DISPERSION MAP

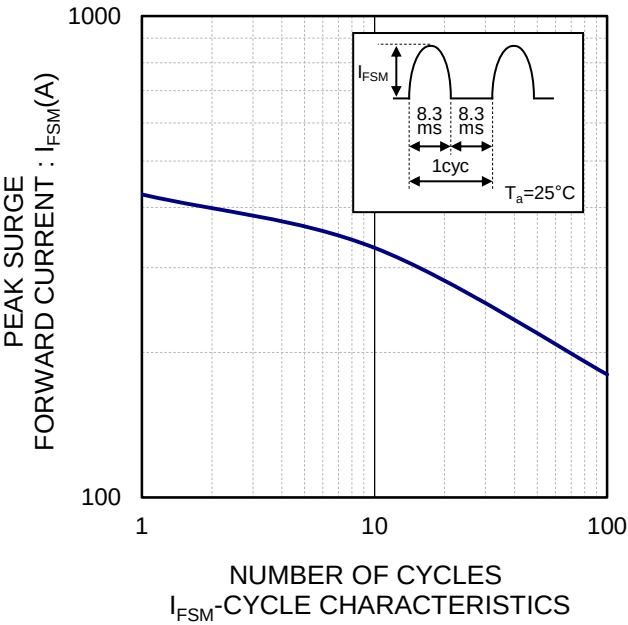
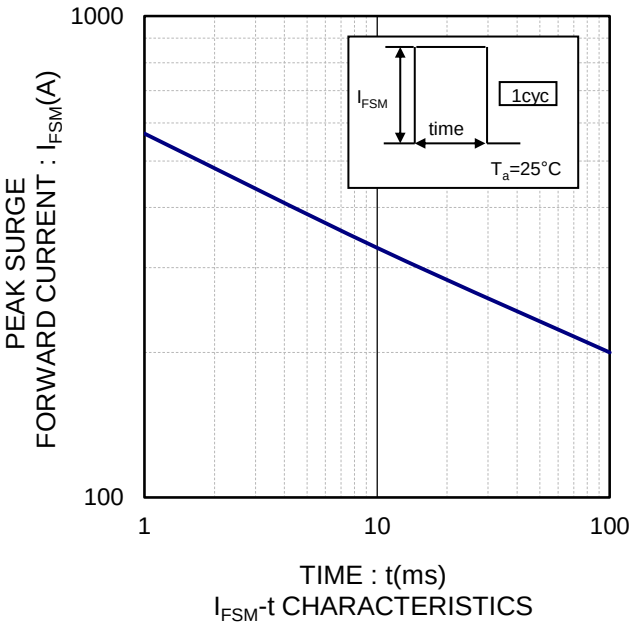
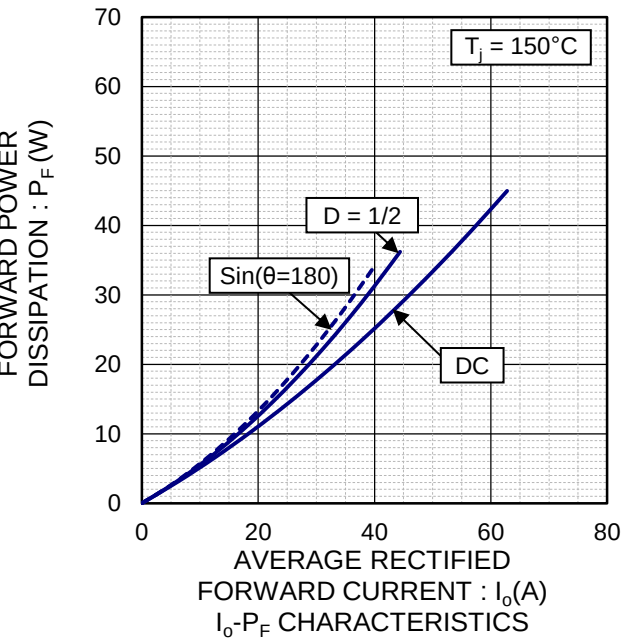
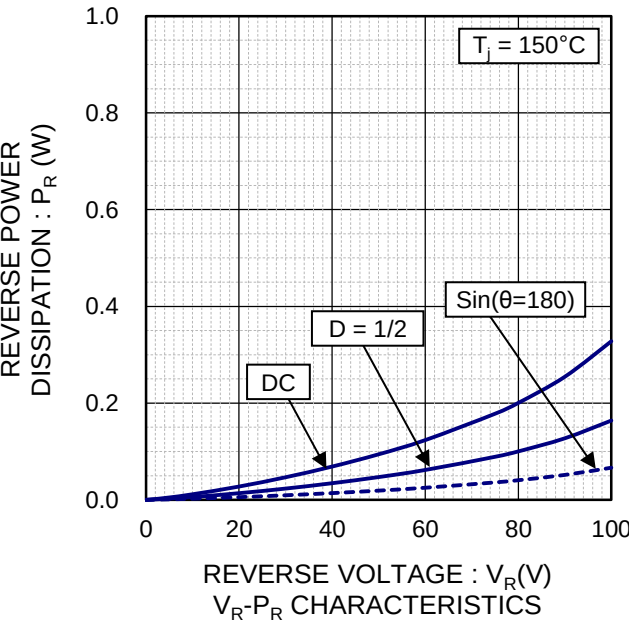


I_{FSM} DISPERSION MAP

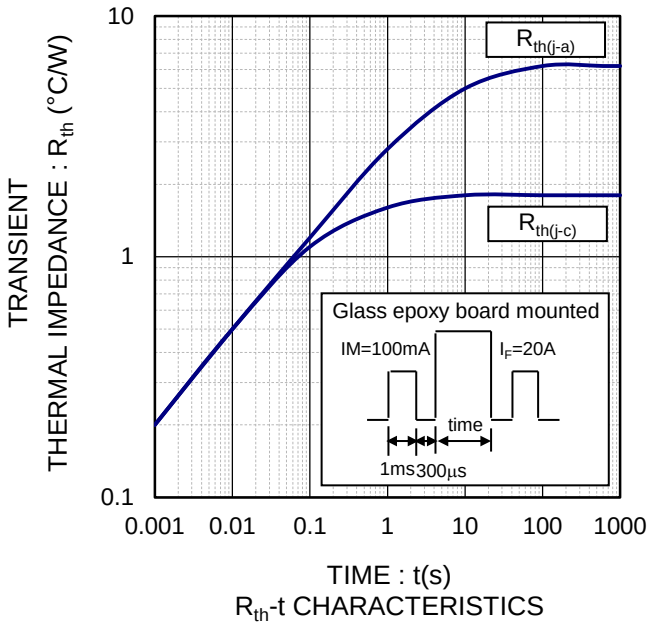
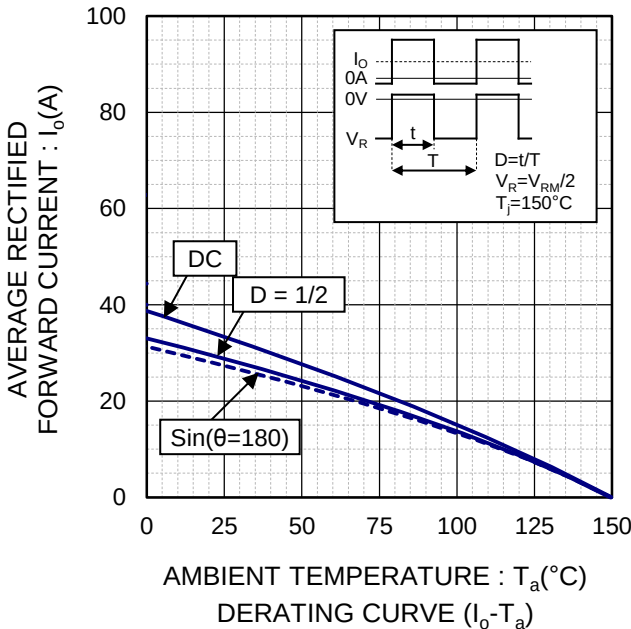
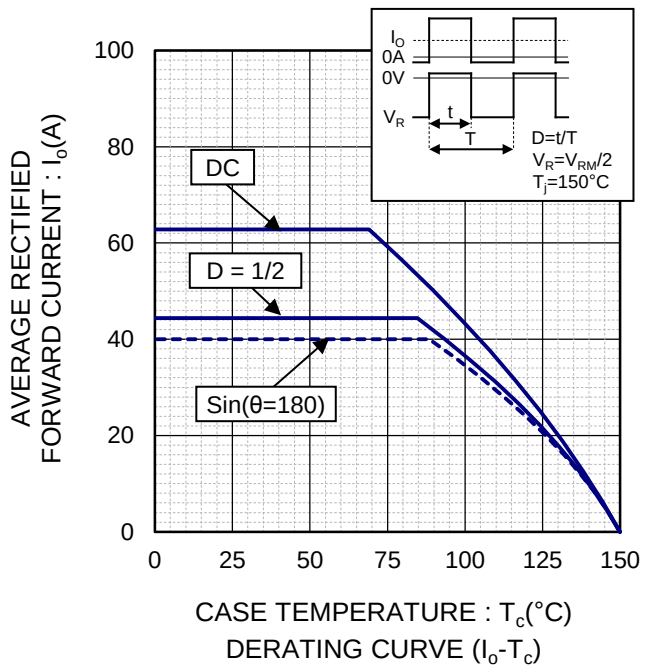
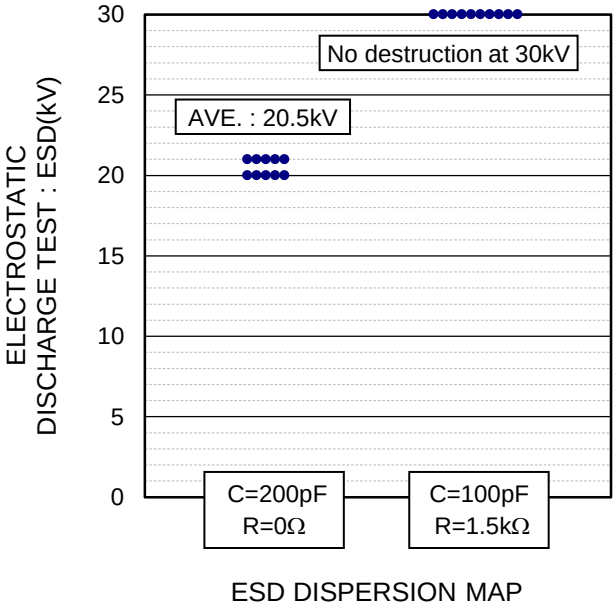


t_{rr} DISPERSION MAP

●Electrical Characteristic Curves



●Electrical Characteristic Curves



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