

●Application

Switching power supply

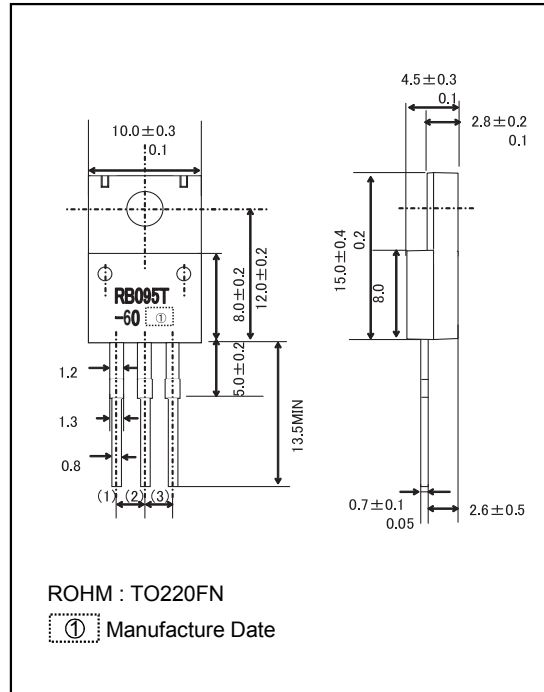
●Features

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

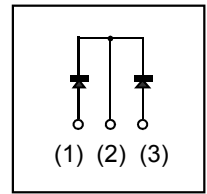
●Construction

Silicon epitaxial planar

●Dimensions (Unit : mm)



●Structure



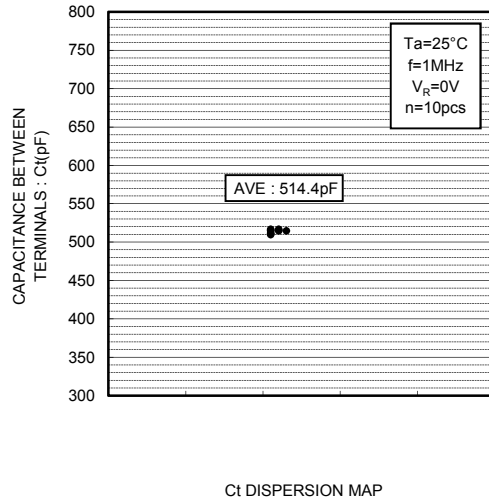
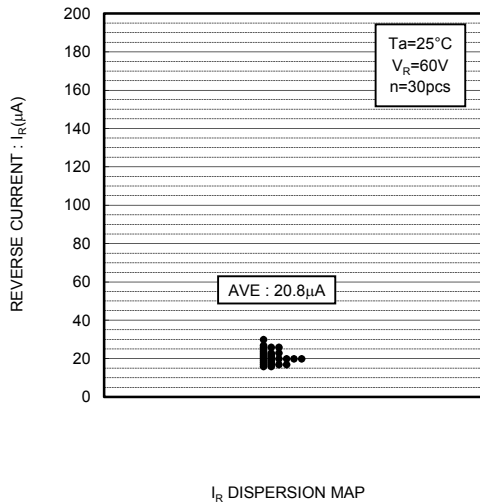
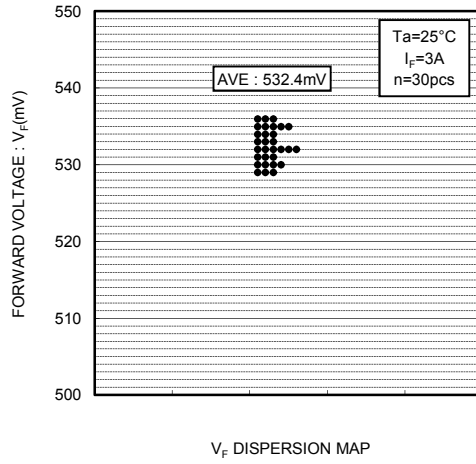
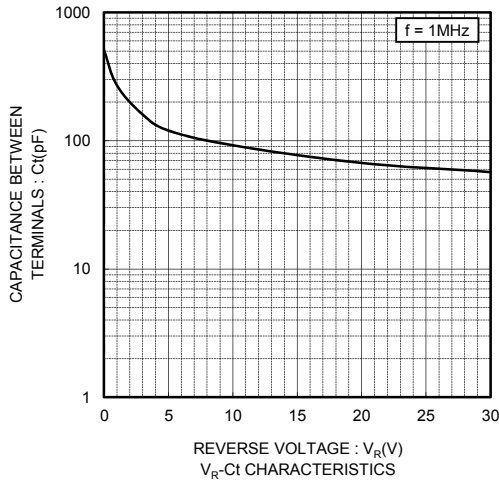
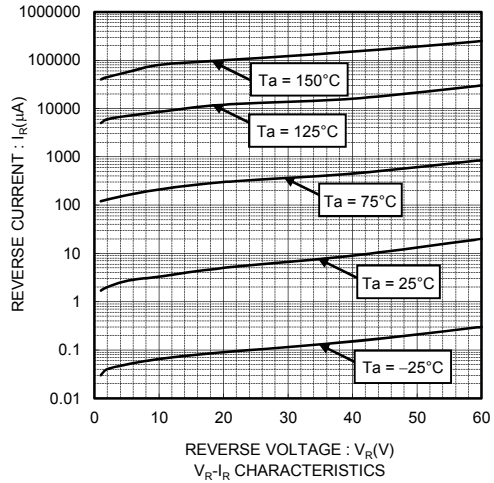
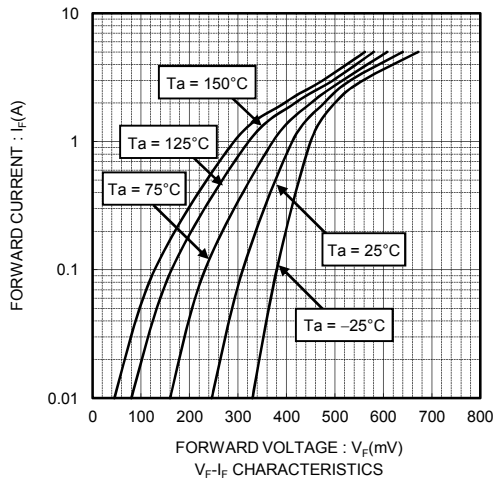
●Absolute maximum ratings (Ta = 25°C)

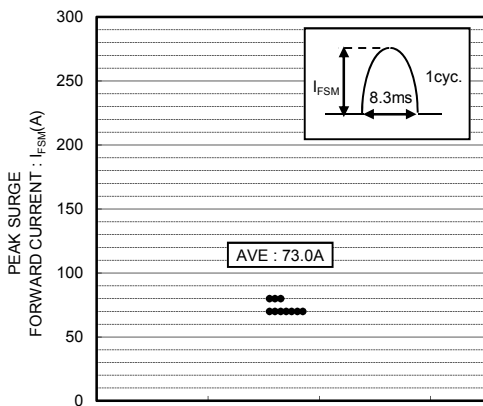
Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	V_{RM}	60	V
Reverse voltage (DC)	V_R	60	V
Average rectified forward current (*1)	I_o	6	A
Forward current surge peak (60Hz/1cyc)	I_{FSM}	100	A
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-40 to +150	°C

(*1) Business frequencies, Rating of R-load, 1/2 I_o per diode, $T_c=130^\circ\text{C}$

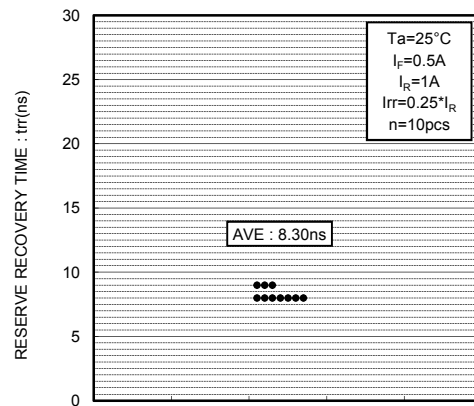
●Electrical characteristics (Ta= 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	-	-	0.58	V	$I_F=3A$
Reverse current	I_R	-	-	300	μA	$V_R=60V$
Thermal impedance	θ_{jc}	-	-	3.0	°C/W	junction to case

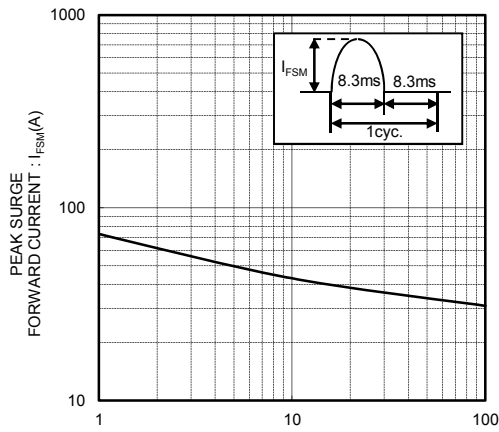




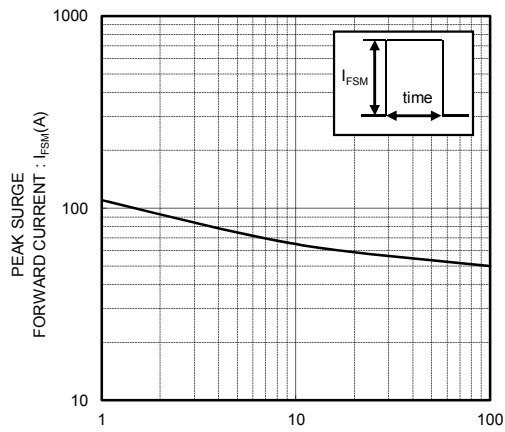
I_{FSM} DISPERSION MAP



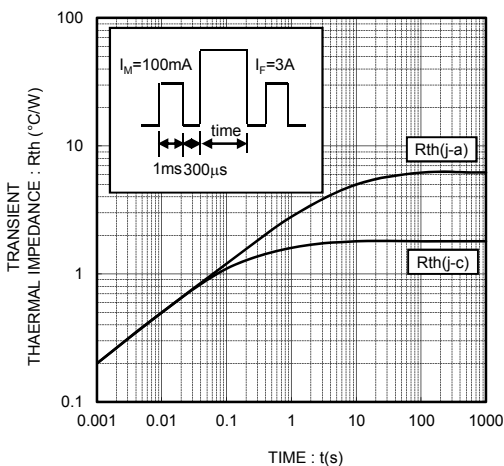
t_{rr} DISPERSION MAP



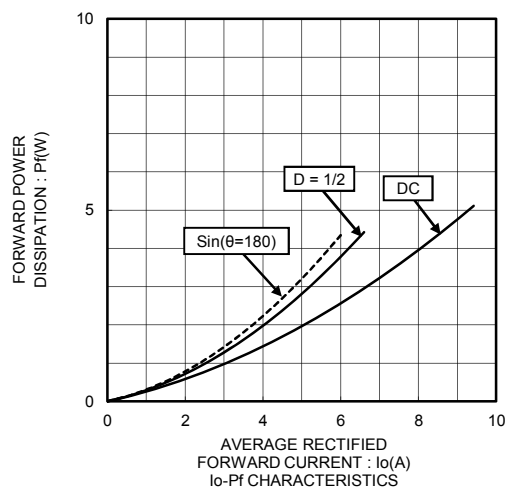
I_{FSM} -CYCLE CHARACTERISTICS



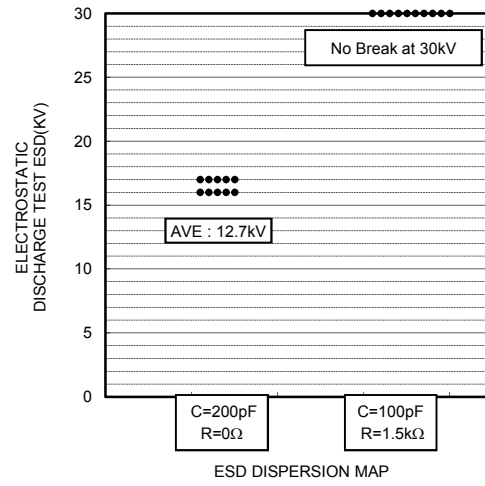
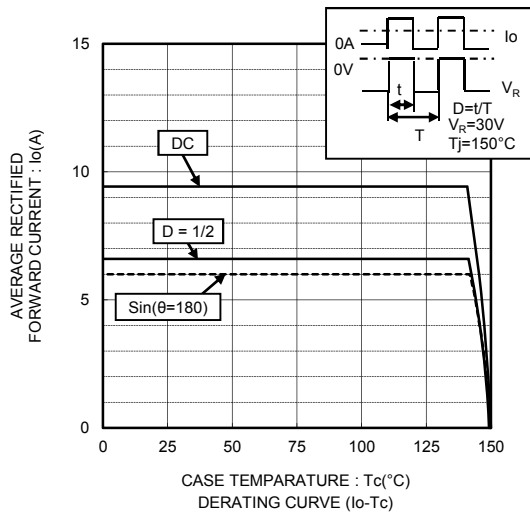
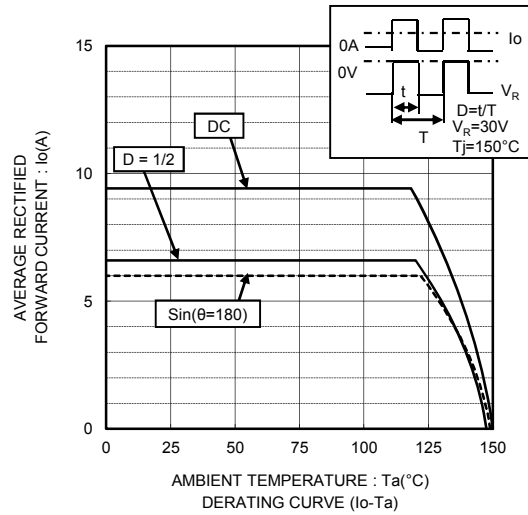
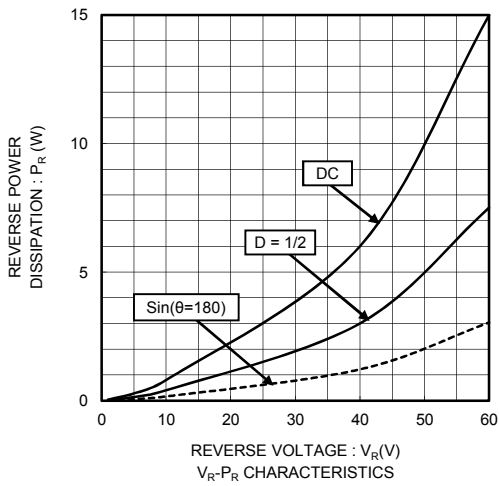
I_{FSM} - t CHARACTERISTICS



R_{th} - t CHARACTERISTICS



I_o - P_f CHARACTERISTICS



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