Fast recovery diodes

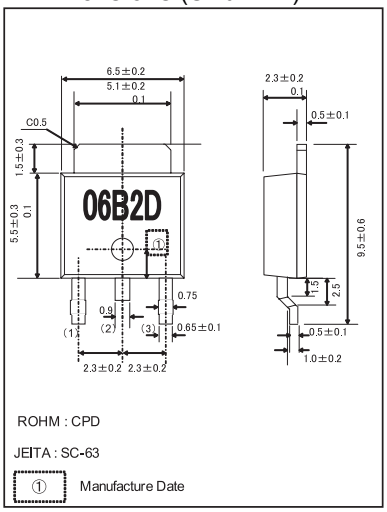
RF601B2D

●Applications
General rectification

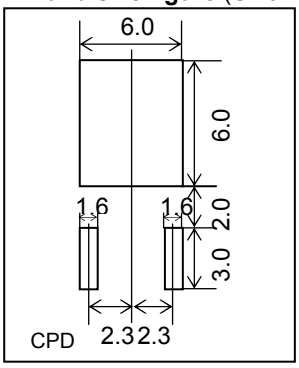
●Features
1)Power mold type.(CPD)
2)Ultra Low V_F
3)Very fast recovery
4)Low switching loss

●Construction
Silicon epitaxial planer

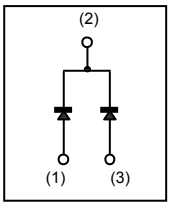
●Dimensions (Unit : mm)



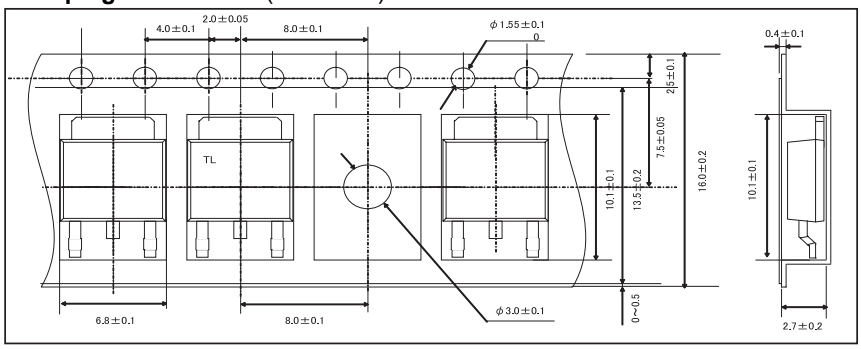
●Land size figure (Unit : mm)



●Structure



● Taping dimensions (Unit : mm)



●Absolute maximum ratings (Ta=25°C)

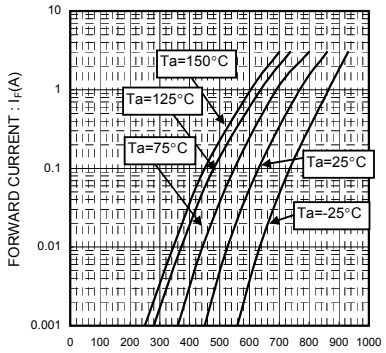
Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	V_{RM}	200	V
Reverse voltage (DC)	V_R	200	V
Average rectified forward current (*1)	Io	6	A
Forward current surge peak (60Hz/1cyc)	I_{FSM}	40	A
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C

(*1) Business frequencies, Rating of R-load, Tc=128°C, 1/2 Io per diode

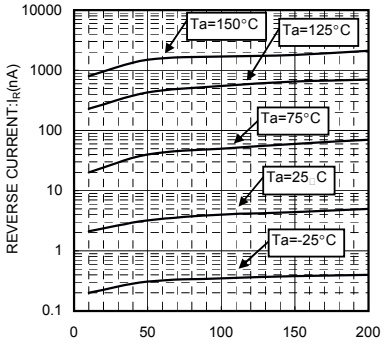
●Electrical characteristic (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	-	0.87	0.93	V	I_F=3A
Reverse current	I_R	-	0.01	10	μA	V_R=200V
Reverse recovery time	trr	-	14	25	ns	I_F=0.5A,I_R=1A,Irr=0.25*I_R
Thermal impedance	θjc	-	-	6	°C/W	JUNCTION TO CASE

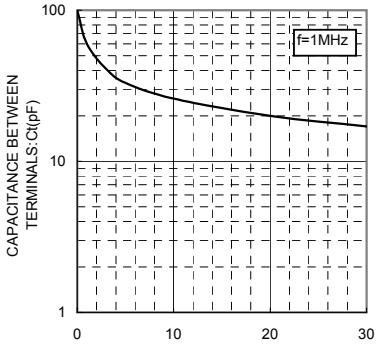
●**Electrical characteristic curves**



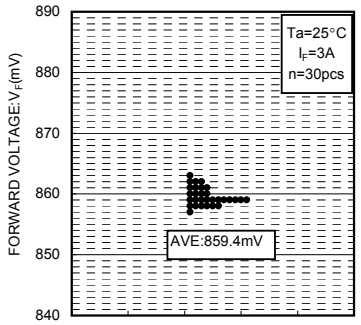
V_F-I_F CHARACTERISTICS



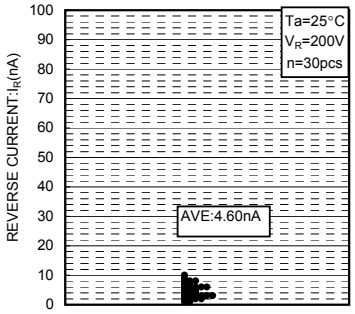
V_R-I_R CHARACTERISTICS



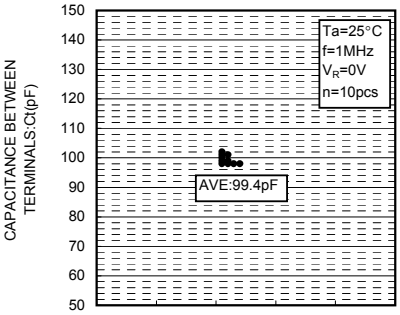
V_R-Ct CHARACTERISTICS



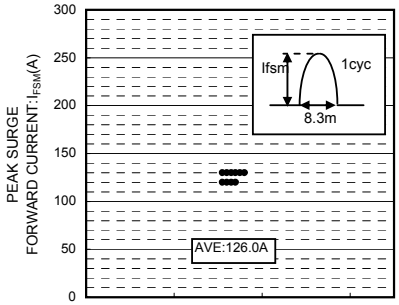
V_F DISPERSION MAP



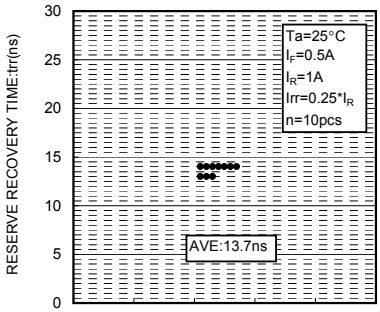
I_R DISPERSION MAP



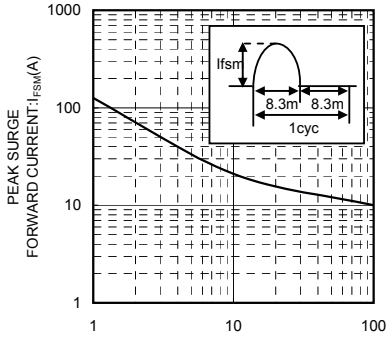
Ct DISPERSION MAP



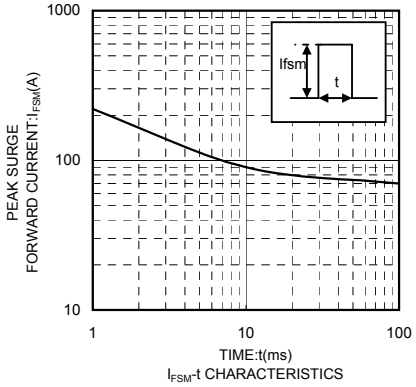
I_{FSM} DISPERSION MAP

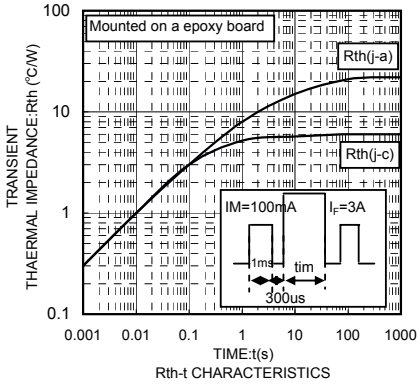


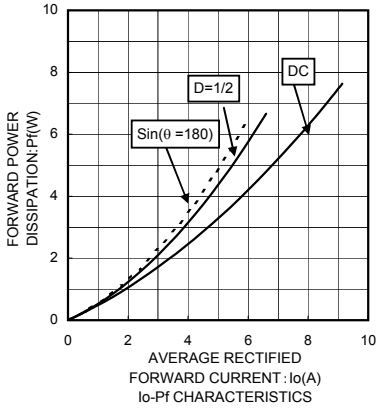
trr DISPERSION MAP

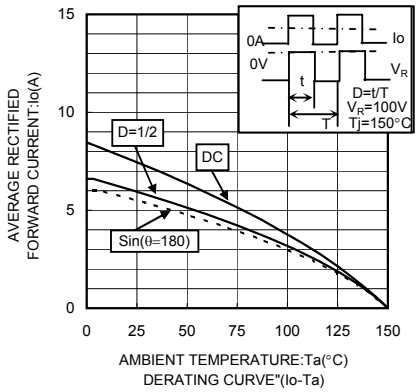


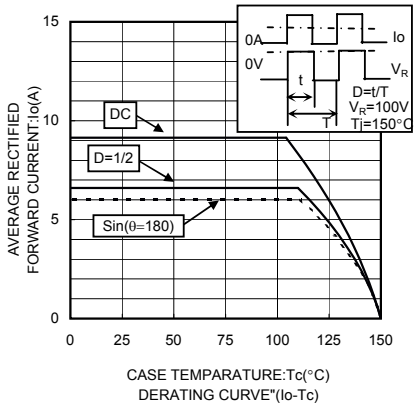
I_{FSM}-CYCLE CHARACTERISTICS

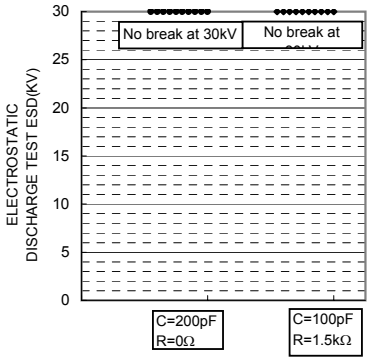












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