

Fast Recovery Diode

RF301B2S

●Applications

General rectification

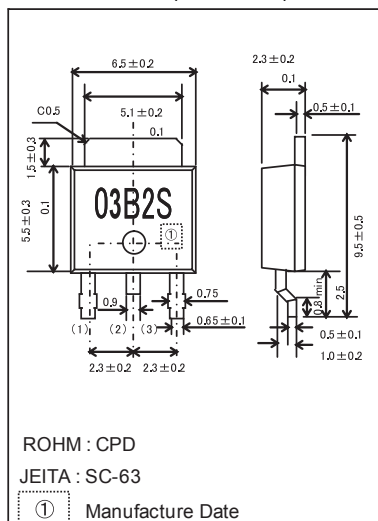
●Features

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

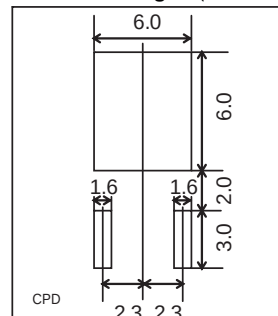
●Construction

Silicon epitaxial planar

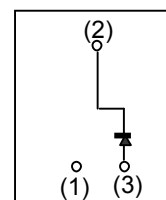
●Dimentions(Unit : mm)



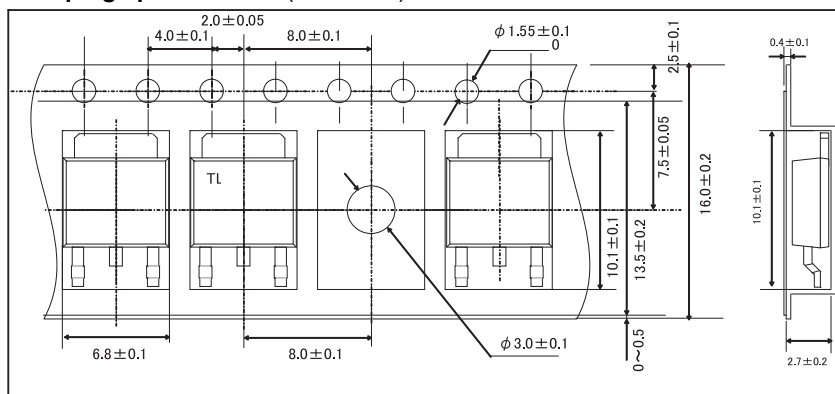
●Land size figure(Unit : mm)



●Structure



●Taping specifications(Unit : mm)



●Absolute maximum ratings (Ta=25°C)

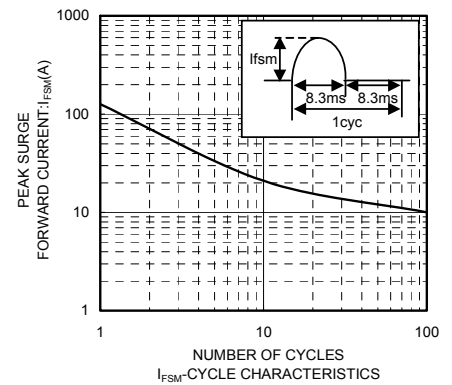
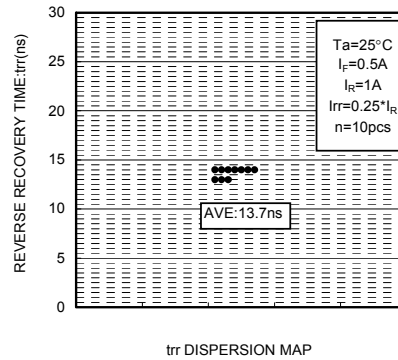
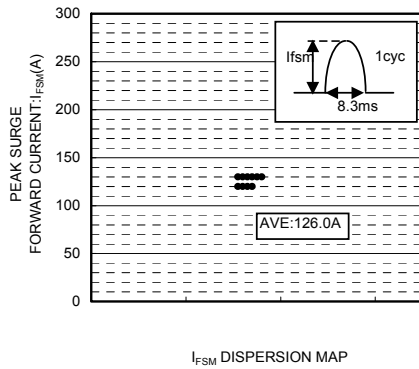
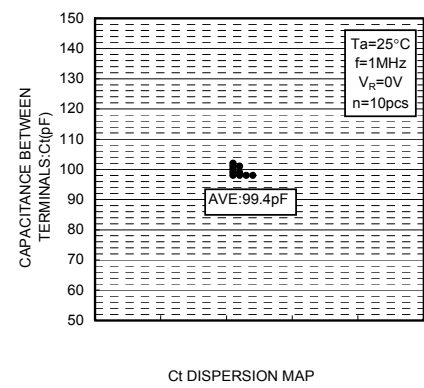
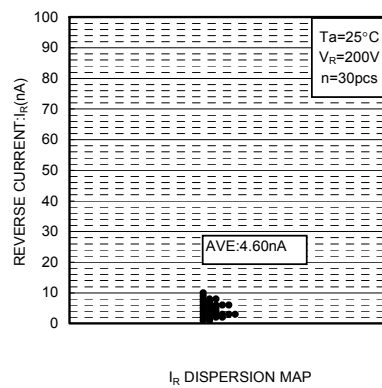
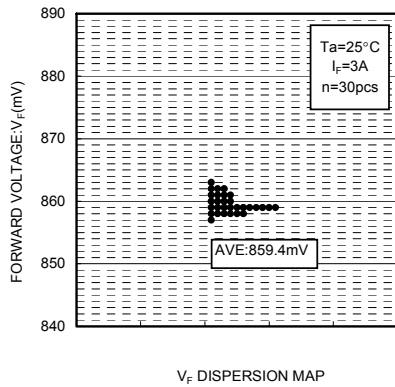
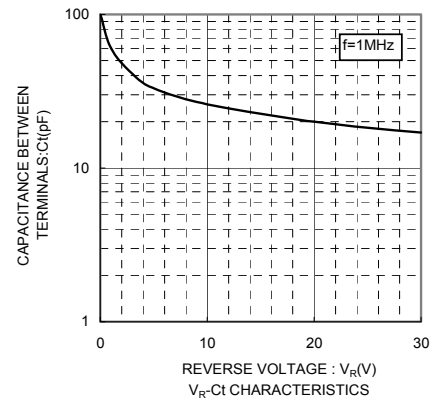
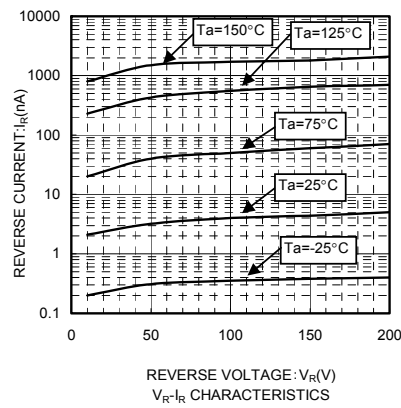
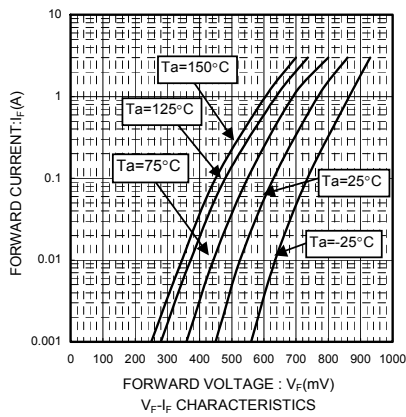
Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	V_{RM}	200	V
Reverse voltage (DC)	V_R	200	V
Average rectified forward current(*1)	I_o	3	A
Forward current surge peak (60Hz / 1cyc)(*1)	I_{FSM}	40	A
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55 to +150	°C

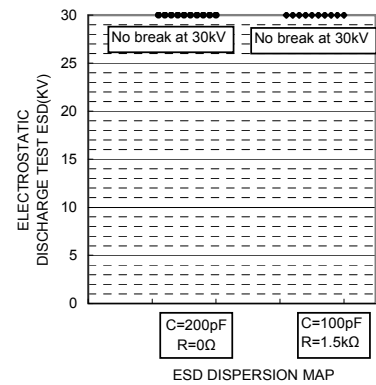
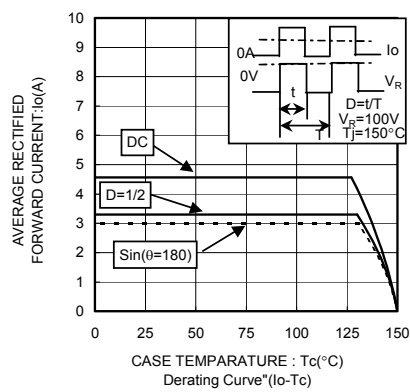
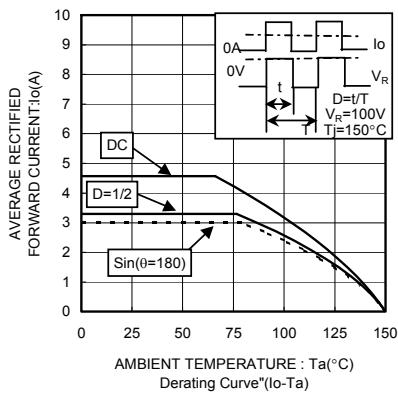
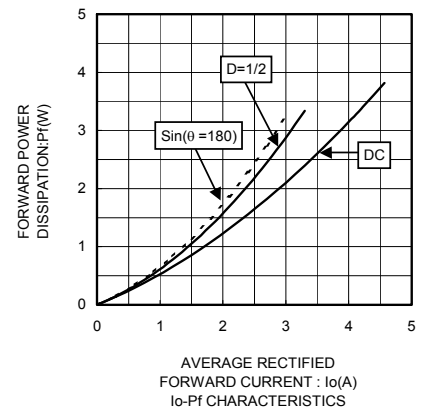
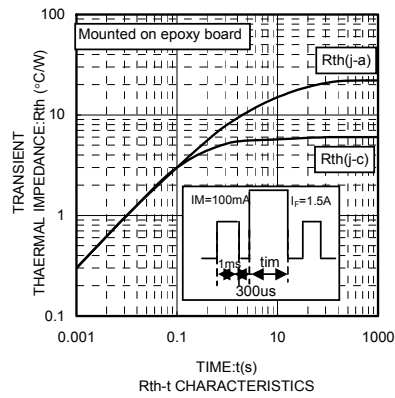
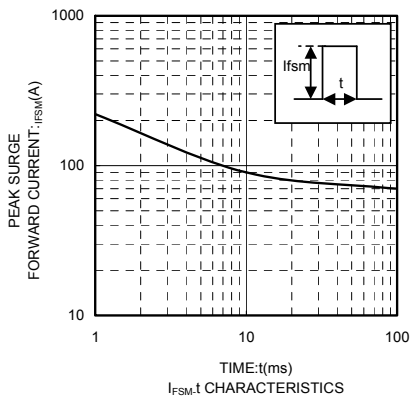
(*1)Business frequencies, Rating of R-load, $T_c=128^{\circ}\text{C MAX.}$

●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	-	0.87	0.93	V	$I_F=3\text{A}$
Reverse current	I_R	-	10nA	10	μA	$V_R=200\text{V}$
Reverse recovery time	t_{rr}	-	14	25	ns	$I_F=0.5\text{A}, I_R=1\text{A}, I_{rr}=0.25 \cdot I_R$
Thermal impedance	θ_{jc}	-	-	6	°C/W	JUNCTION TO CASE

●Electrical characteristics curves





Notes

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