

Fast Recovery Diode

RF301B2S

● **Applications**

General rectification

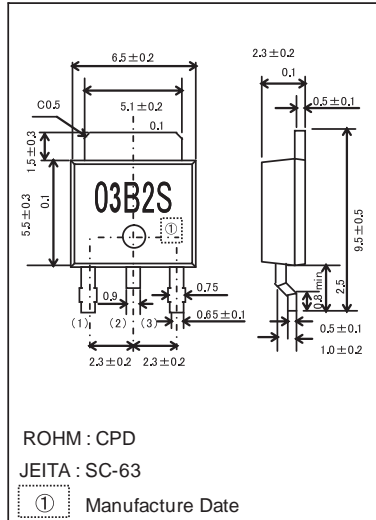
● **Features**

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

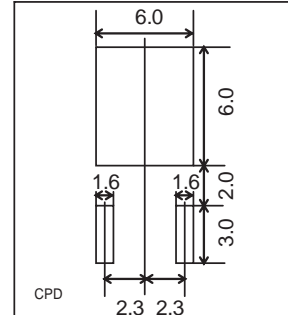
● **Construction**

Silicon epitaxial planar

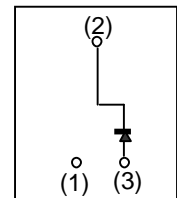
● **Dimensions**(Unit : mm)



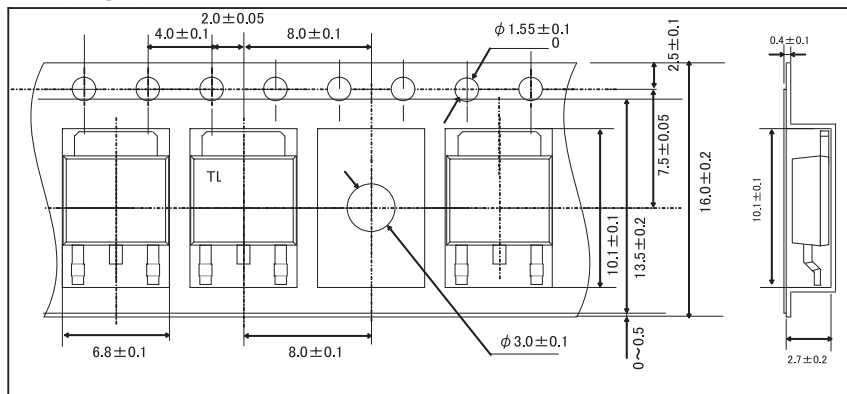
● **Land size figure**(Unit : mm)



● **Structure**



● **Taping specifications**(Unit : mm)



● **Absolute maximum ratings**($T_a=25^\circ\text{C}$)

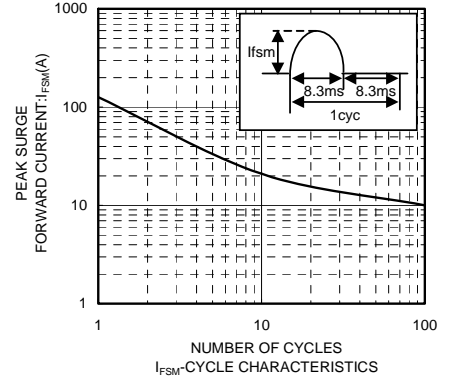
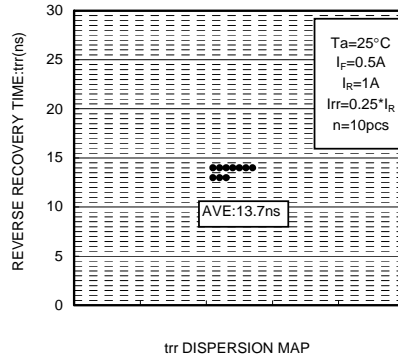
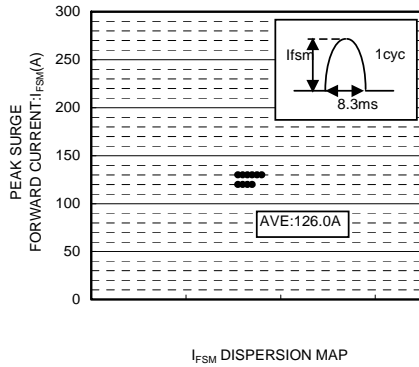
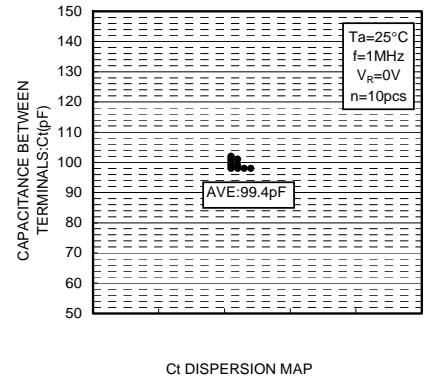
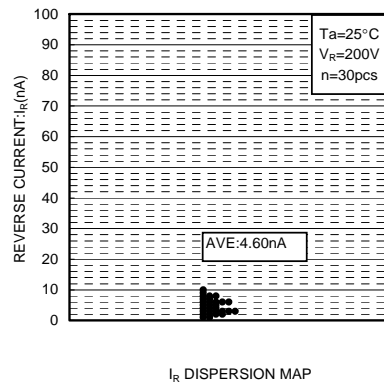
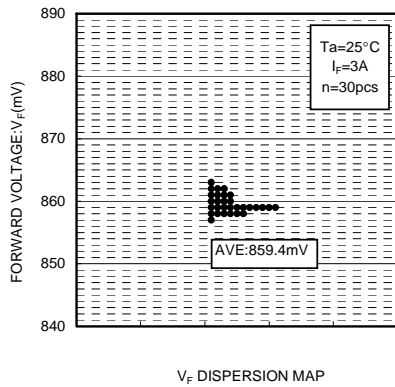
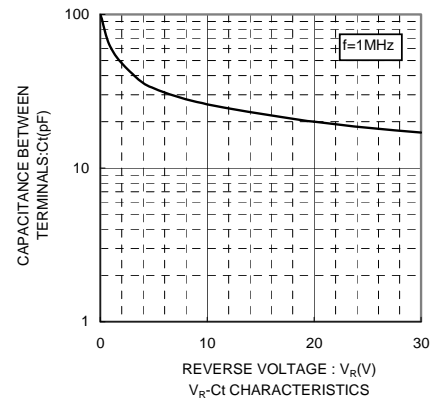
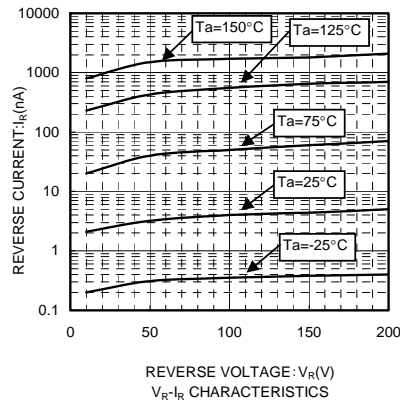
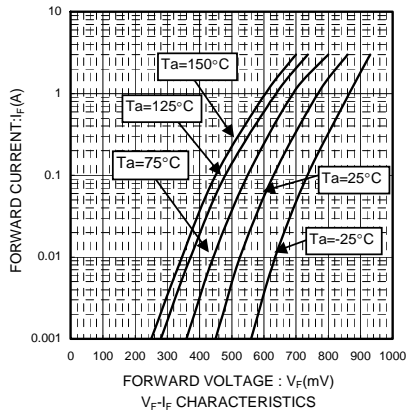
Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	V_{RM}	200	V
Reverse voltage (DC)	V_R	200	V
Average rectified forward current(*1)	I_o	3	A
Forward current surge peak (60Hz / 1cyc)(*1)	I_{FSM}	40	A
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

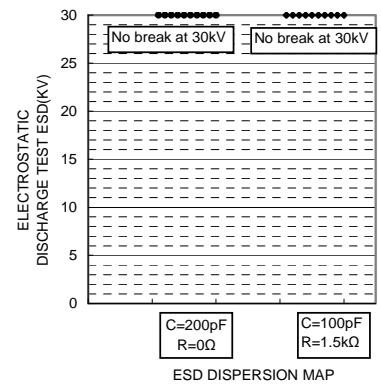
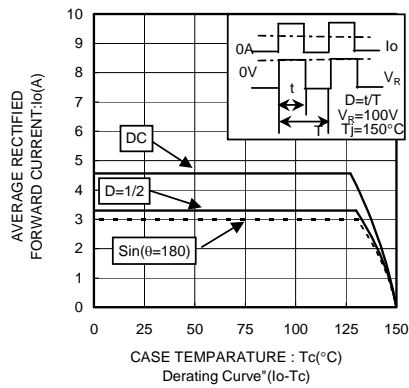
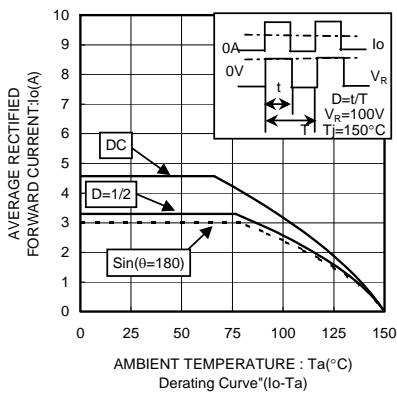
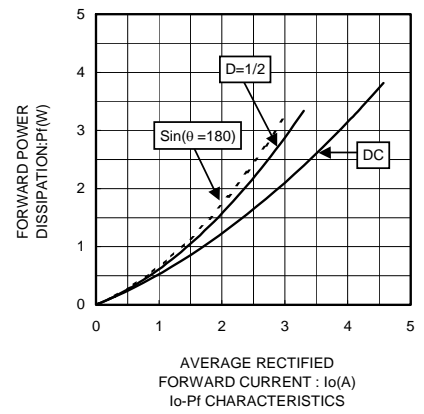
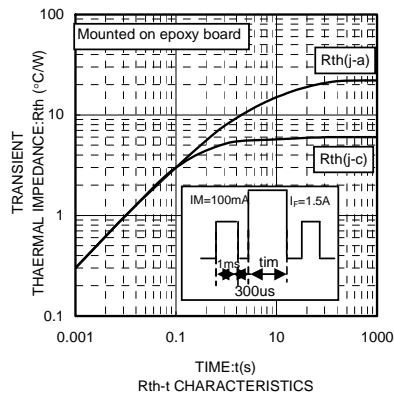
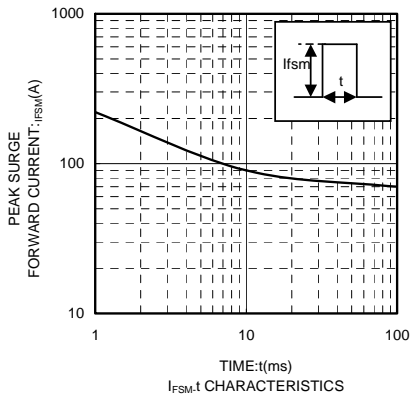
(*1)Business frequencies, Rating of R-load, $T_c=128^\circ\text{C MAX.}$

● **Electrical characteristics**($T_a=25^\circ\text{C}$)

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	$^\circ\text{C/W}$	JUNCTION TO CASE

●Electrical characteristics curves





Notes

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