

# Super Fast Recovery Diode

# RF305B6S

## ●Series

## Standard Fast Recovery

## ●Applications

## General rectification

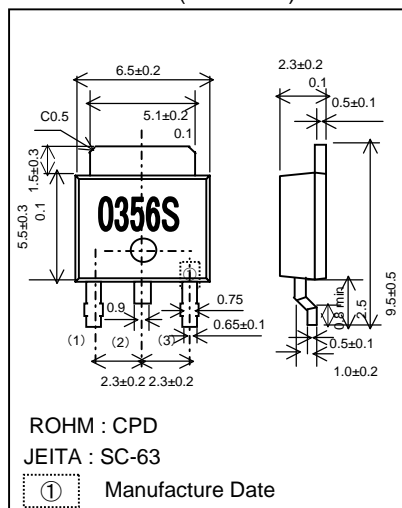
## ●Features

- 1) Low forward voltage
- 2) Low switching loss

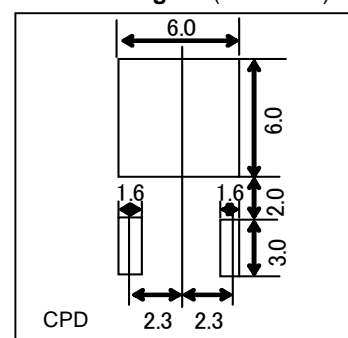
## ●Construction

Silicon epitaxial planer

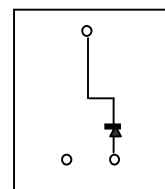
● **Dimensions** (Unit : mm)



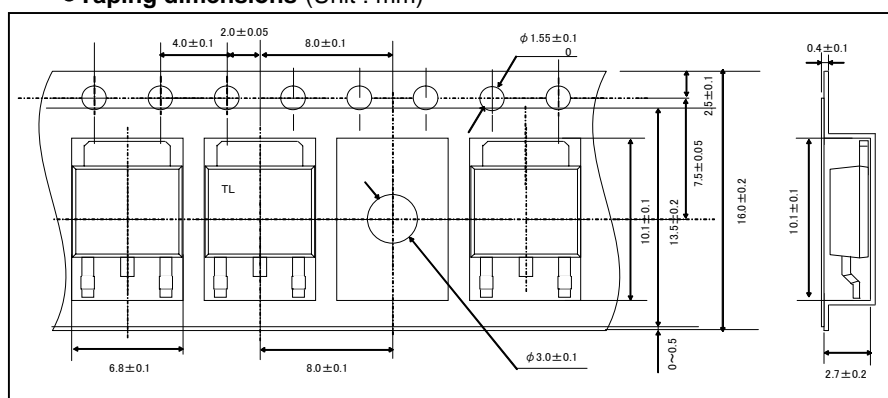
●Land size figure (Unit : mm)



### ● Structure



●Taping dimensions (Unit : mm)

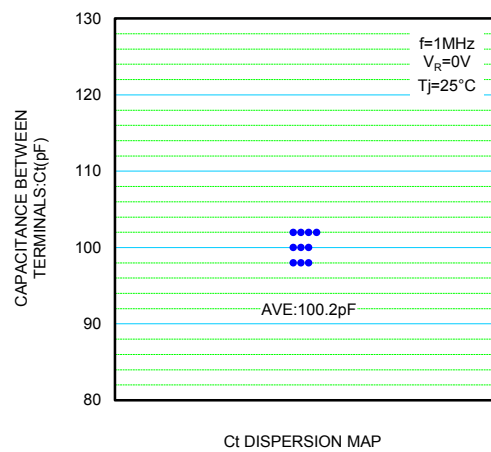
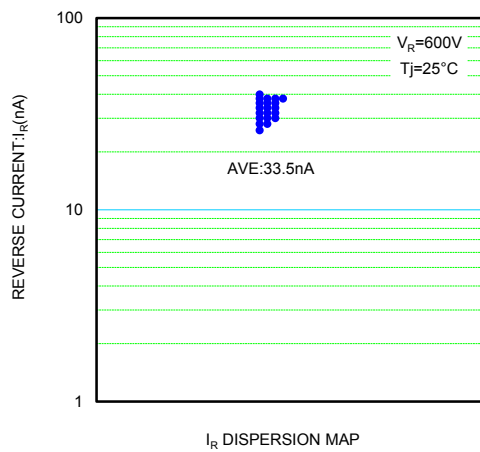
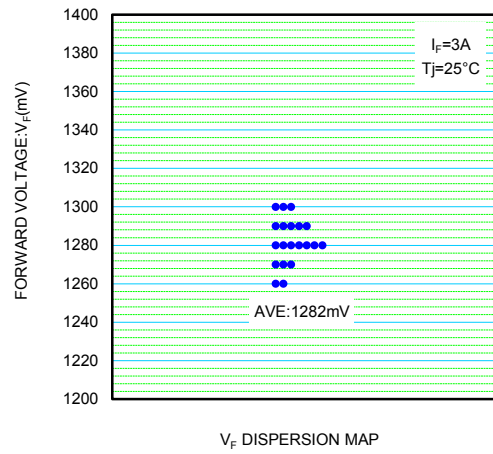
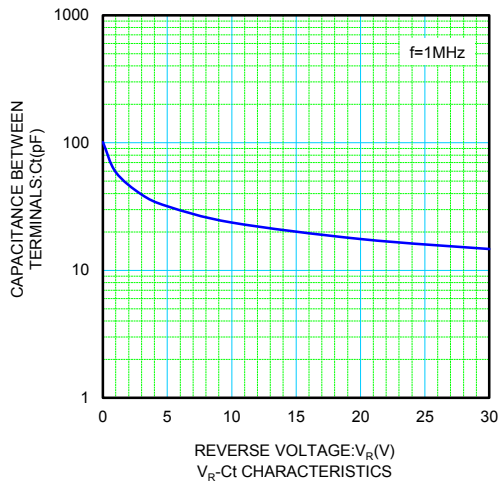
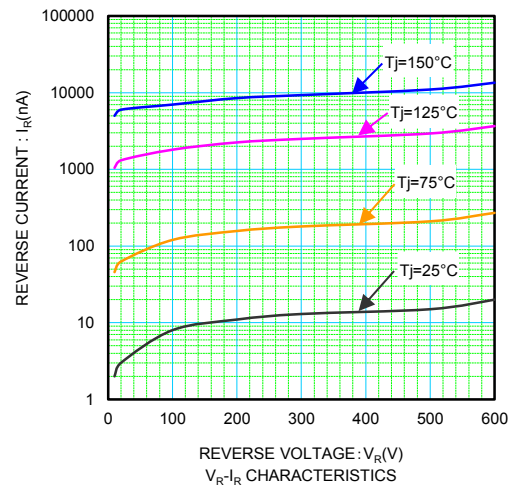
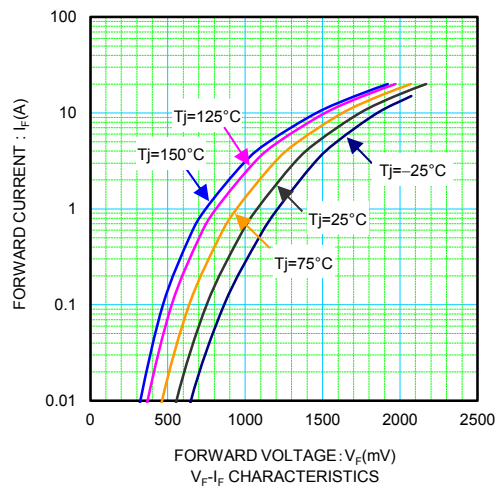


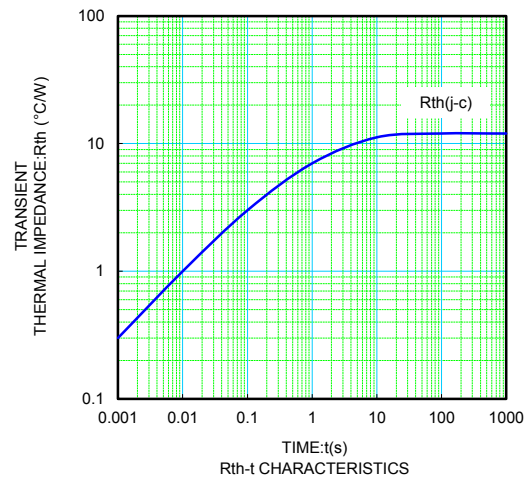
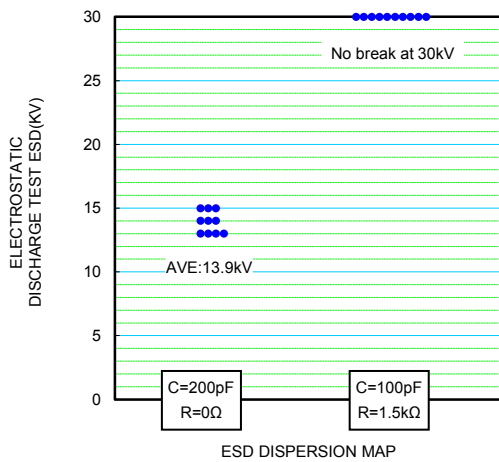
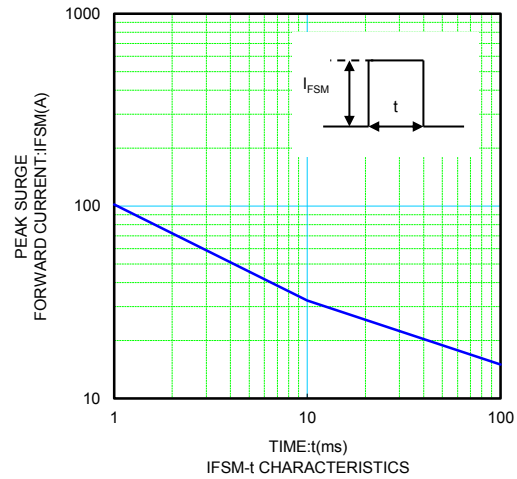
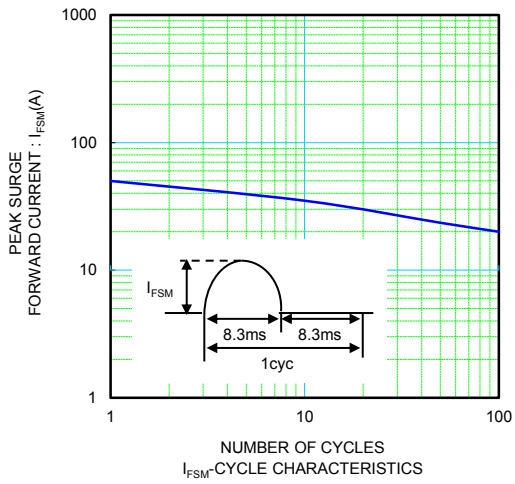
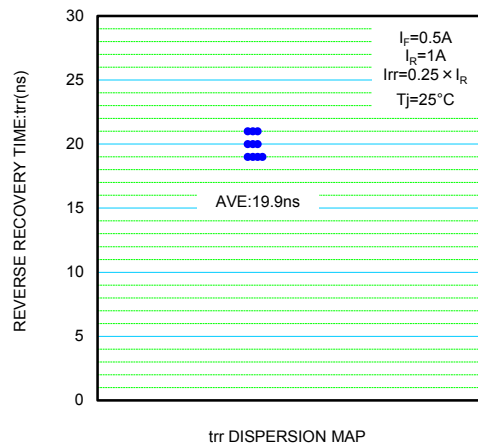
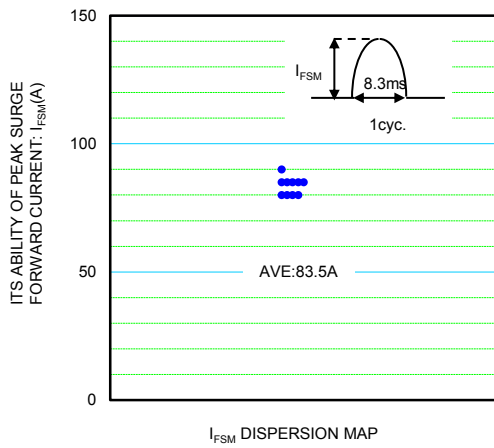
●Absolute maximum ratings (T<sub>c</sub>=25°C)

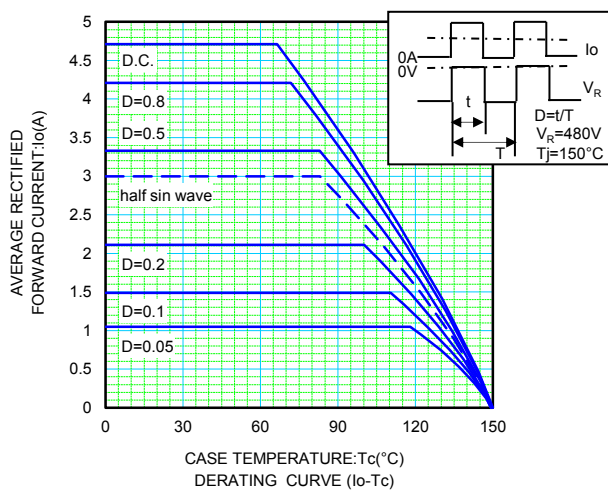
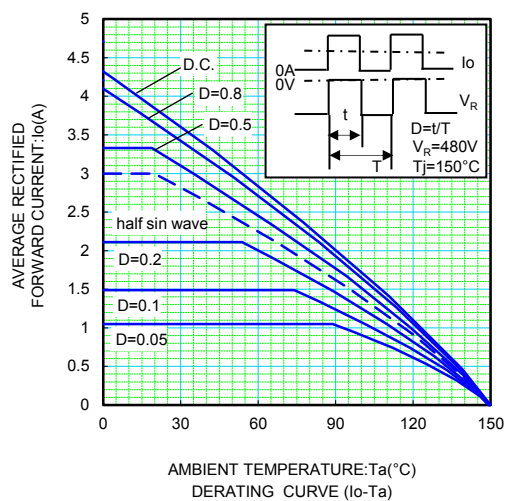
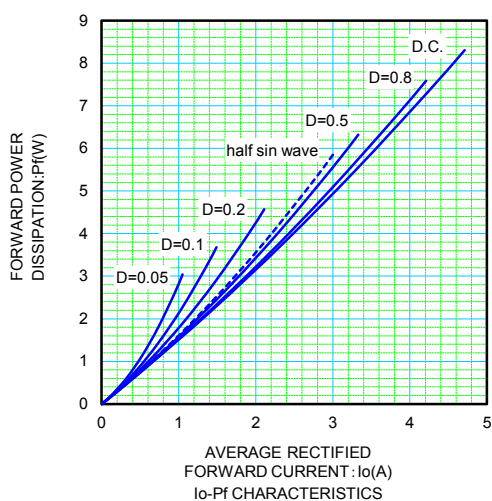
Parameter	Symbol	Conditions		Limits	Unit
Repetitive peak reverse voltage	V <sub>RM</sub>	Duty≤0.5		600	V
Reverse voltage	V <sub>R</sub>	Direct voltage		600	V
Average rectified forward current	I <sub>o</sub>	60Hz half sin wave, resistive load	Tc=83°C	3.0	A
Forward current surge peak	I <sub>FSM</sub>	60Hz half sin wave, Non-repetitive one cycle peak value, Tj=25°C		50	A
Junction temperature	Tj			150	°C
Storage temperature	Tstg			-55 to +150	°C

### ●Electrical characteristics (Tj=25°C)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage	$V_F$	$I_F=3.0A$	—	1.3	1.7	V
Reverse current	$I_R$	$V_R=600V$	—	0.04	10	$\mu A$
Reverse recovery time	$t_{rr}$	$I_F=0.5A, I_R=1A, t_{rr}=0.25 \times I_R$	—	22	30	ns
Thermal resistance	$R_{th(j-l)}$	junction to lead	—	—	12	$^{\circ}C/W$







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