



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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## Super Fast Recovery Diode

RF305B6S

## ●Series

Standard Fast Recovery

## ●Applications

General rectification

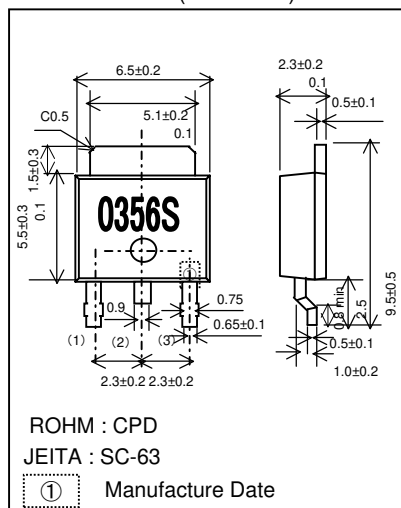
## ●Features

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

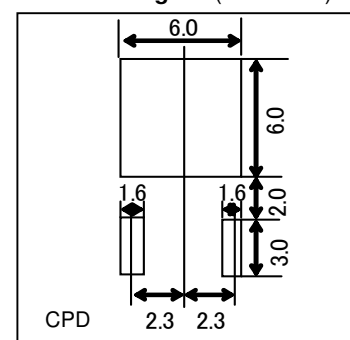
## ●Construction

Silicon epitaxial planer

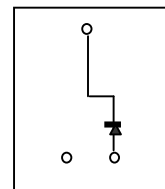
## ●Dimensions (Unit : mm)



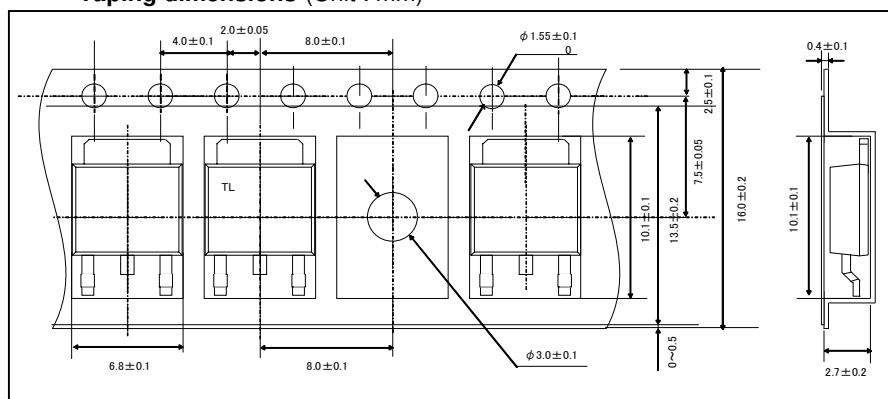
## ●Land size figure (Unit : mm)



## ●Structure



## ●Taping dimensions (Unit : mm)

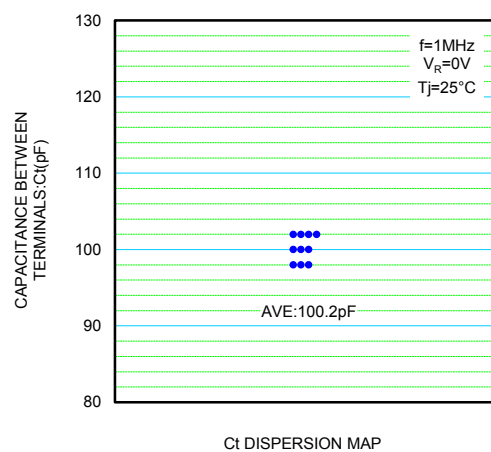
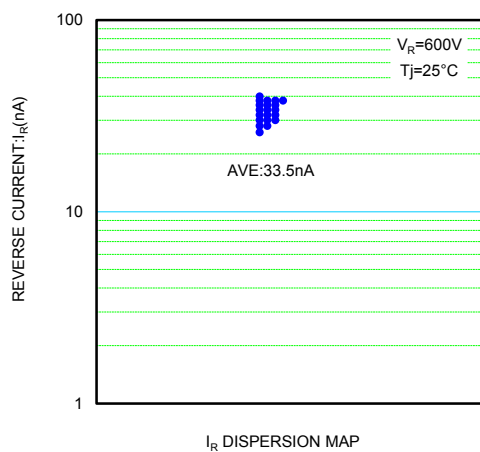
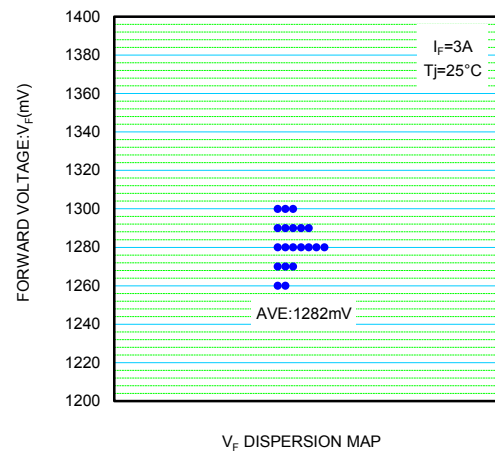
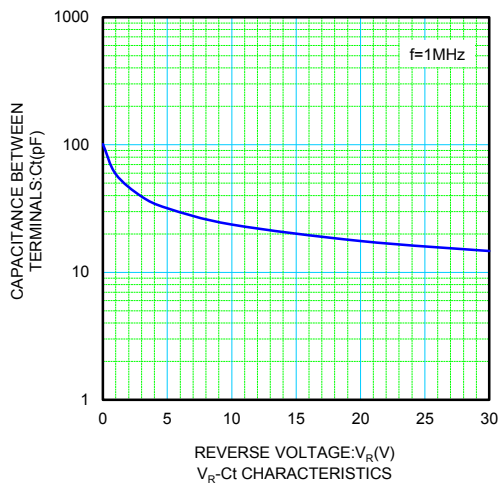
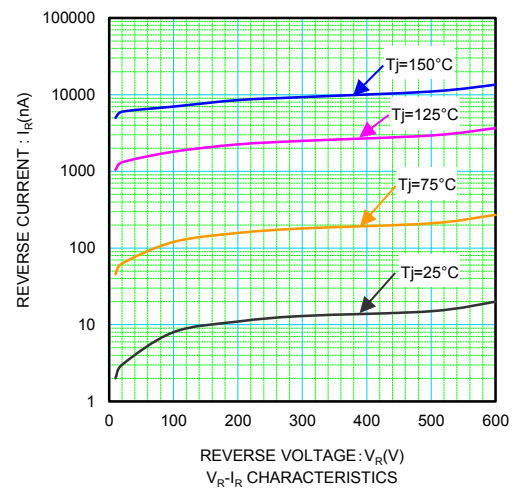
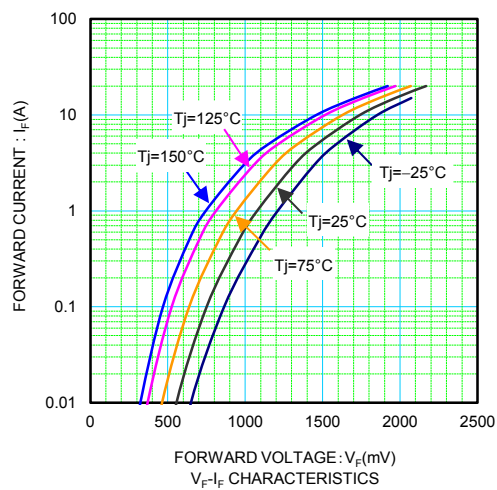


## ●Absolute maximum ratings (Tc=25°C)

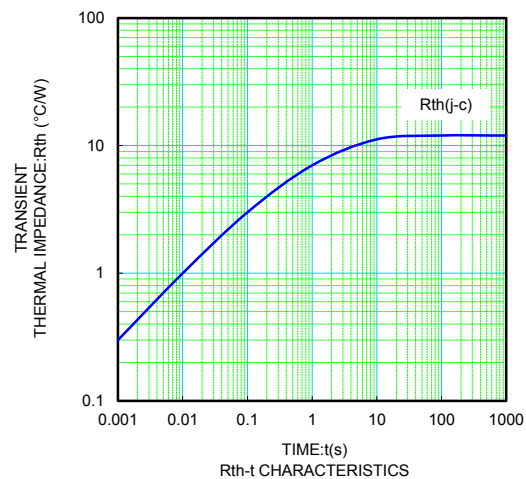
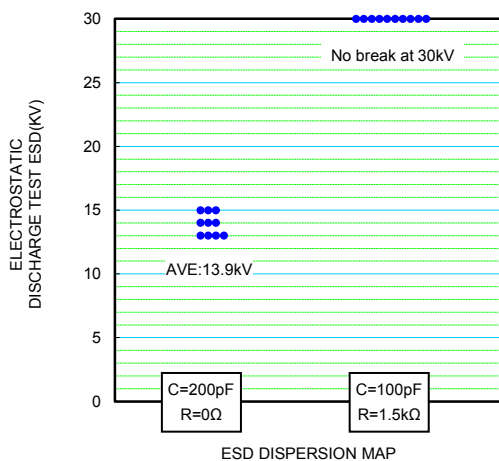
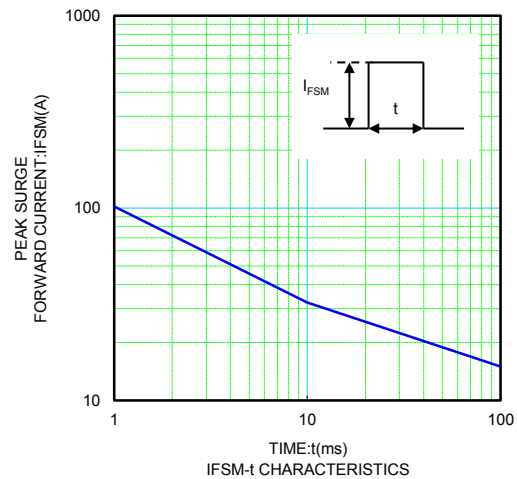
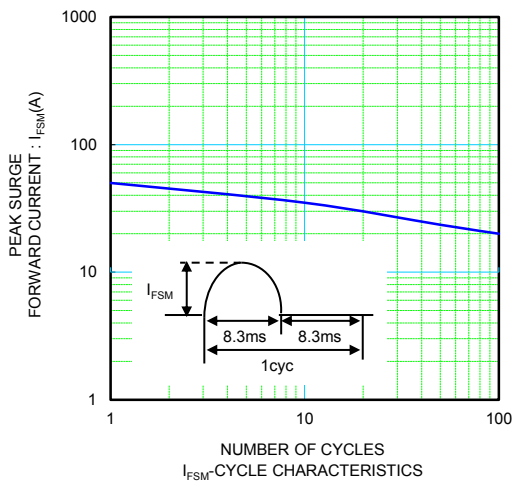
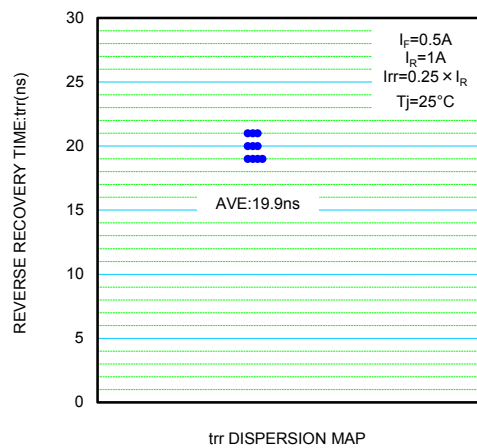
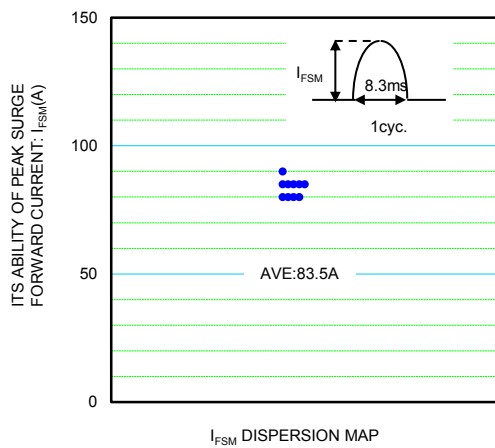
Parameter	Symbol	Conditions	Limits	Unit
Repetitive peak reverse voltage	$V_{RM}$	Duty $\leq$ 0.5	600	V
Reverse voltage	$V_R$	Direct voltage	600	V
Average rectified forward current	$I_o$	60Hz half sin wave, resistive load, Tc=83°C	3.0	A
Forward current surge peak	$I_{FSM}$	60Hz half sin wave, Non-repetitive one cycle peak value, Tj=25°C	50	A
Junction temperature	Tj		150	°C
Storage temperature	Tstg		-55 to +150	°C

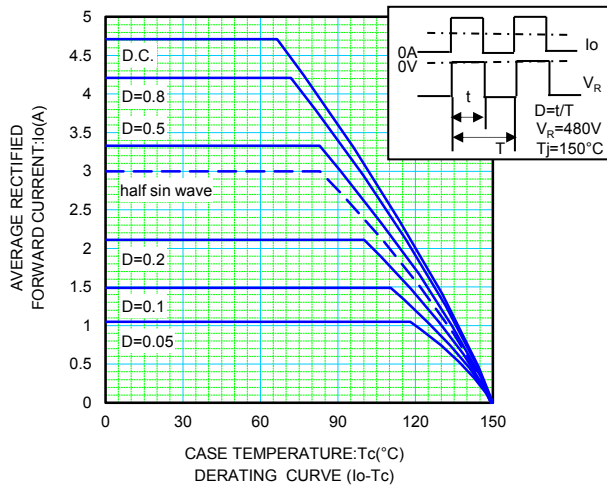
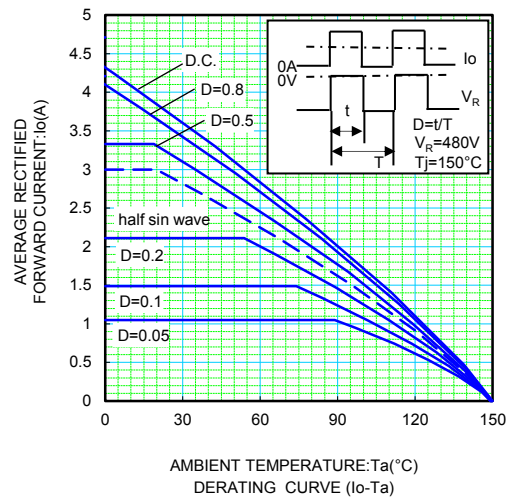
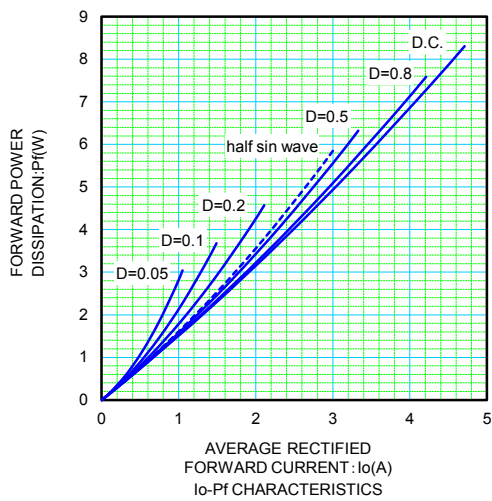
## ●Electrical characteristics (Tj=25°C)

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	trr	$I_F=0.5A, I_R=1A, I_{rr}=0.25 \times I_R$	—	22	30	ns
Thermal resistance	Rth(j-l)	junction to lead	—	—	12	°C/W









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