Super Fast Recovery Diode

RF081L2S

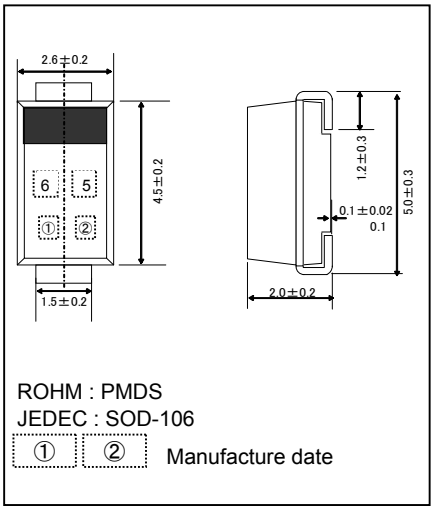
●Series
Standard Fast Recovery

●Applications
General rectification

●Features
1)Small power mold type.（PMDS）
2)Low switching loss
3)Low forward voltage

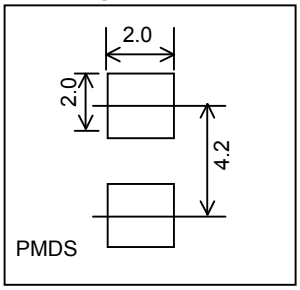
●Construction
Silicon epitaxial planer

●Dimensions (Unit : mm)

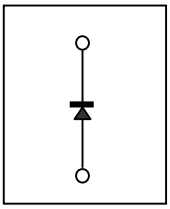


ROHM : PMDS
JEDEC : SOD-106
① ② Manufacture date

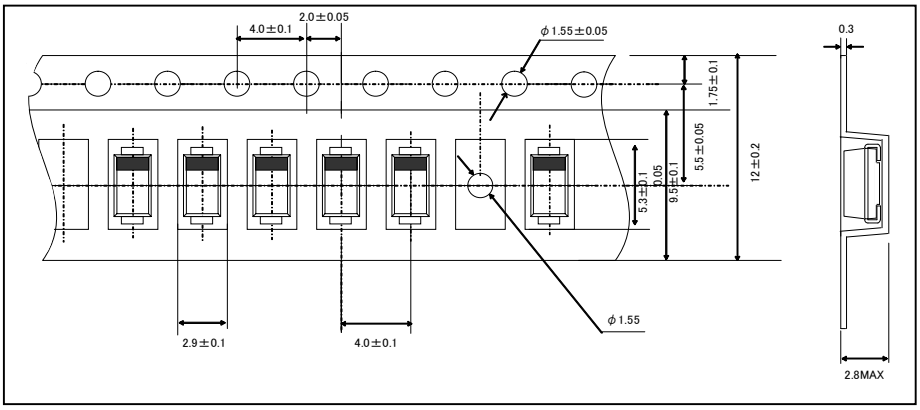
●Land size figure (Unit : mm)



●Structure



●Taping dimensions (Unit : mm)



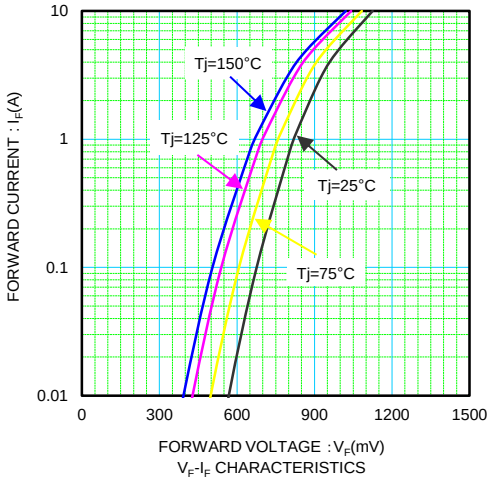
●Absolute maximum ratings (Tl=25°C)

Parameter	Symbol	Conditions		Limits	Unit
Repetitive peak reverse voltage	V_{RM}	D≥0.5		200	V
Reverse voltage	V_R	Direct voltage		200	V
Average rectified forward current	Io	Glass epoxy substrate mounted R-road, 60Hz half sin wave	Tl=120°C	1.1	A
Forward current surge peak	I_{FSM}	60Hz half sin wave, Non-repetitive one cycle peak value, Tj=25°C		25	A
Junction temperature	Tj			150	°C
Storage temperature	Tstg			−55 to +150	°C

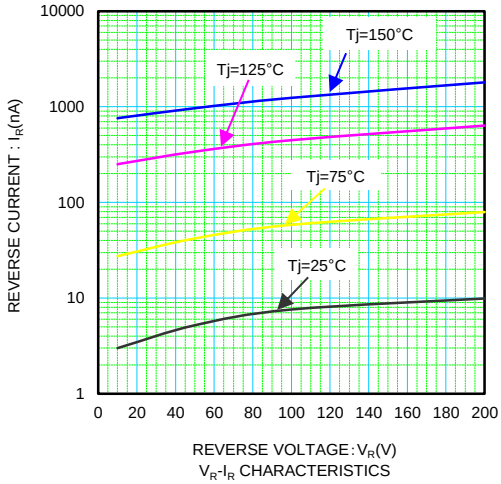
●Electrical characteristics (Tj=25°C)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage	V_F	I_F=1.1A	—	0.85	0.98	V
Reverse current	I_R	V_R=200V	—	0.01	10	μA
Reverse recovery time	trr	I_F=0.5A,I_R=1A,Irr=0.25×I_R	—	12	25	ns
Thermal resistance	Rth(j-l)	junction to lead	—	—	23	°C/W

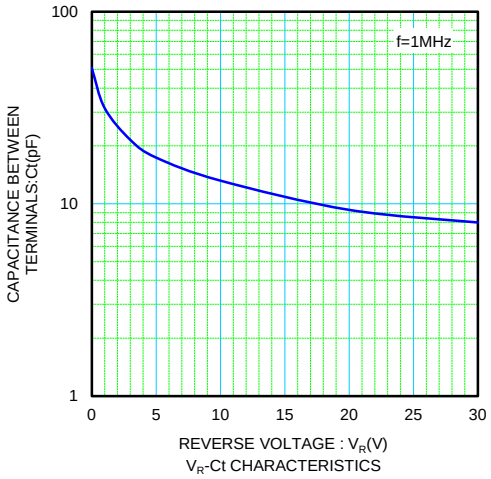
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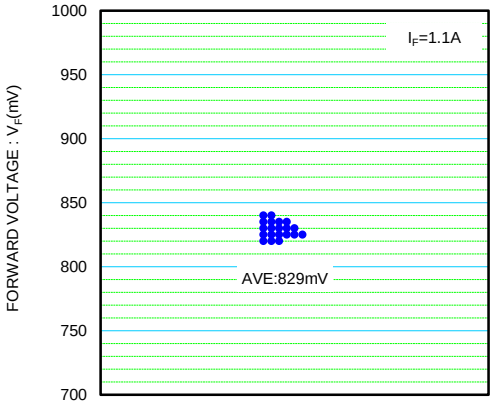
V_F-I_F CHARACTERISTICS



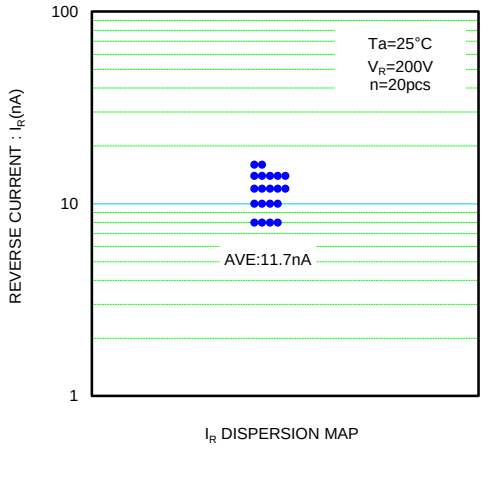
V_R-I_R CHARACTERISTICS



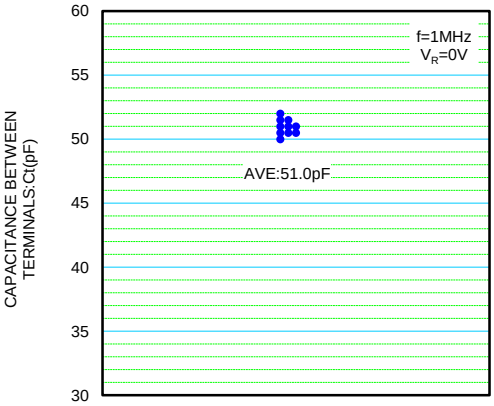
V_R-Ct CHARACTERISTICS



V_F DISPERSION MAP

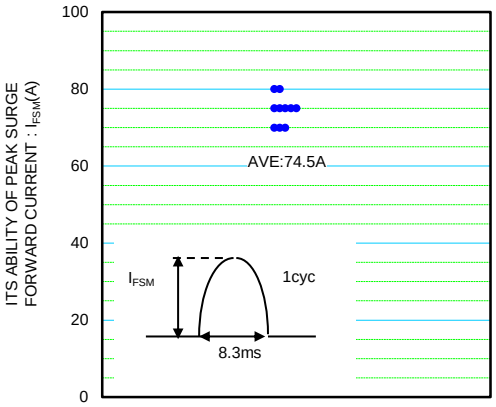


I_R DISPERSION MAP

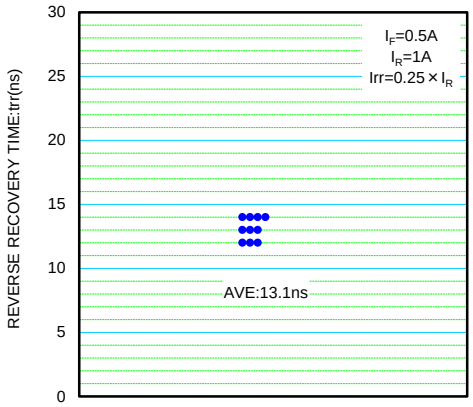


Ct DISPERSION MAP

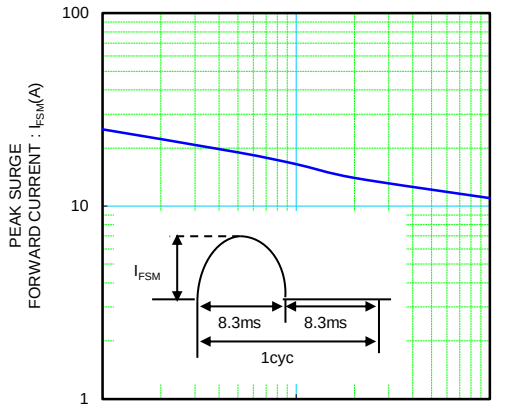
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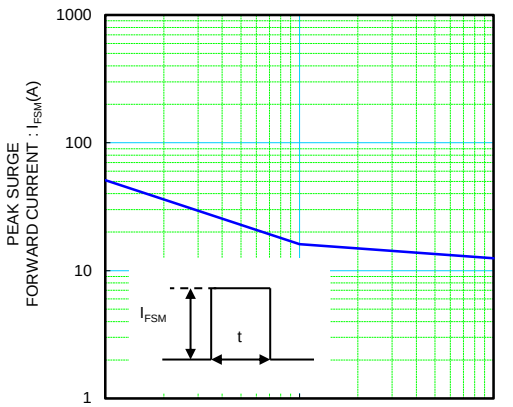
I_{FSM} DISPERSION MAP



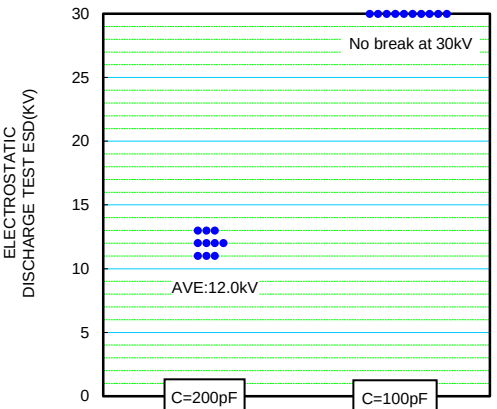
trr DISPERSION MAP



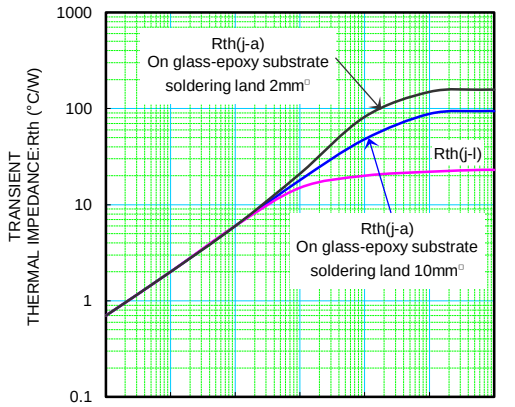
I_{FSM}-CYCLE CHARACTERISTICS



I_{FSM}-t CHARACTERISTICS

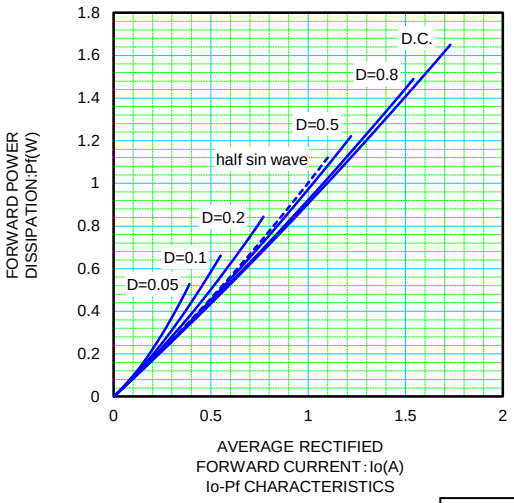


ESD DISPERSION MAP

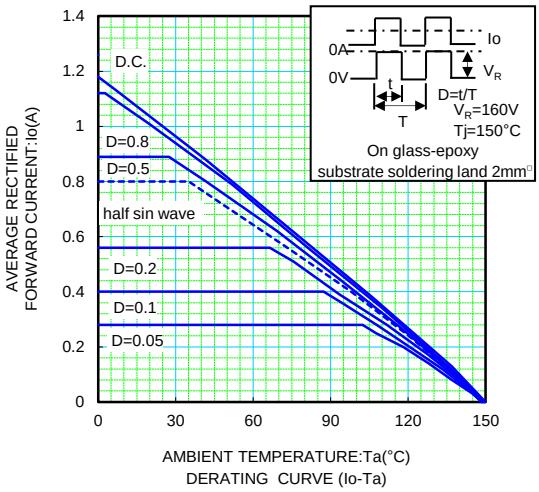


Rth-t CHARACTERISTICS

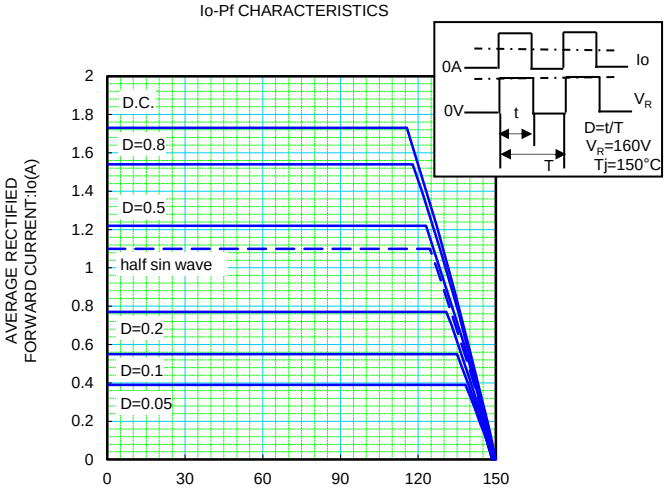
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Io-Pf CHARACTERISTICS



DERATING CURVE (Io-Ta)



DERATING CURVE (Io-Tl)

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