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Super Fast Recovery Diode

RF081M2S Data Sheet

●Serise

Standard Fast Recovery

●Application

General rectification

●Features

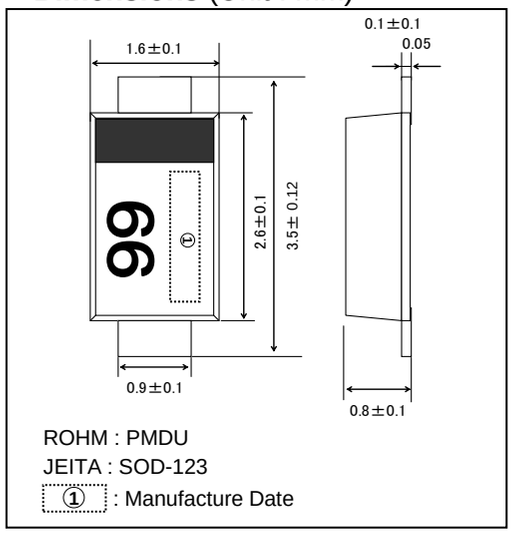
1) Low forward voltage

2) Low switching loss

●Construction

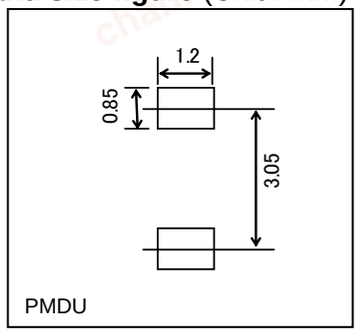
Silicon epitaxial planar type

●Dimensions (Unit : mm)

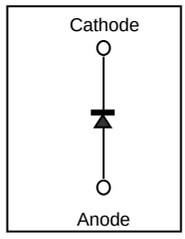


ROHM : PMDU
JEITA : SOD-123
① : Manufacture Date

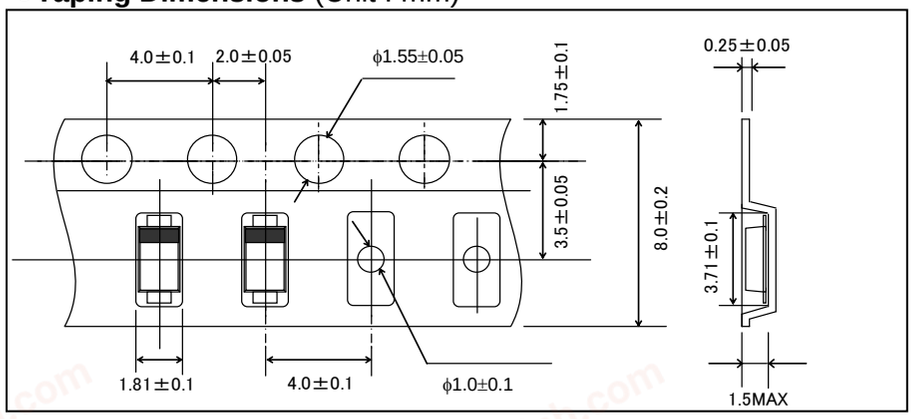
●Land size figure (Unit : mm)



●Structure



●Taping Dimensions (Unit : mm)



●Absolute maximum ratings (T_a= 25°C)

Parameter	Symbol	Conditions		Limits	Unit
Repetitive peak reverse voltage	V_{RM}	Duty≦0.5		200	V
Reverse voltage	V_R	Direct reverse voltage		200	V
Average rectified foward current	I_o	On glass epoxy substrate 60Hz half sin wave , Resistive load	T_a= 45°C	0.8	A
			T_l= 130°C	1	
Non-repetitive forward surge current	I_{FSM}	60Hz half sin wave ,Non-repetitive at T_j=25°C		20	A
Operating junction temperature	T_j	-		150	°C
Storage temperature	T_{stg}	-		–55 to +150	°C

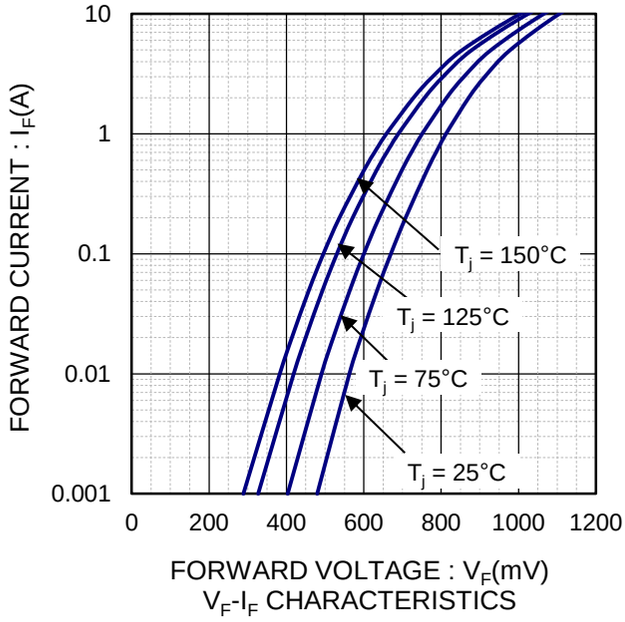
●Electrical characteristics (T_j = 25°C)

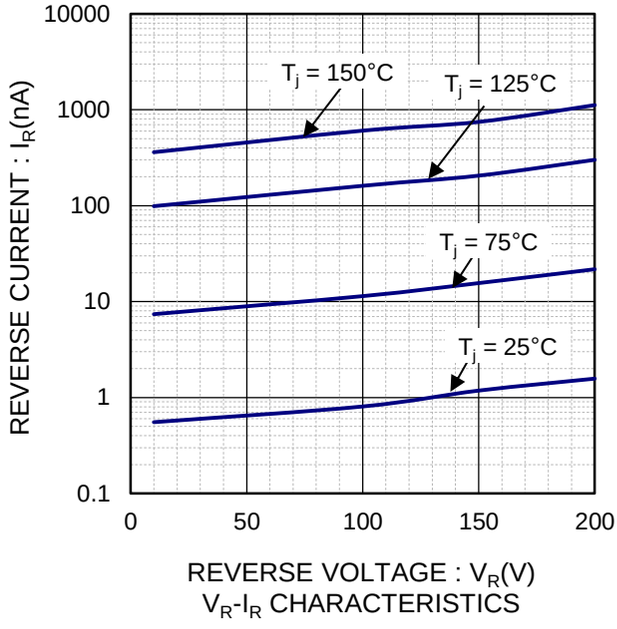
Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage	V_F	I_F=0.8A	-	0.81	0.95	V
		I_F=1A	-	0.82	0.98	
Reverse current	I_R	V_R=200V	-	0.01	10	μA
Reverse recovery time	trr	I_F=0.5A, I_R=1A, Irr=0.25×I_R	-	14	25	ns
Thermal resistance	$R_{th(j-l)}$	Junction to lead	-	-	20	°C / W

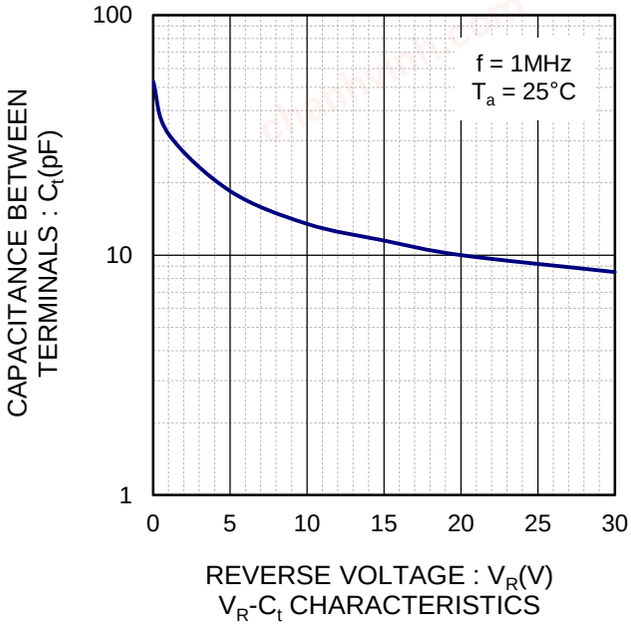
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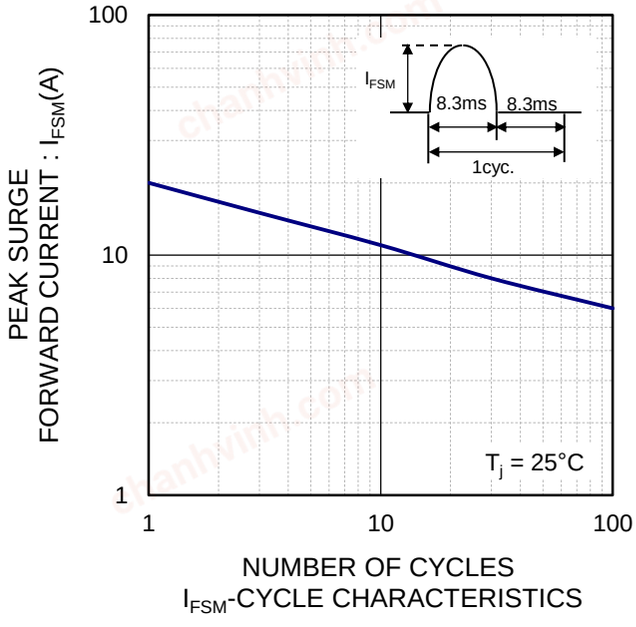
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●Electrical characteristic curves





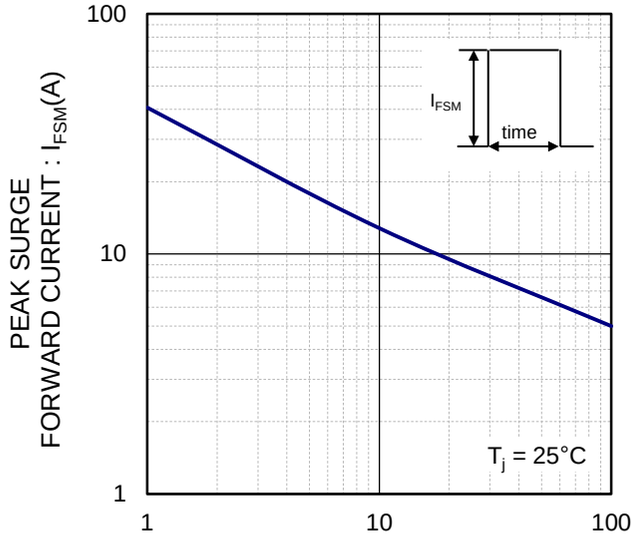




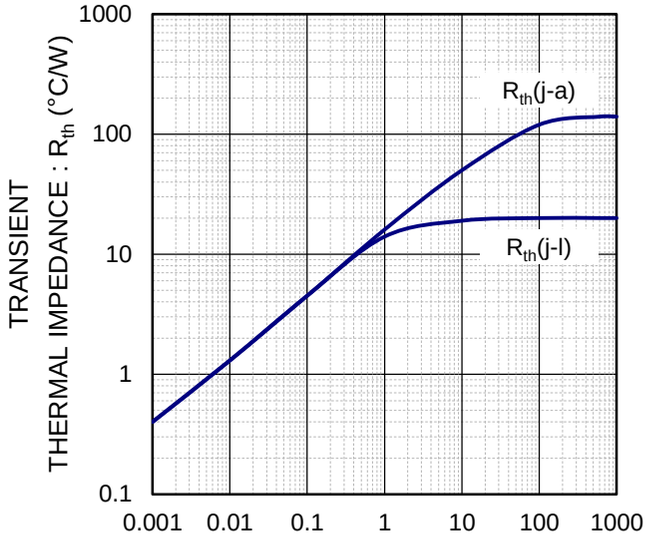
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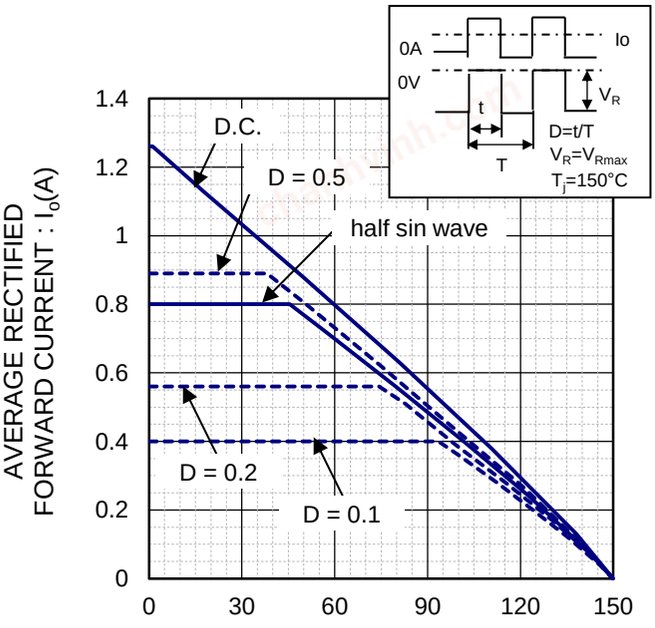
●Electrical characteristic curves



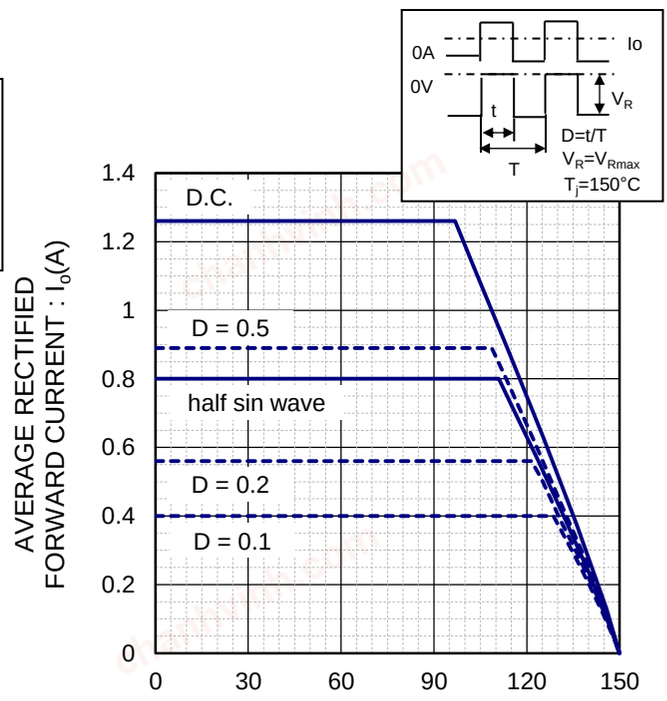
I_{FSM}-t CHARACTERISTICS



R_{th}-t CHARACTERISTICS



DERATING CURVE (I_o-T_a)

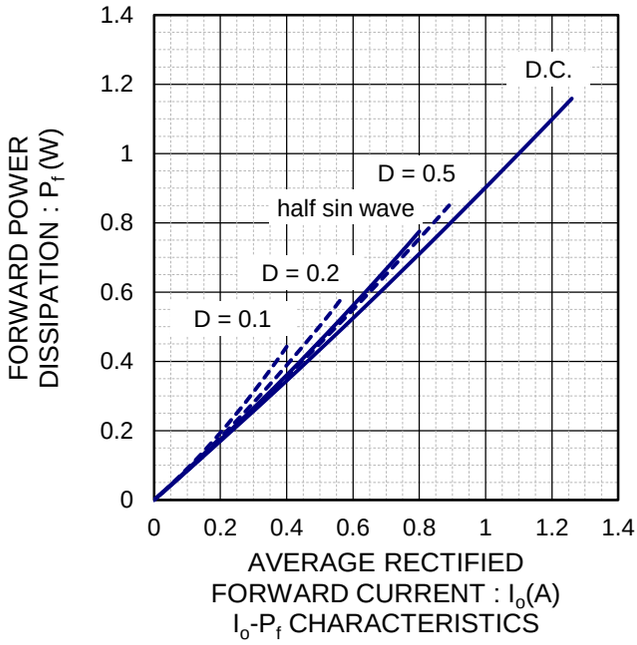


DERATING CURVE (I_o-T_l)

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●Electrical characteristic curves



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