Super Fast Recovery Diode

RF305BM6SFH Datasheet

AEC-Q101 Qualified

●Series

Standard Fast Recovery

●Application

General rectification

●Features

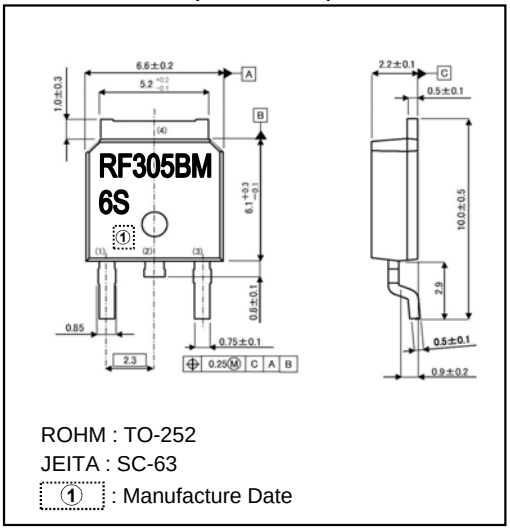
1) Low switching loss

2) Low forward voltage

●Construction

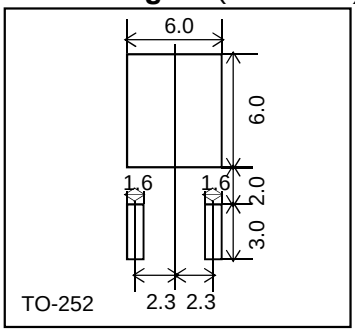
Silicon epitaxial planar type

●Dimensions (Unit : mm)

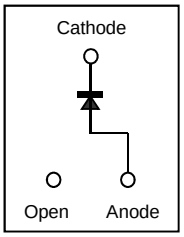


ROHM : TO-252
JEITA : SC-63
① : Manufacture Date

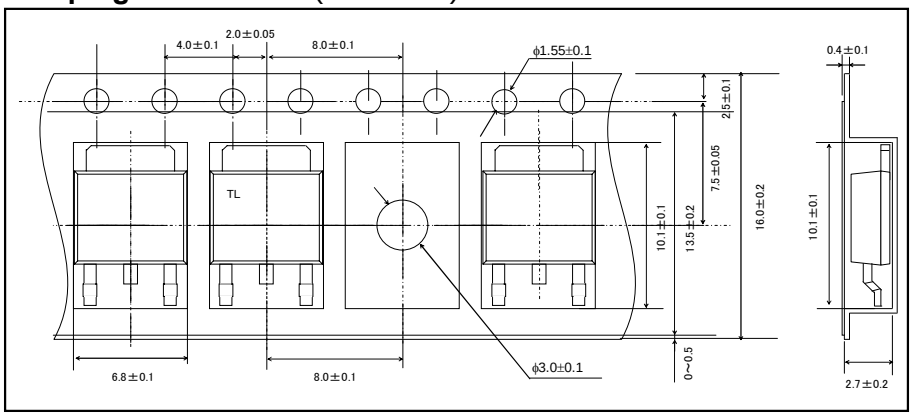
●Land Size Figure (Unit : mm)



●Structure



●Taping Dimensions (Unit : mm)



●Absolute Maximum Ratings (T_c= 25°C)

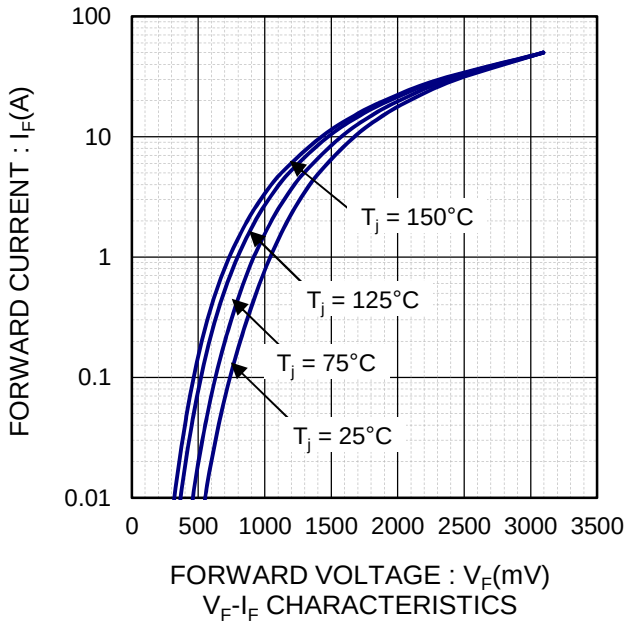
Parameter	Symbol	Conditions		Limits	Unit
Repetitive peak reverse voltage	V_{RM}	Duty≦0.5		600	V
Reverse voltage	V_R	Direct voltage		600	V
Average rectified foward current	I_o	60Hz half sin wave , Resistive load	T_c=115°C	3	A
Forward current surge peak	I_{FSM}	60Hz half sin wave ,Non-repetitive at T_j=25°C		50	A
Operating junction temperature	T_j	-		150	°C
Storage temperature	T_{stg}	-		−55 to +150	°C

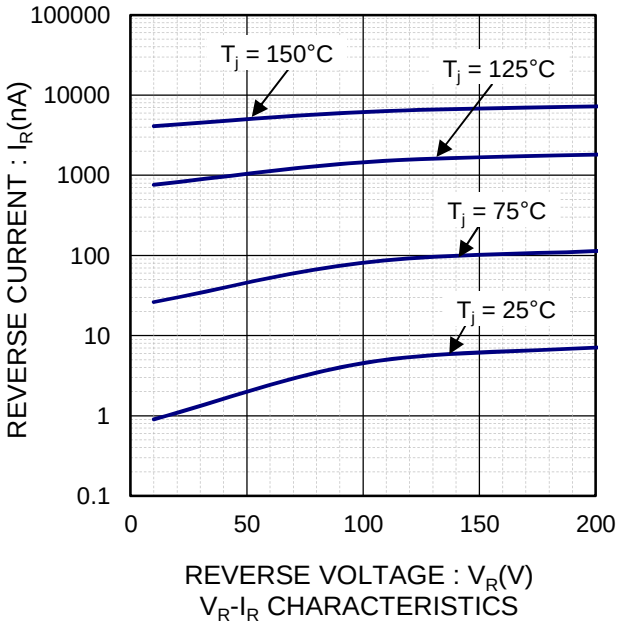
●Electrical Characteristics (T_j = 25°C)

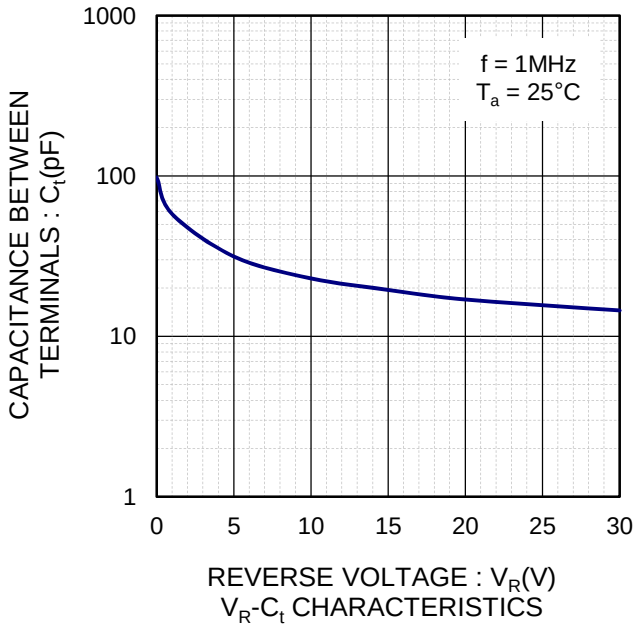
Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage	V_F	I_F=3A	-	1.3	1.7	V
Reverse current	I_R	V_R=600V	-	0.04	10	μA
Reverse recovery time	trr	I_F=0.5A, I_R=1A, Irr=0.25×I_R	-	20	30	ns
Thermal resistance	$R_{th(j-c)}$	Junction to case	-	-	6.0	°C / W

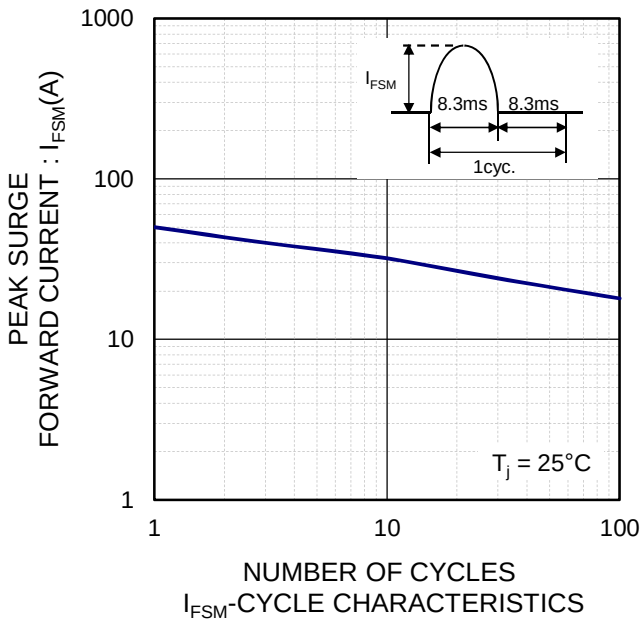
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●Electrical Characteristic Curves



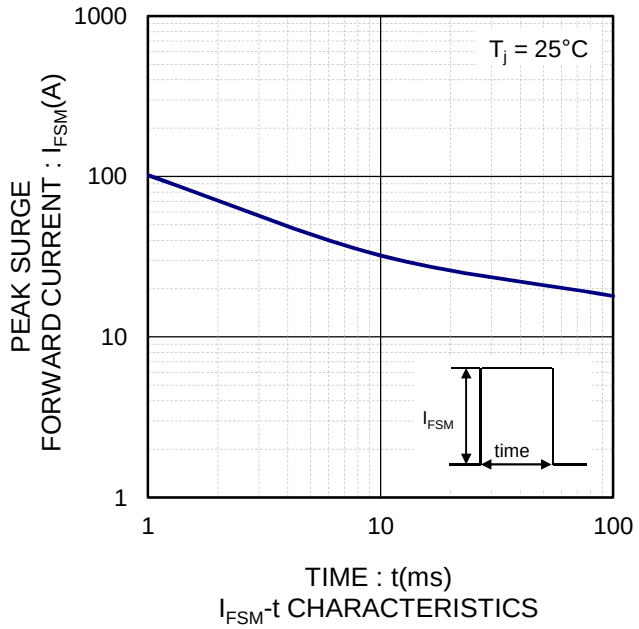


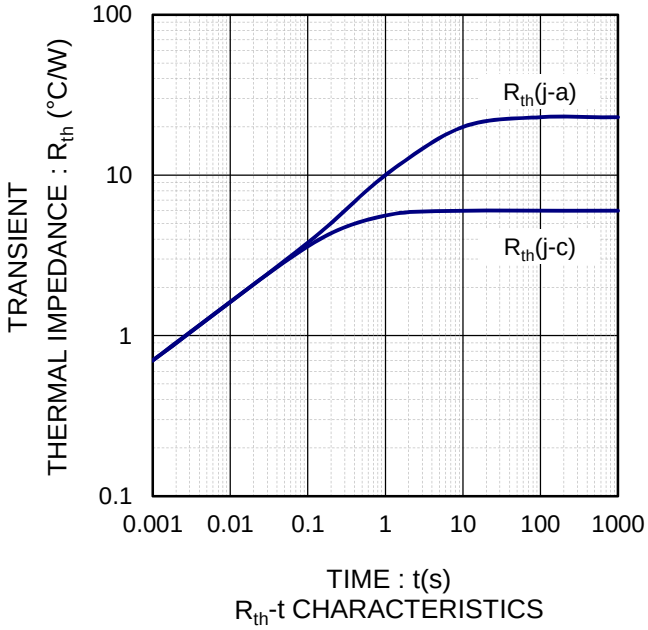


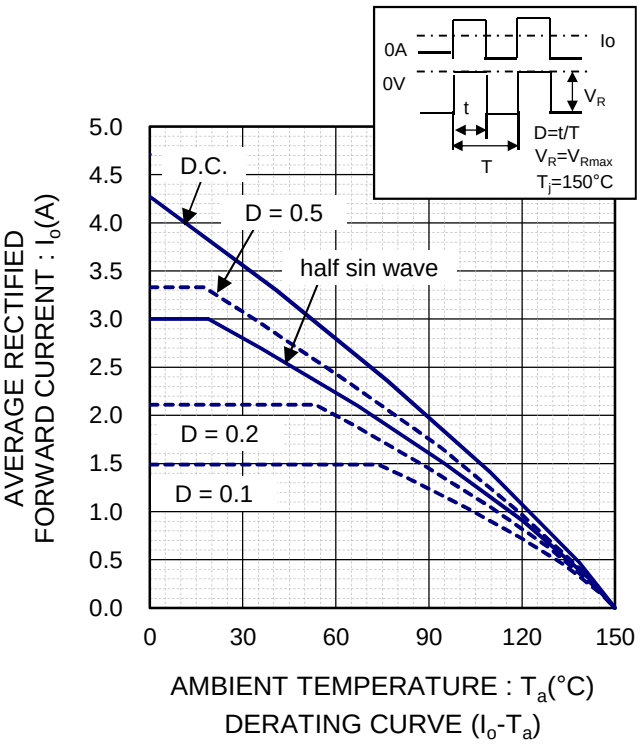


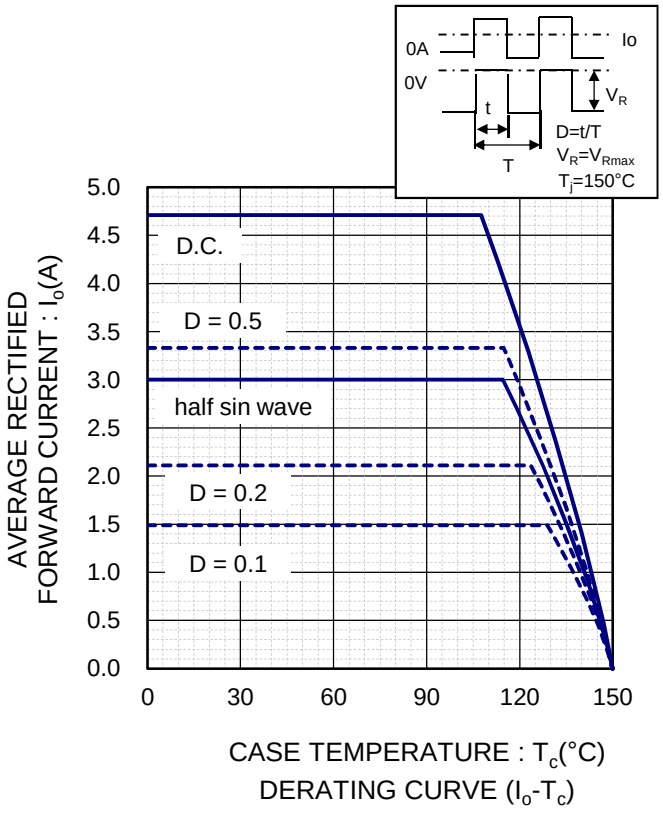
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●Electrical Characteristic Curves



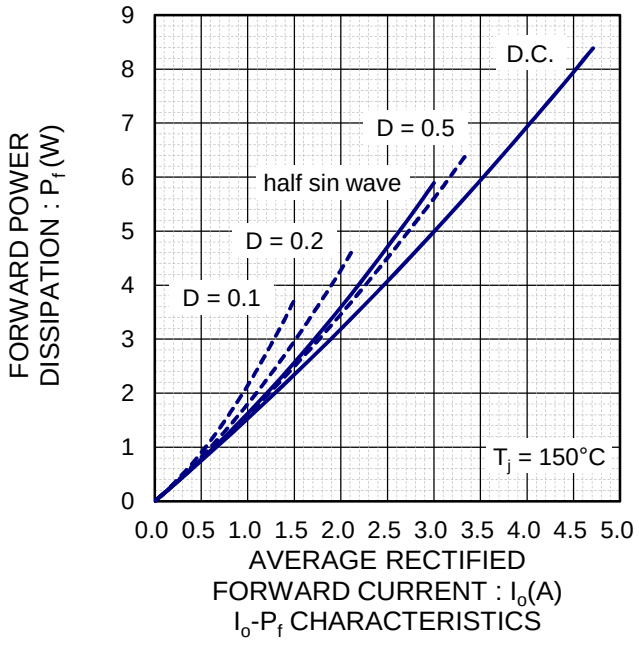






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●Electrical Characteristic Curves



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