Schottky Barrier Diode

RB168L-40

Data Sheet

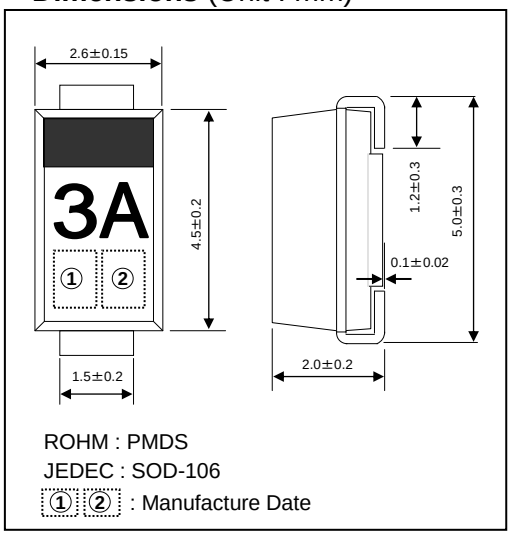
●Application

General rectification

●Features

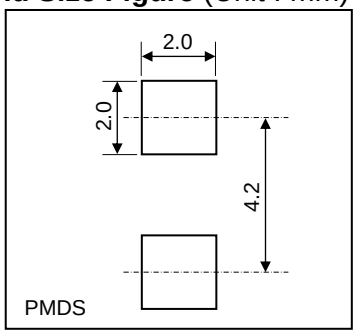
1) Small power mold type (PMDS)
2) High reliability
3) Super low I_R

●Dimensions (Unit : mm)

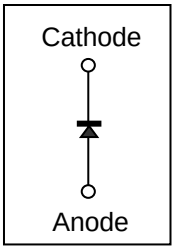


ROHM : PMDS
JEDEC : SOD-106
① ② : Manufacture Date

●Land Size Figure (Unit : mm)



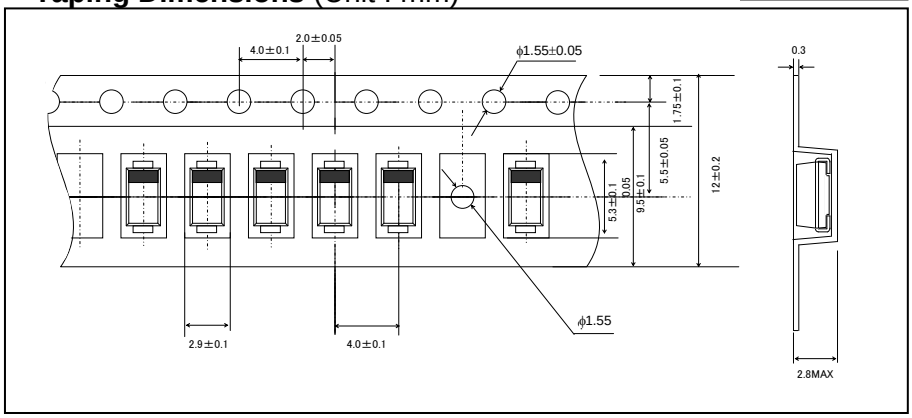
●Structure



●Construction

Silicon epitaxial planar type

●Taping Dimensions (Unit : mm)



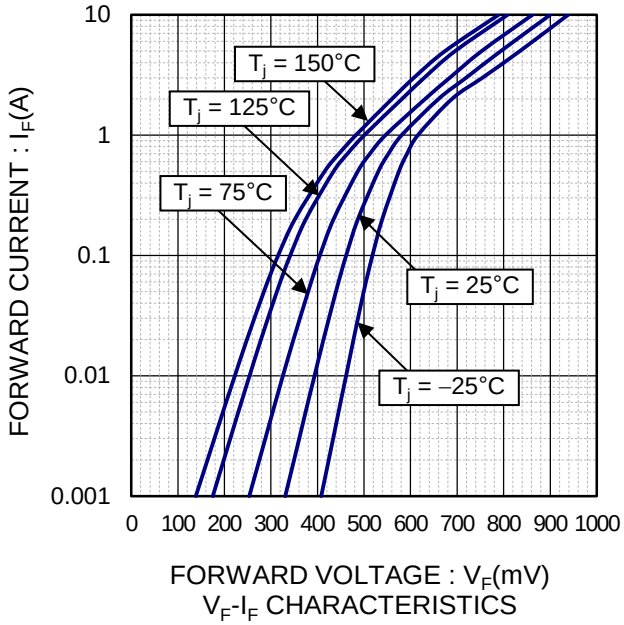
●Absolute Maximum Ratings (T_c= 25°C)

Parameter	Symbol	Conditions	Limits	Unit
Repetitive peak reverse voltage	V_{RM}	Duty≦0.5	40	V
Reverse voltage	V_R	Direct reverse voltage	40	V
Average forward rectified current	I_o	Glass epoxy board mounted, 60Hz half sin wave, resistive load, T_c=125ºC Max.	1	A
Non-repetitive forward current surge peak	I_{FSM}	60Hz half sin wave, one cycle, non-repetitive at T_a=25ºC	30	A
Operating junction temperature	T_j	-	150	°C
Storage temperature	T_{stg}	-	−55 to +150	°C

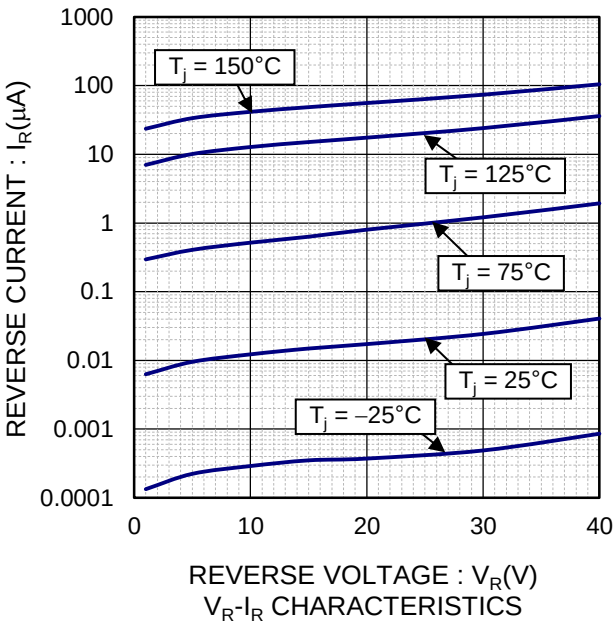
●Electrical Characteristics (T_j= 25°C)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage	V_F	I_F=1.0A	-	-	0.65	V
Reverse current	I_R	V_R=40V	-	-	0.55	μA

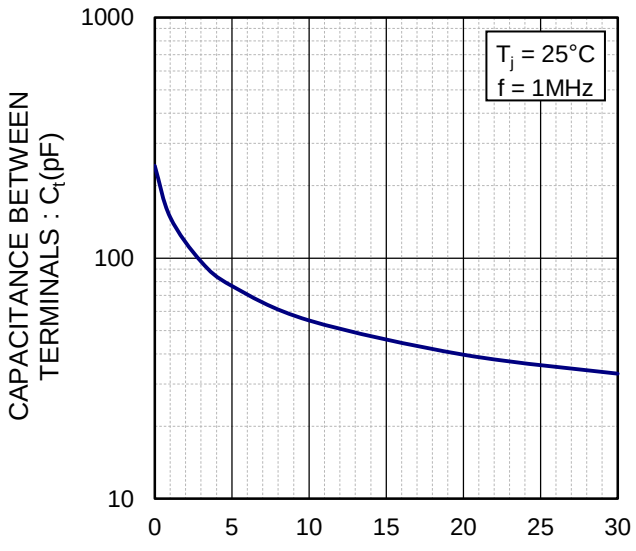
●Electrical Characteristic Curves



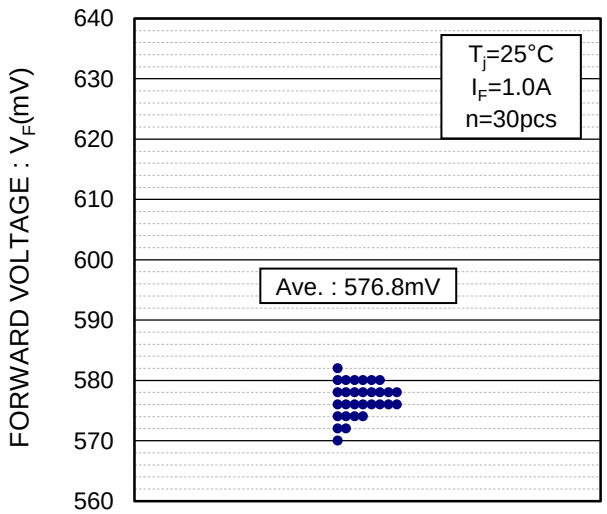
V_F-I_F CHARACTERISTICS



V_R-I_R CHARACTERISTICS

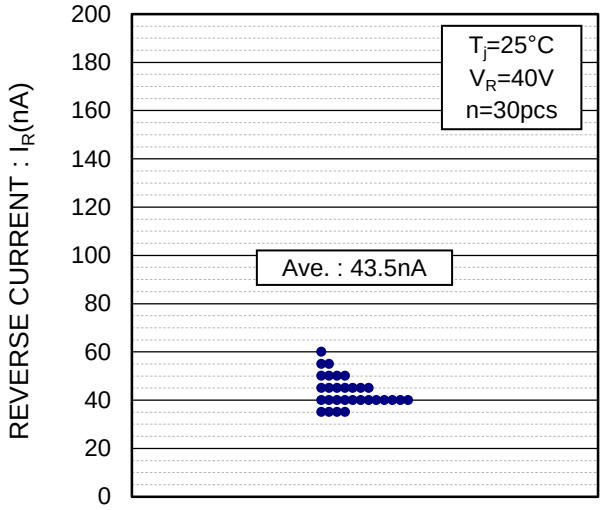


V_R-C_t CHARACTERISTICS

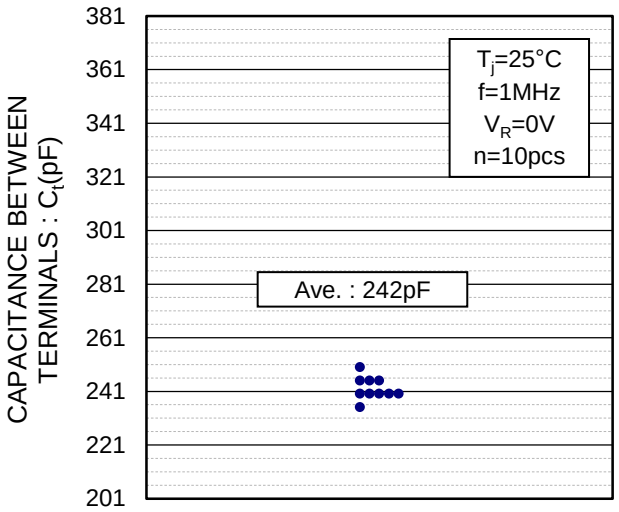


V_F DISPERSION MAP

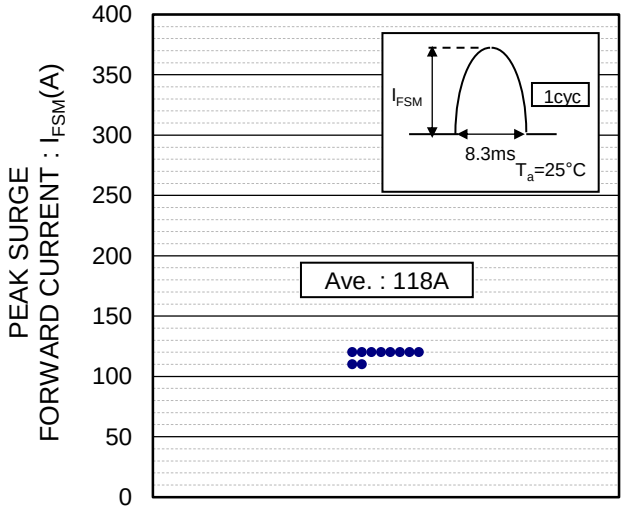
●Electrical Characteristic Curves



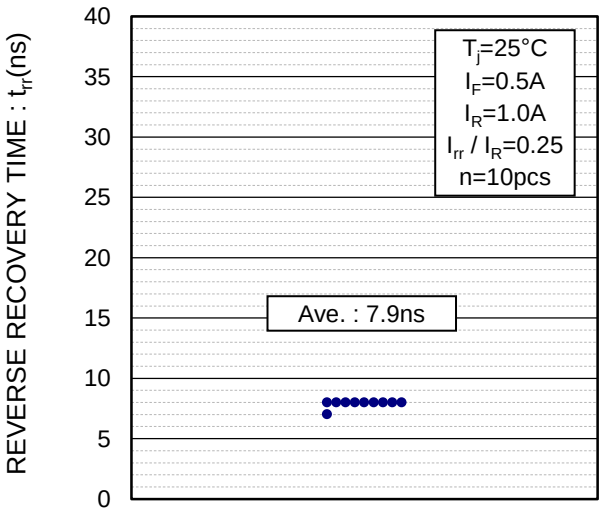
I_R DISPERSION MAP



C_t DISPERSION MAP

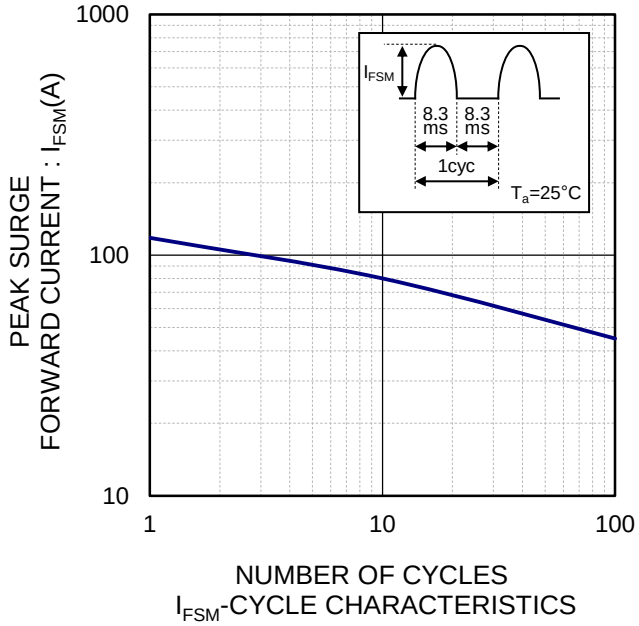


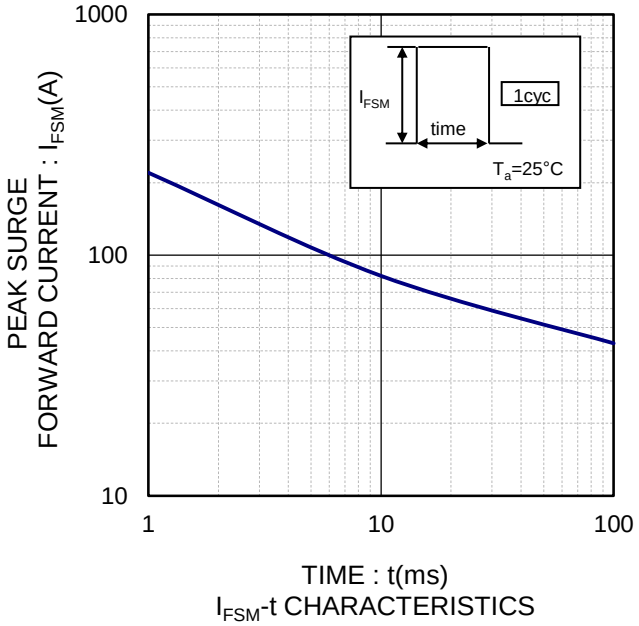
I_{FSM} DISPERSION MAP

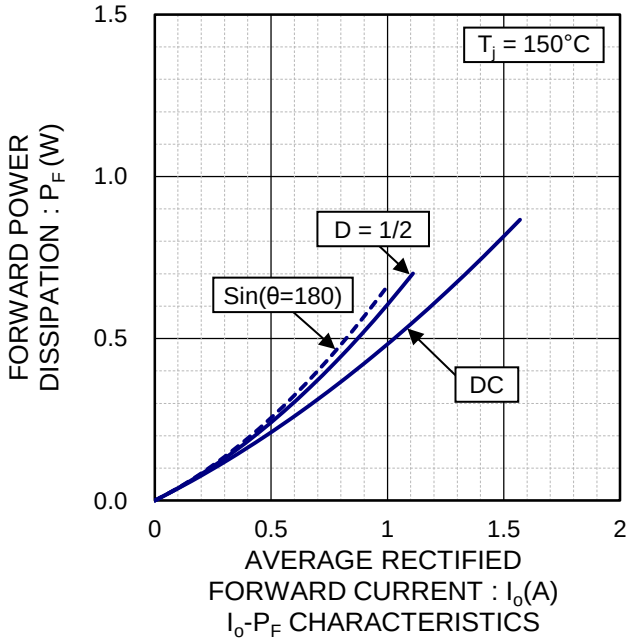


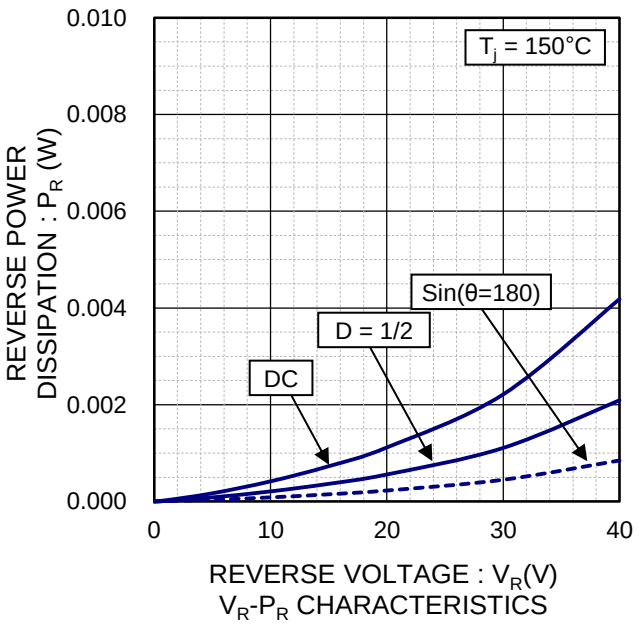
t_{rr} DISPERSION MAP

●Electrical Characteristic Curves

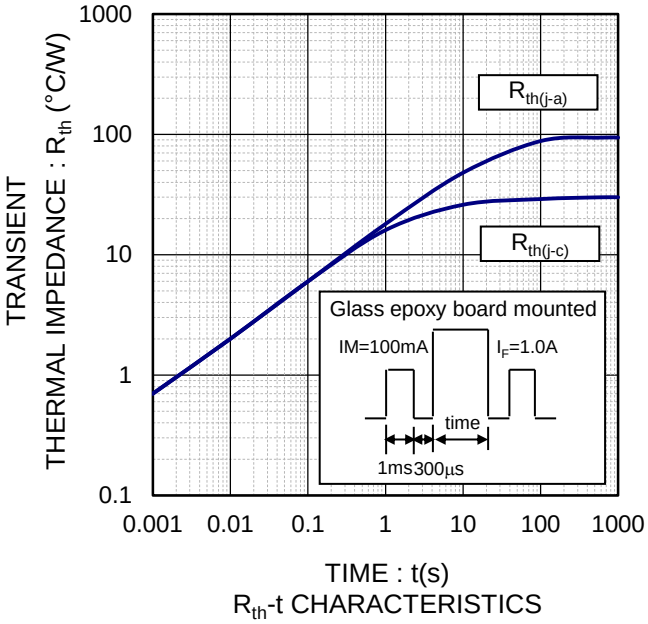




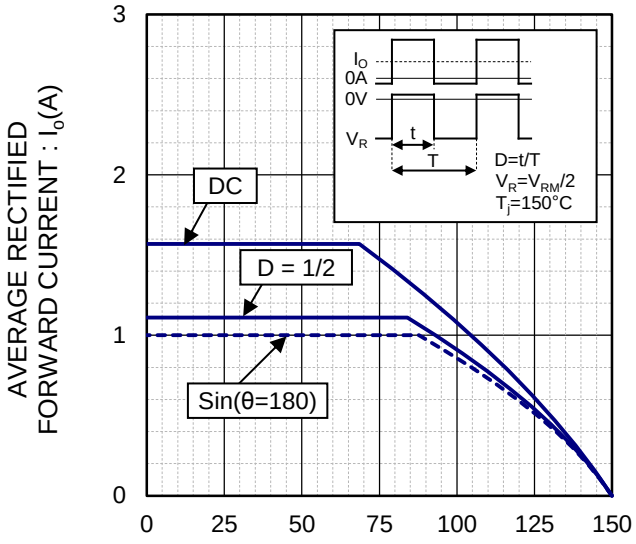




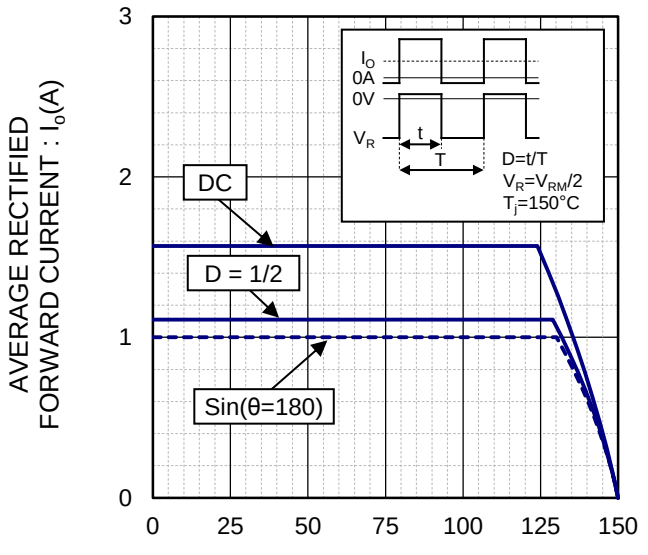
●Electrical Characteristic Curves



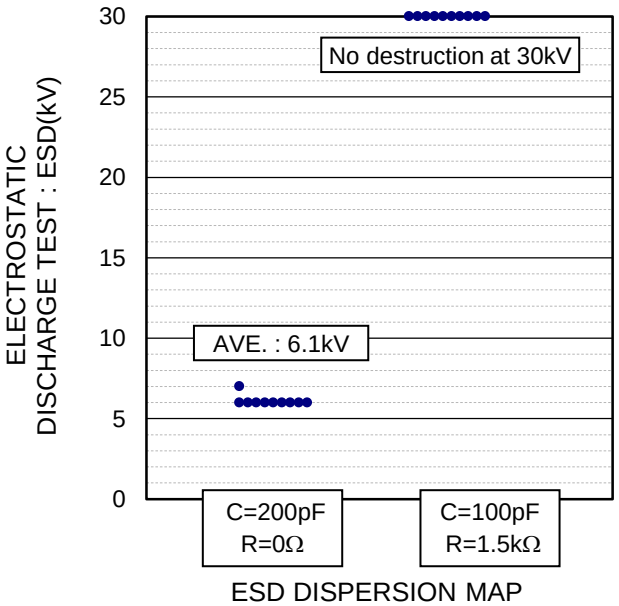
R_{th}-t CHARACTERISTICS



DERATING CURVE (I_o-T_a)



DERATING CURVE (I_o-T_c)



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