Schottky Barrier Diode

RB501SM-30 Data Sheet

Application

General rectification

Features

- Ultra small mold type (EMD2)
- 2) High reliability
- 3) Super low V_F

Construction

Silicon epitaxial planar type

© Dimensions (Unit : mm)

0.8±0.05
(1)
(1)
(2)
(2)
(2)
(3)±0.05

ROHM : EMD2
JEDEC : SOD-523
JEITA : SC-79
: Year, week and factory

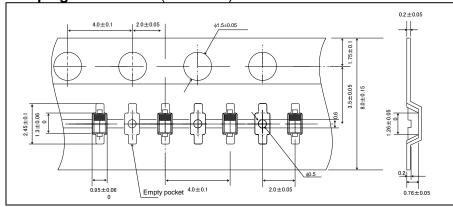
●Land Size Figure (Unit : mm)

| O.8 | O.

EMD2

•Structure (1) Cathode

●Taping Dimensions (Unit : mm)



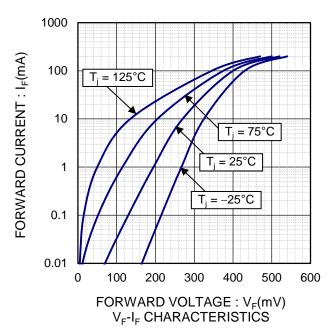
● Absolute Maximum Ratings (T_c= 25°C)

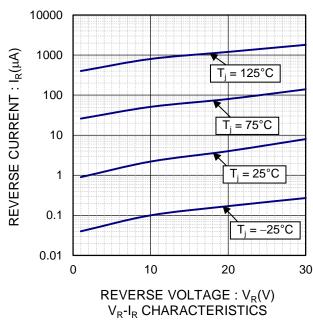
Parameter	Symbol	Conditions	Limits	Unit	
Repetitive peak reverse voltage	V_{RM}	Duty≦0.5	30	V	
Reverse voltage	V_R	Direct reverse voltage	30	30 V	
Average forward rectified current	I _o	Glass epoxy board mounted, 60Hz half sin wave, resistive load	100	mA	
Non-repetitive forward current surge peak	I _{FSM}	60Hz half sin wave, Non-repetitive at T _a =25°C , 1cycle	1000	mA	
Operating junction temperature	T _j	•	125	°C	
Storage temperature	T _{stg}	-	-55 to +125	°C	

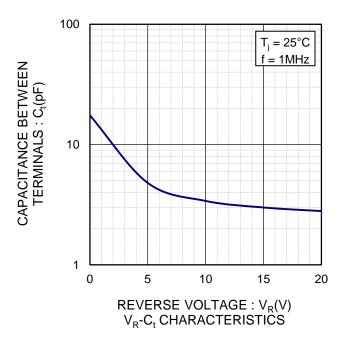
●Electrical Characteristics (T_i= 25°C)

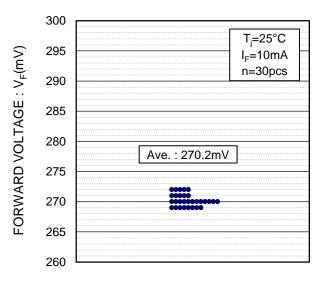
Parameter	Symbol	Conditions	Min.	Тур.	Max.	Unit
Forward voltage	V_{F}	I _F =10mA	ı	ı	0.35	V
Reverse current	I _R	V _R =10V	ı	ı	10	μΑ

• Electrical Characteristic Curves



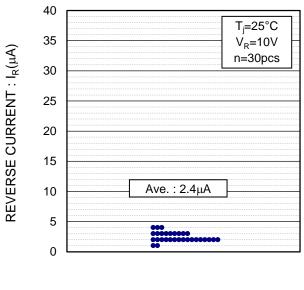


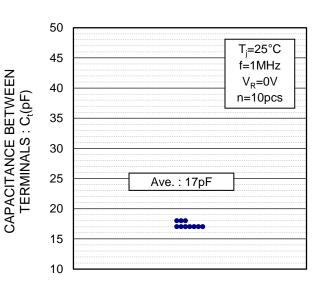




V_F DISPERSION MAP

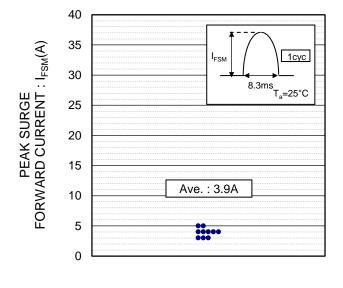
• Electrical Characteristic Curves



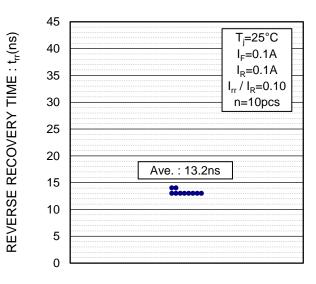


I_R DISPERSION MAP

C_t DISPERSION MAP

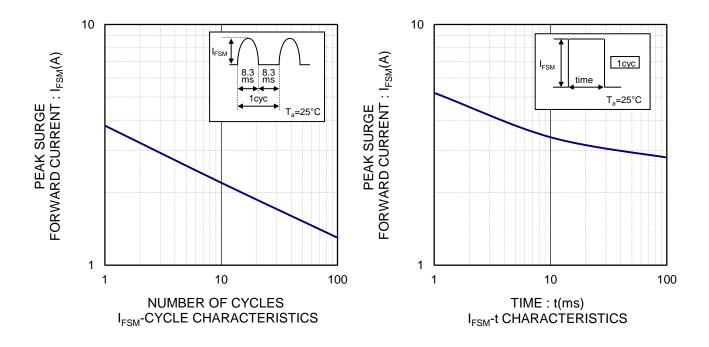


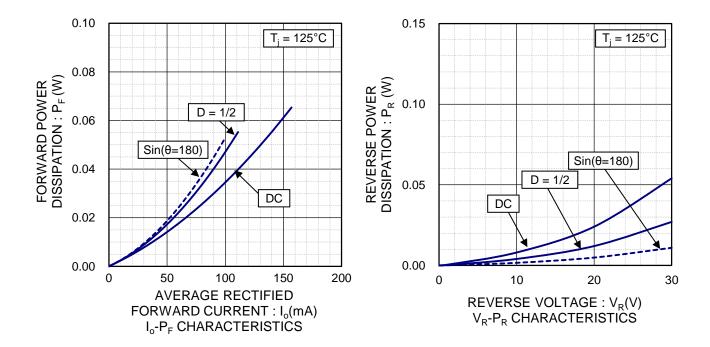
I_{FSM} DISPERSION MAP



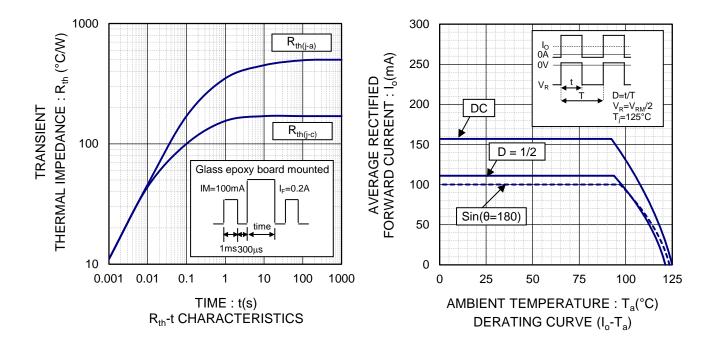
t_{rr} DISPERSION MAP

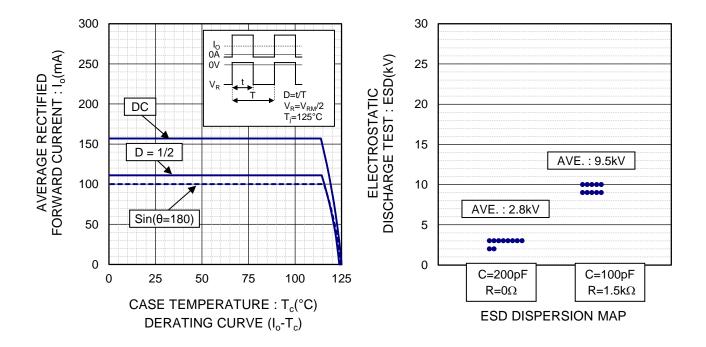
•Electrical Characteristic Curves





•Electrical Characteristic Curves





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