

Schottky Barrier Diode

RB521SM-40

●Applications

Small current rectification

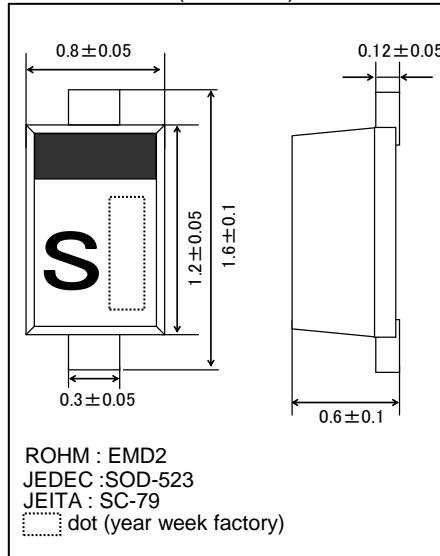
●Features

- 1) Ultra small mold type. (EMD2)
- 2) Low V_F
- 3) High reliability

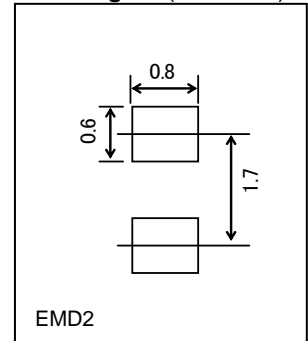
●Construction

Silicon epitaxial

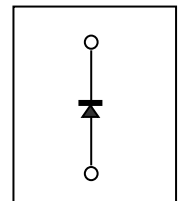
●Dimensions (Unit : mm)



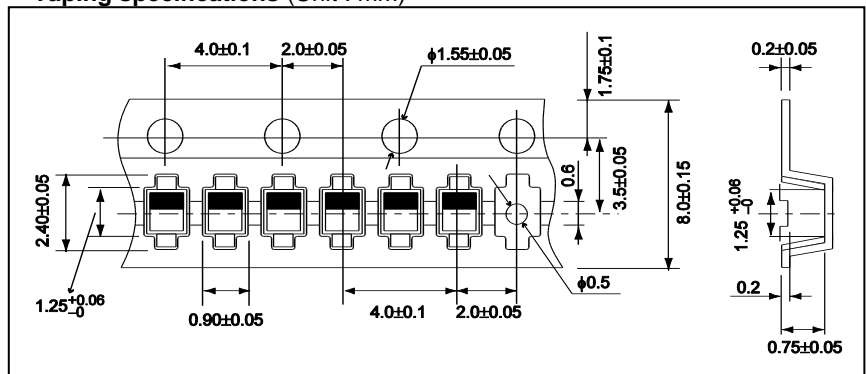
●Land size figure (Unit : mm)



●Structure



●Taping specifications (Unit : mm)

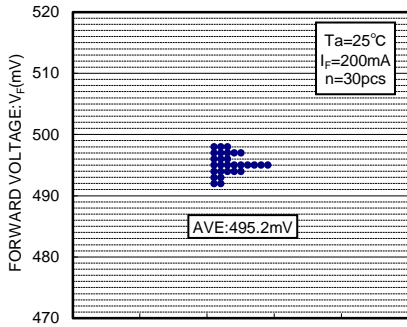
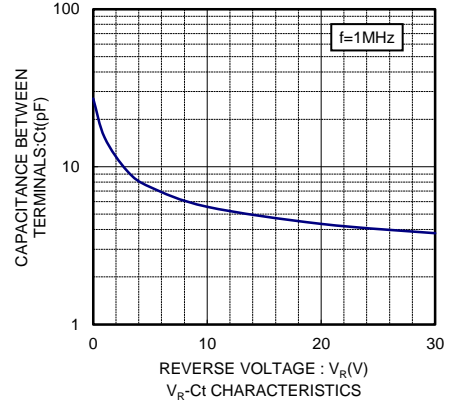
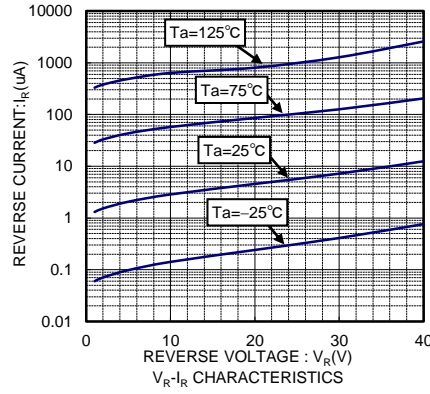
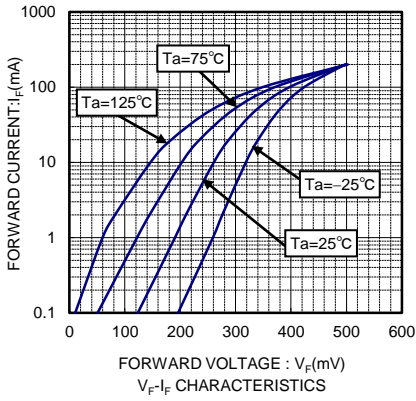


●Absolute maximum ratings (Ta=25°C)

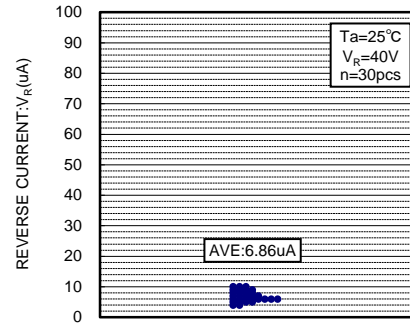
Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive)	V_{RM}	45	V
Reverse voltage (DC)	V_R	40	V
Average rectified forward current	I_o	200	mA
Forward current surge peak (60Hz · 1cyc)	I_{FSM}	4	A
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55 to +150	°C

●Electrical characteristics (Ta=25°C)

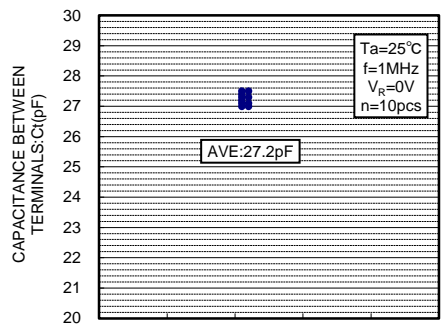
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	0.16	0.26	0.30	V	$I_F=10mA$
		0.31	0.395	0.45		$I_F=100mA$
		0.41	0.495	0.54		$I_F=200mA$
Reverse current	I_R	-	3.50	20.00	μA	$V_R=10V$
		-	13.00	90.00		$V_R=40V$



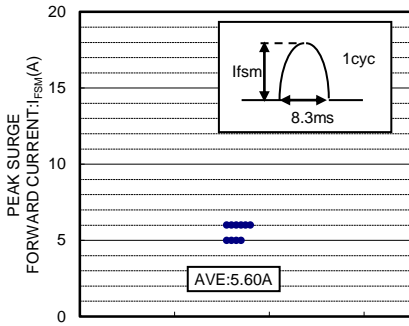
V_F DISPERSION MAP



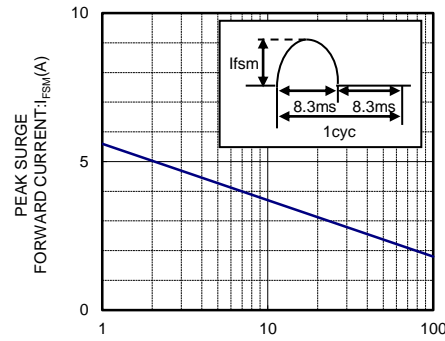
I_R DISPERSION MAP



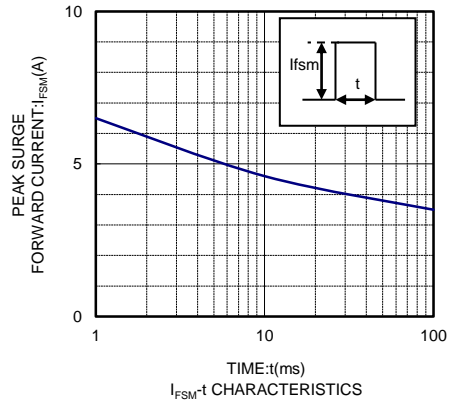
C_t DISPERSION MAP



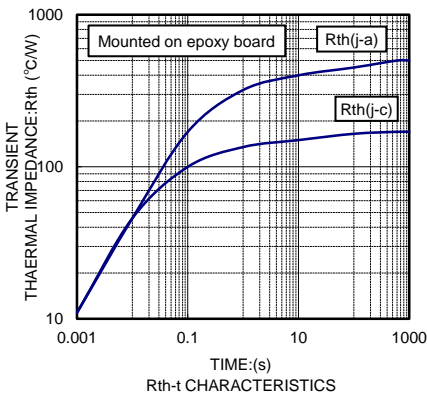
I_{FSM} DISPERSION MAP



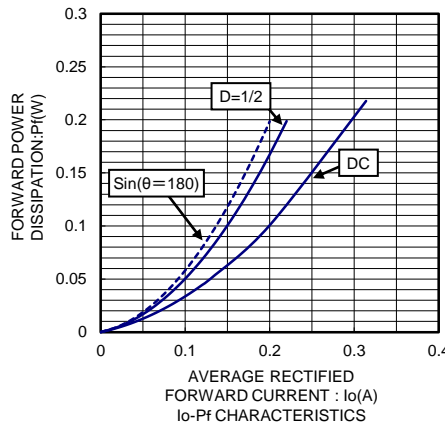
I_{FSM} -CYCLE CHARACTERISTICS



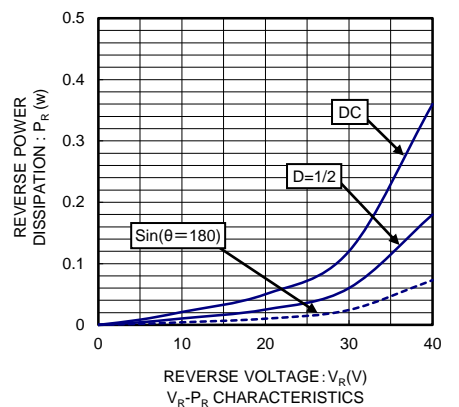
$I_{FSM}-t$ CHARACTERISTICS



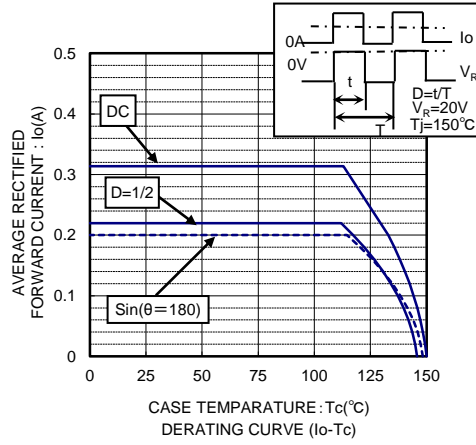
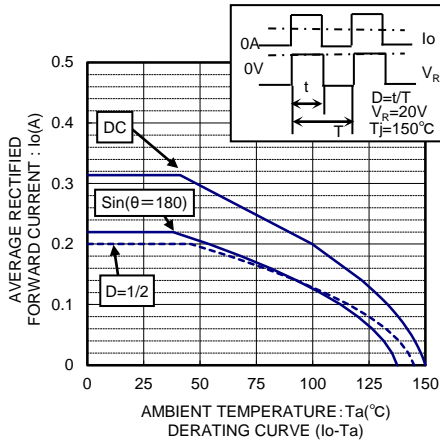
$R_{th}-t$ CHARACTERISTICS



I_o-P_R CHARACTERISTICS



V_R-P_R CHARACTERISTICS



Notes

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