

Schottky barrier diode

RB520S-40

●Applications

Rectifying small power

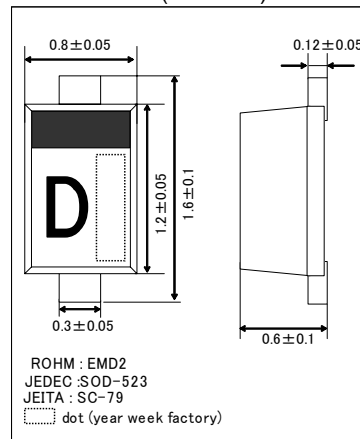
●Features

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

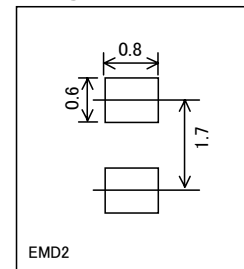
●Construction

Silicon epitaxial planar

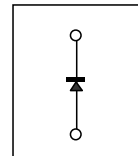
●Dimensions (Unit : mm)



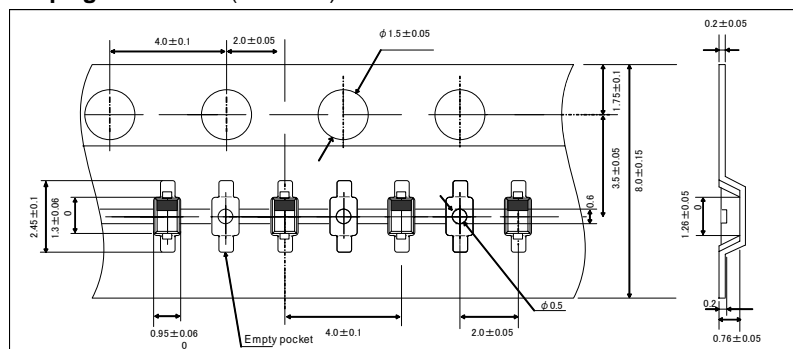
●Land size figure



●Structure



●Taping dimensions (Unit : mm)



●Absolute maximum ratings (Ta=25°C)

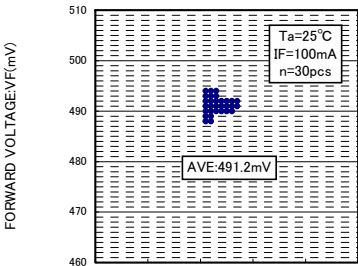
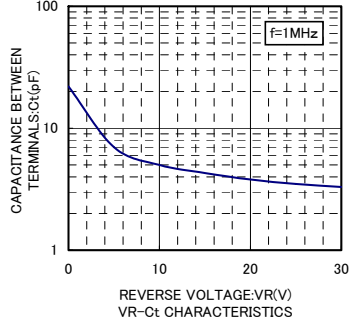
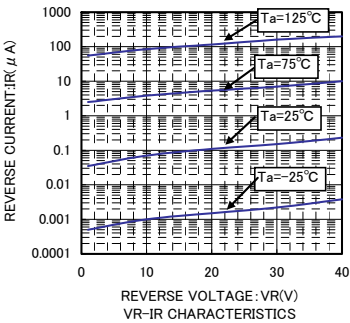
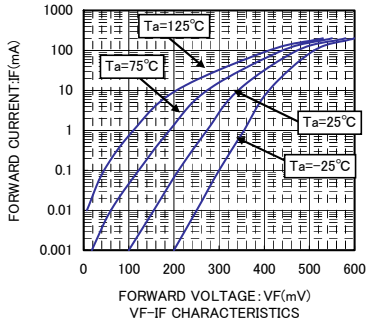
Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	V_{RM}	40	V
Reverse voltage (DC)	V_R	40	V
Average rectified forward current	I_o	200	mA
Forward current surge peak	I_{FSM}	1	A
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	-40 to +125	°C

●Electrical characteristic (Ta=25°C)

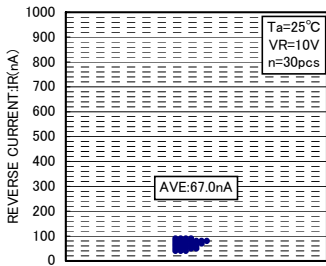
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	-	-	0.39	V	$I_F=10\text{mA}$
	V_F	-	-	0.55	V	$I_F=100\text{mA}$
Reverse current	I_R	-	-	1	μA	$V_R=10\text{V}$
	I_R	-	-	10	μA	$V_R=40\text{V}$

Diodes

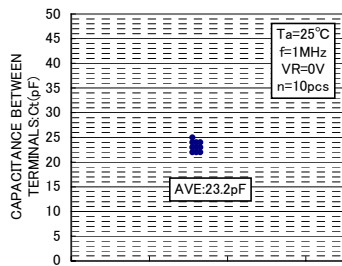
●Electrical characteristic curves



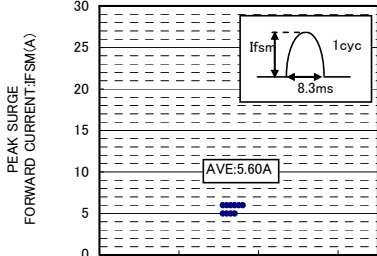
VF DISPERSION MAP



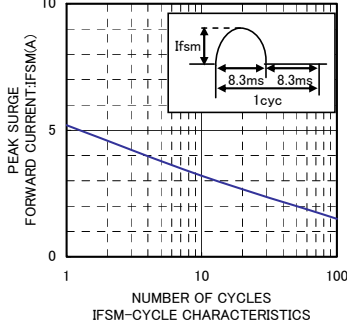
IR DISPERSION MAP



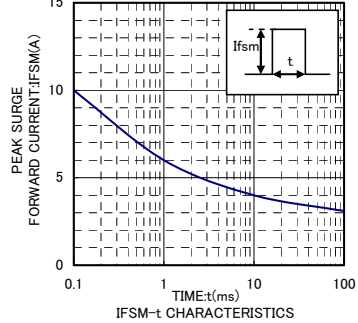
Ct DISPERSION MAP



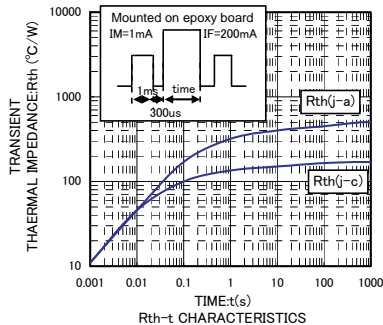
IFSM DISPERSION MAP



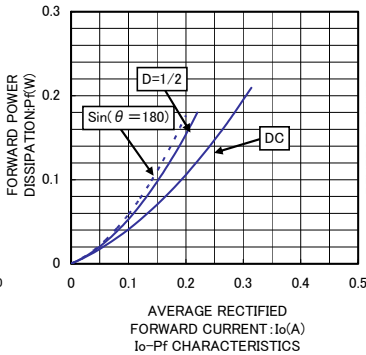
IFSM-CYCLE CHARACTERISTICS



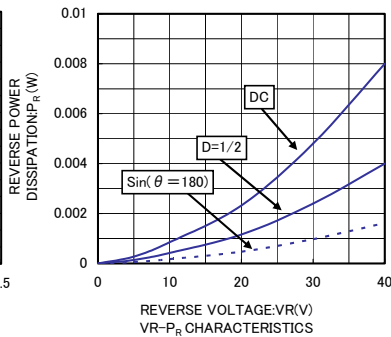
IFSM-t CHARACTERISTICS



Rth-t CHARACTERISTICS

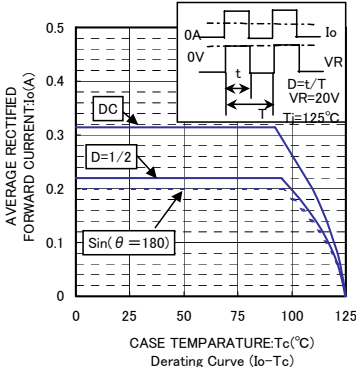
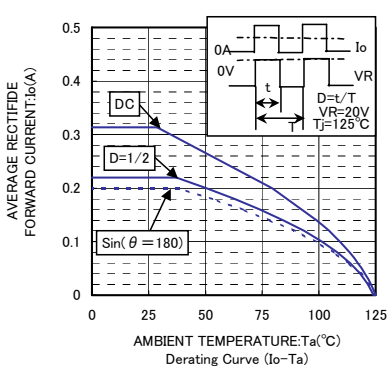


Io-Pf CHARACTERISTICS



VR-Pr CHARACTERISTICS

Diodes



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