

# Schottky Barrier Diode

## RB531S-30

● **Applications**

General rectification

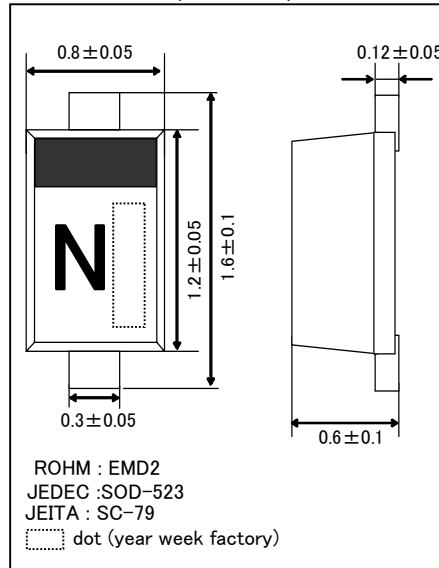
● **Features**

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

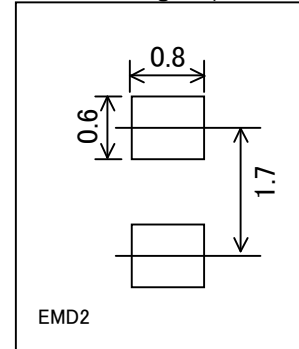
● **Construction**

Silicon epitaxial planer

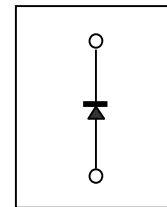
● **Dimensions**(Unit : mm)



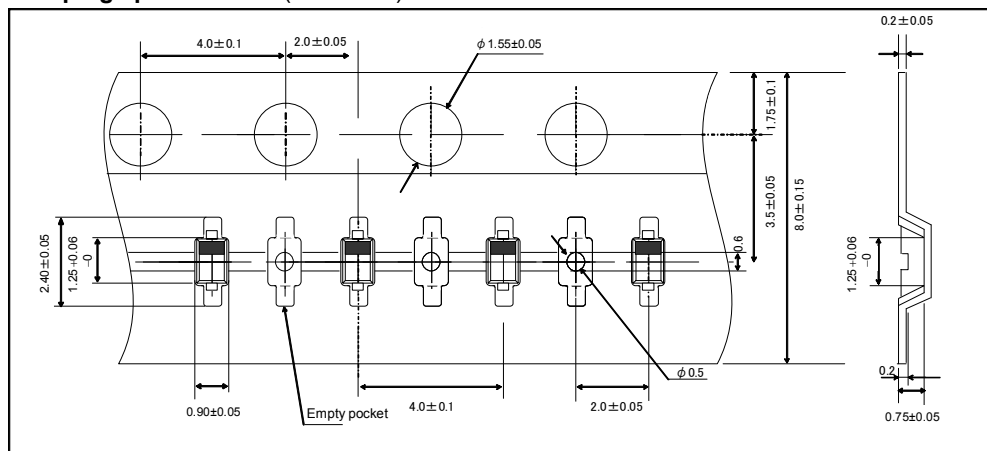
● **Land size figure**(Unit : mm)



● **Structure**



● **Taping specifications**(Unit : mm)



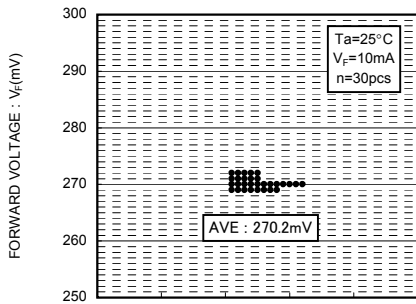
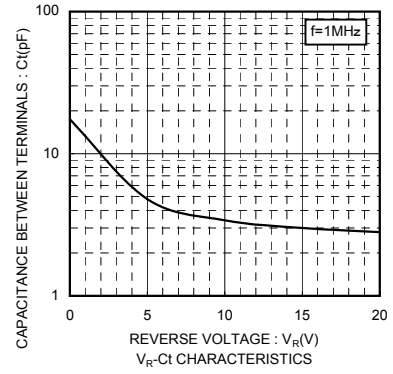
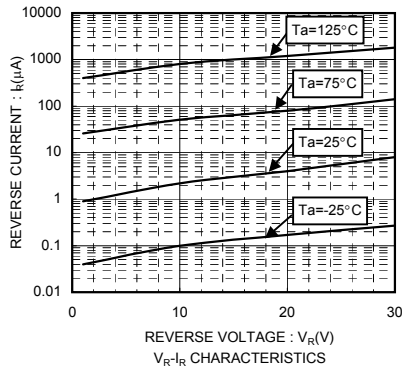
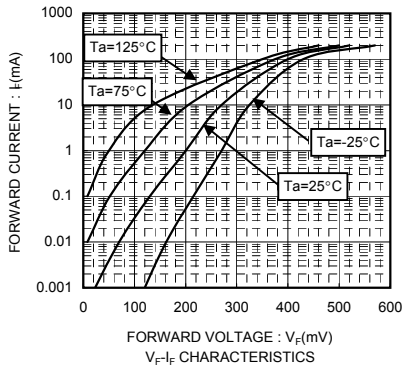
● **Absolute maximum ratings**( $T_a=25^\circ\text{C}$ )

Parameter	Symbol	Limits	Unit
Reverse voltage(DC)	$V_R$	30	V
Average rectified forward current	$I_o$	100	mA
Forward current surge peak(60Hz/1cyc)	$I_{FSM}$	500	mA
Junction temperature	$T_j$	125	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-40to+125	$^\circ\text{C}$

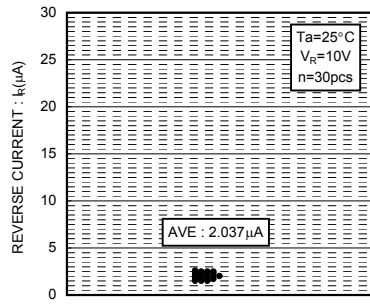
● **Electical voltage**( $T_a=25^\circ\text{C}$ )

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_F$	-	-	0.35	V	$I_F=10\text{mA}$
Reverse current	$I_R$	-	-	10	$\mu\text{A}$	$V_R=10\text{V}$

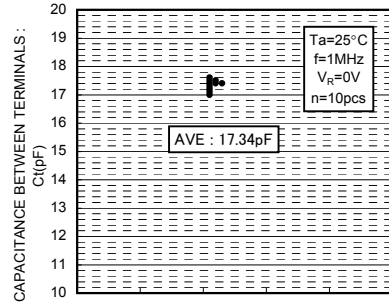
●Electrical characteristics curves



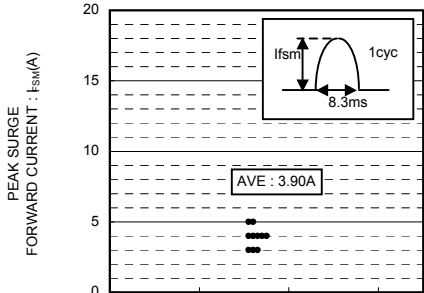
V<sub>F</sub> DISPERSION MAP



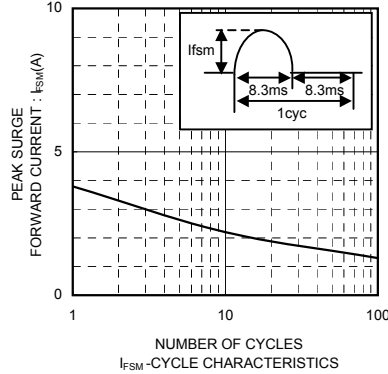
I<sub>R</sub> DISPERSION MAP



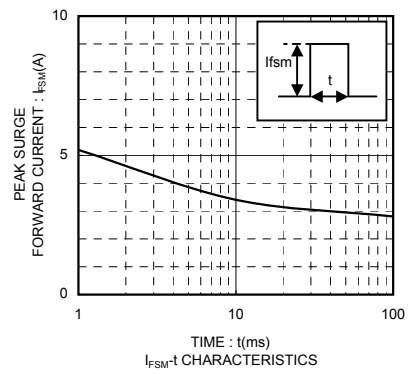
C<sub>t</sub> DISPERSION MAP



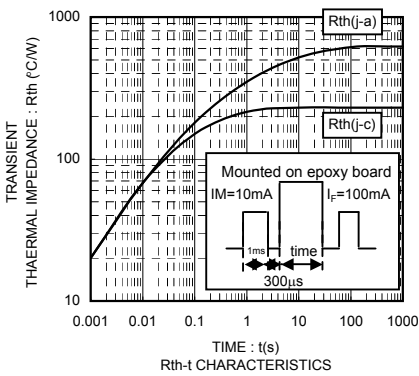
I<sub>FSM</sub> DISPERSION MAP



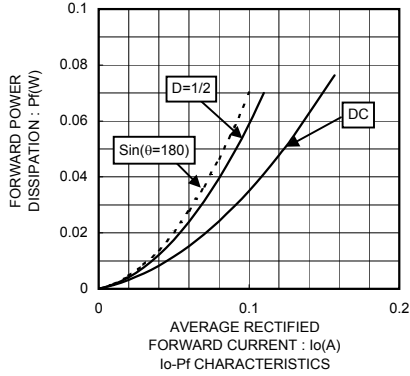
I<sub>FSM</sub>-CYCLE CHARACTERISTICS



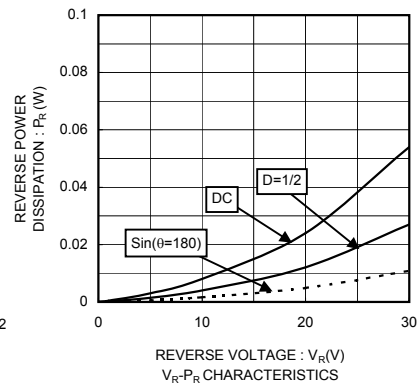
I<sub>FSM</sub>-t CHARACTERISTICS



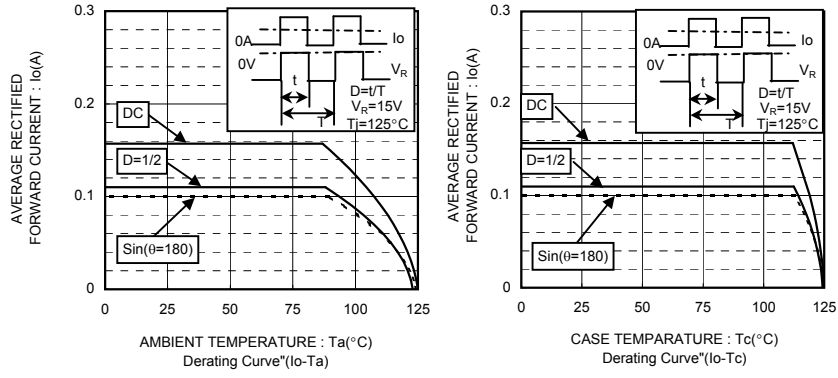
R<sub>th</sub>-t CHARACTERISTICS



I<sub>o</sub>-P<sub>F</sub> CHARACTERISTICS



V<sub>R</sub>-P<sub>R</sub> CHARACTERISTICS



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