

Schottky barrier Diode

RB530S-30

●Applications

General rectification

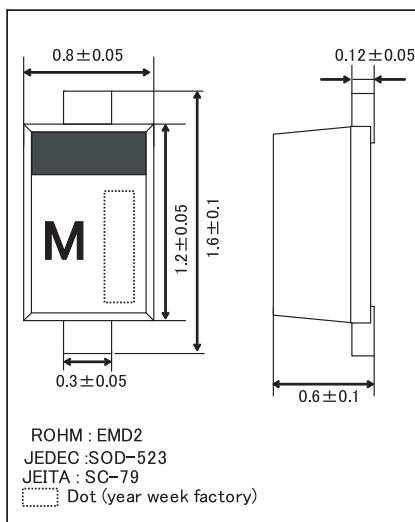
●Features

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

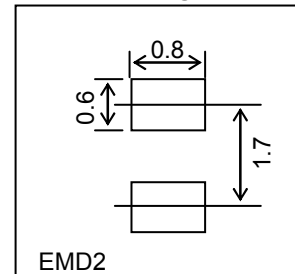
●Construction

Silicon epitaxial planer

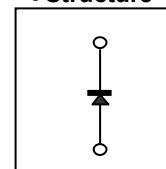
●Dimensions (Unit : mm)



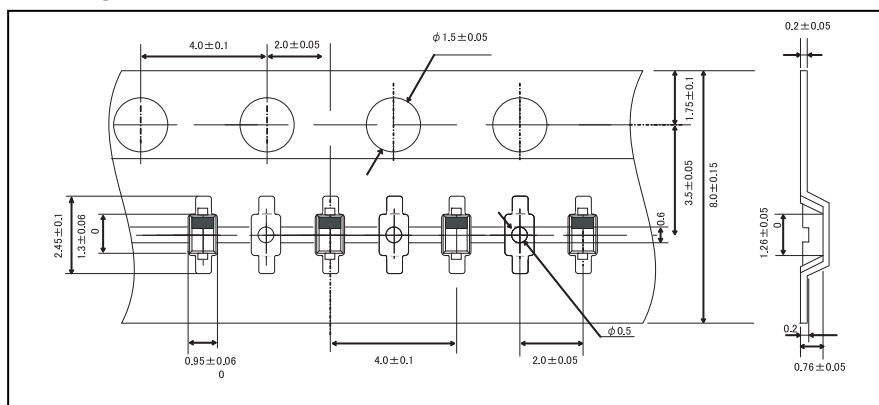
●Land size figure (Unit : mm)



●Structure



●Taping specifications (Unit : mm)



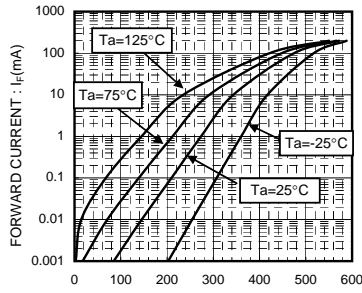
●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Reverse voltage (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	°C
Storage temperature	T_{stg}	-40 to +125	°C

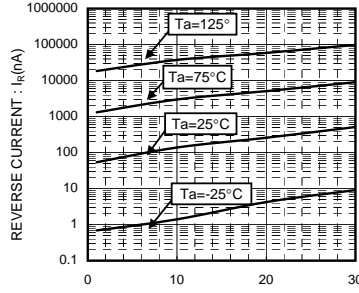
●Electical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	-	-	0.45	V	$I_F=10\text{mA}$
Reverse current	I_R	-	-	0.5	μA	$V_R=10\text{V}$

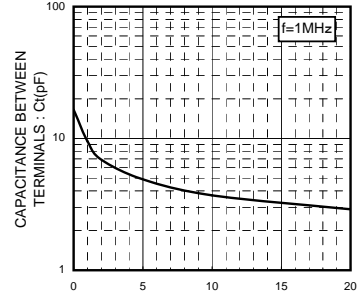
●Electical characteristics curves



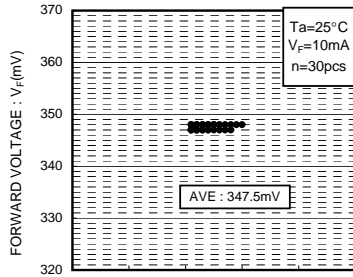
FORWARD VOLTAGE : V_F (mV)
 V_F - I_F CHARACTERISTICS



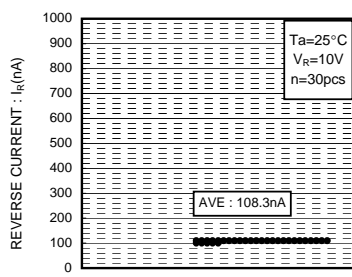
REVERSE VOLTAGE : V_R (V)
 V_R - I_R CHARACTERISTICS



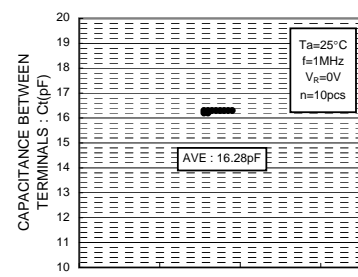
REVERSE VOLTAGE : V_R (V)
 V_R - C_t CHARACTERISTICS



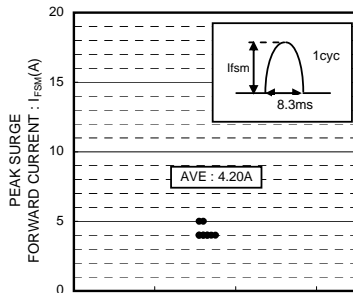
V_F DISPERSION MAP



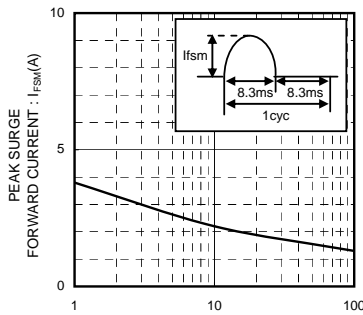
I_R DISPERSION MAP



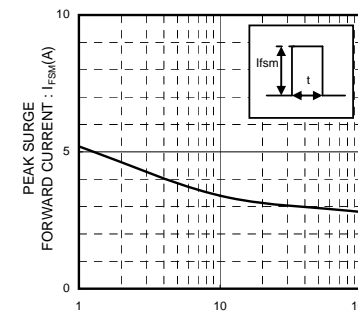
C_t DISPERSION MAP



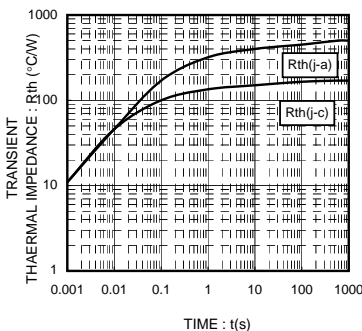
I_{FSM} DISPERSION MAP



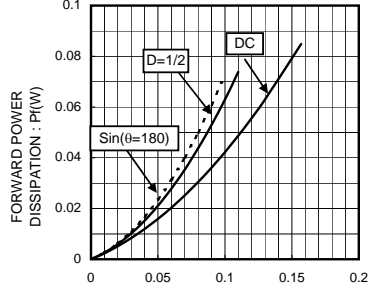
NUMBER OF CYCLES
 I_{FSM} -CYCLE CHARACTERISTICS



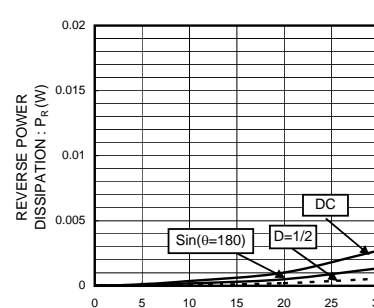
TIME : t (ms)
 I_{FSM} - t CHARACTERISTICS



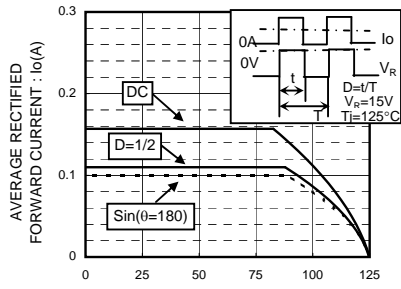
TIME : t (s)
 R_{th} - t CHARACTERISTICS



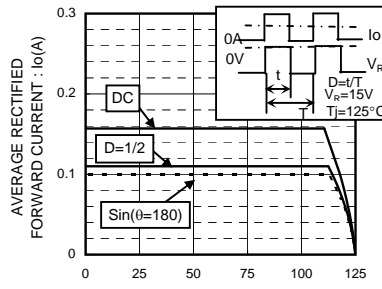
AVERAGE RECTIFIED
FORWARD CURRENT : I_o (A)
 I_o - P_R CHARACTERISTICS



REVERSE VOLTAGE : V_R (V)
 V_R - P_R CHARACTERISTICS



AMBIENT TEMPERATURE : $T_a(^{\circ}C)$
Derating Curve*(I_o-T_a)



CASE TEMPERATURE : $T_c(^{\circ}C)$
Derating Curve*(I_o-T_c)

Notes

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