

Schottky barrier diode

RB705D

●Applications

Low current rectification

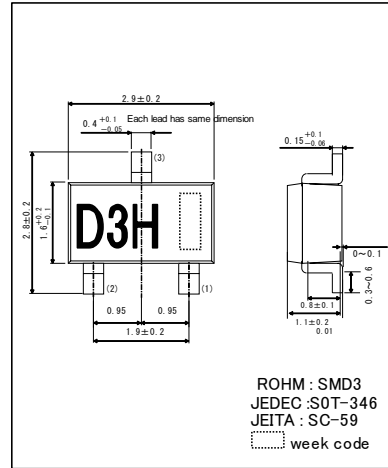
●Features

- 1) Small mold type. (SMD3)
- 2) Low I_R
- 3) High reliability.

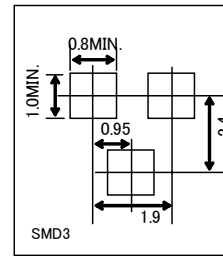
●Construction

Silicon epitaxial planar

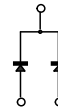
● External dimensions (Unit : mm)



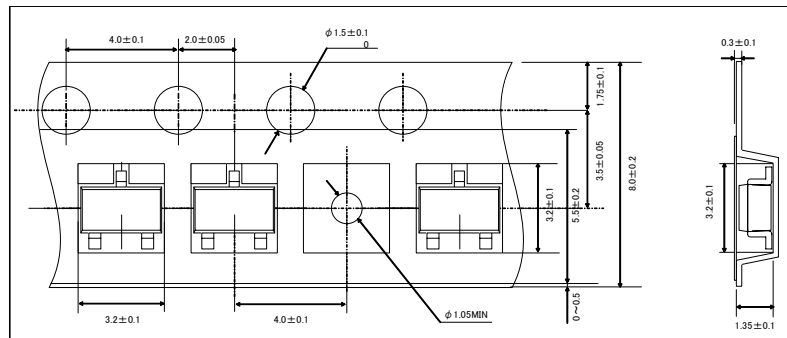
● Land size figure (Unit : mm)



● Structure



● Taping specifications (Unit : mm)



●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	V_{RM}	40	V
Reverse voltage (DC)	V_R	40	V
Average rectified forward current (*1)	I_o	30	mA
Forward current surge peak (60Hz·1cyc) (*1)	I_{FSM}	200	mA
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	-40 to +125	°C

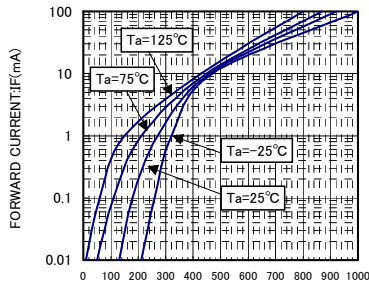
(*1) Rating of per diode : $I_o/2$

●Electrical characteristics (Ta=25°C)

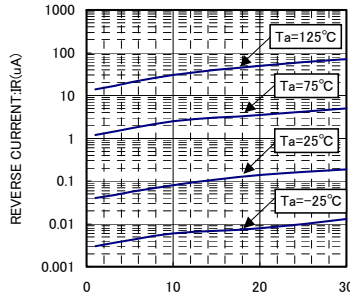
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_{F1}	-	-	0.37	V	$I_F=1mA$
Reverse current	I_{R1}	-	-	1	μA	$V_R=10V$
Capacitance between terminals	Ct1	-	2.0	-	pF	$V_R=1V, f=1MHz$

Diodes

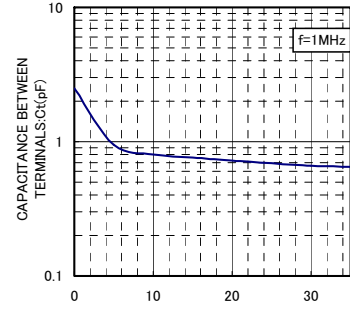
●Electrical characteristic curves (Ta=25°C)



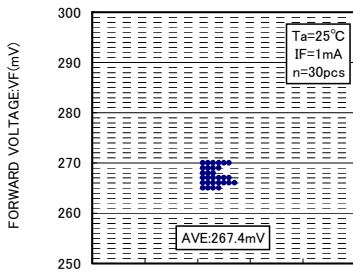
FORWARD VOLTAGE: VF(mV)
VF-IF CHARACTERISTICS



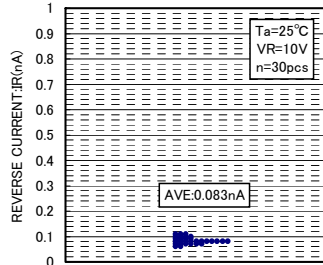
REVERSE VOLTAGE: VR(V)
VR-IR CHARACTERISTICS



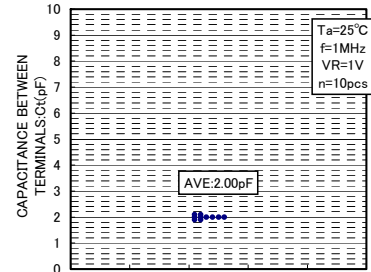
REVERSE VOLTAGE: VR(V)
VR-Ct CHARACTERISTICS



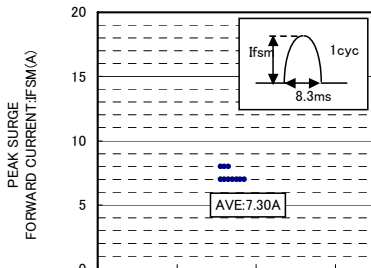
VF DISPERSION MAP



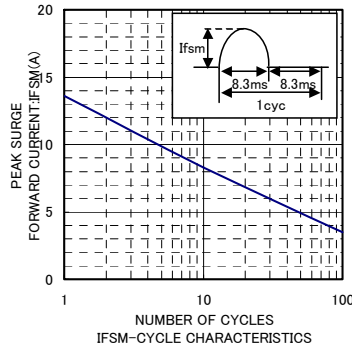
IR DISPERSION MAP



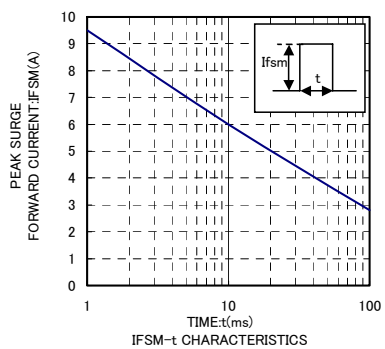
Ct DISPERSION MAP



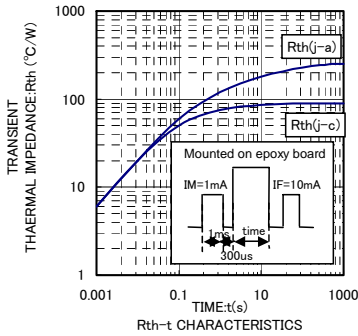
IFSM DISPERSION MAP



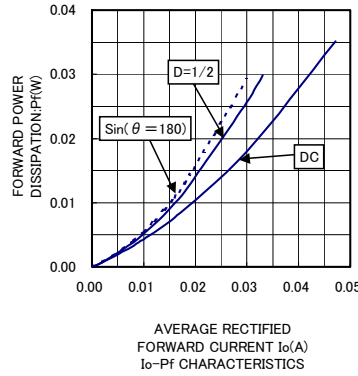
NUMBER OF CYCLES
IFSM-CYCLE CHARACTERISTICS



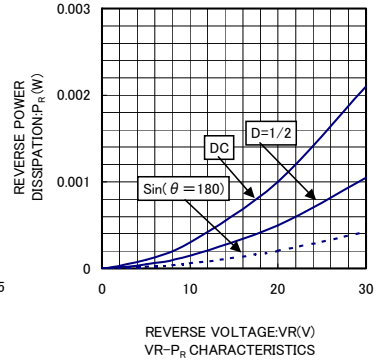
TIME:t(ms)
IFSM-t CHARACTERISTICS



TIME:t(s)
Rth-t CHARACTERISTICS

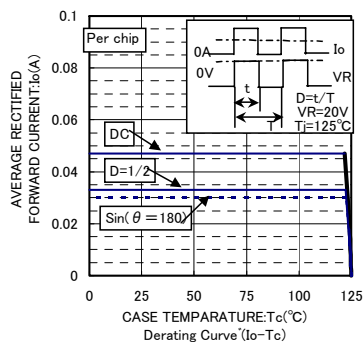
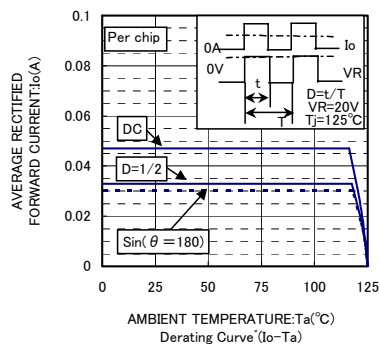


AVERAGE RECTIFIED FORWARD CURRENT Io(A)
Io-PF CHARACTERISTICS



REVERSE VOLTAGE: VR(V)
VR-Pr CHARACTERISTICS

Diodes



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