

# Schottky barrier diode

## RB160M-30

**●Applications**

General rectification

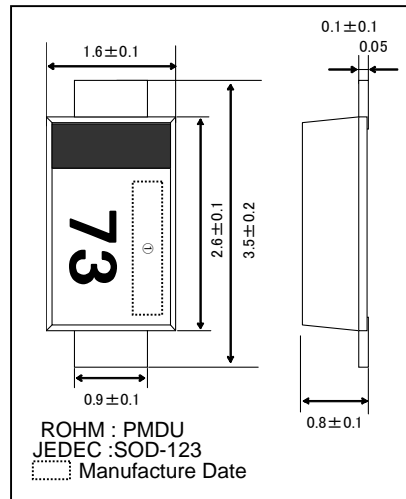
**●Features**

- 1) Small power mold type. (PMDU)
- 2) Low  $I_R$ .
- 3) High reliability

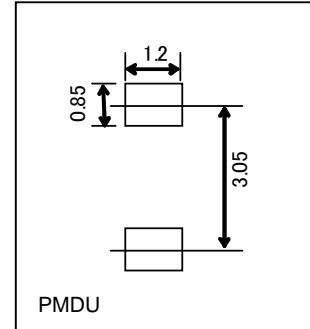
**●Construction**

Silicon epitaxial planer

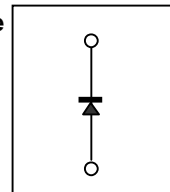
**●Dimensions (Unit : mm)**



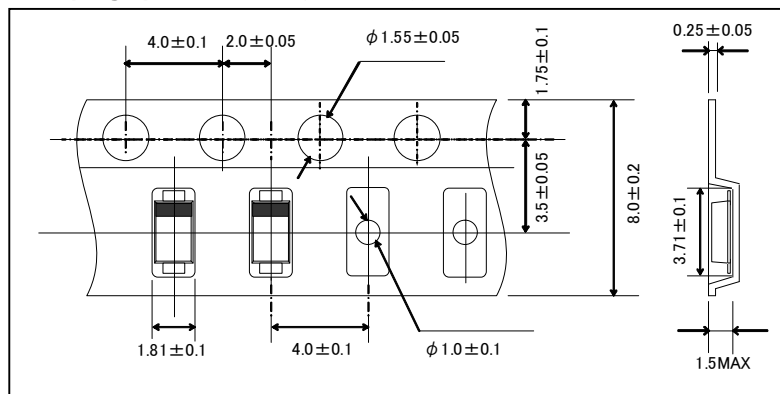
**●Land size figure (Unit : mm)**



**●Structure**



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



**●Absolute maximum ratings (Ta=25°C)**

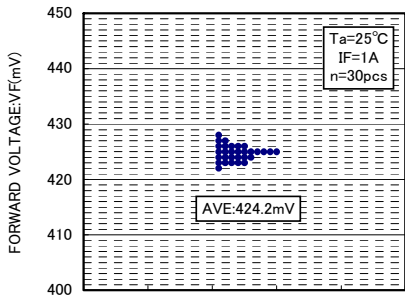
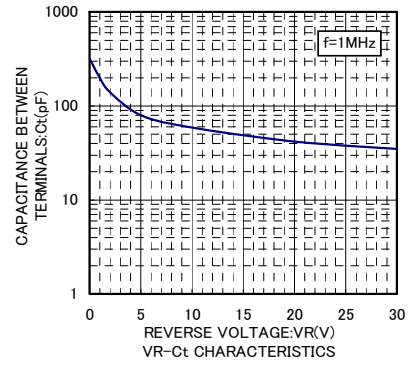
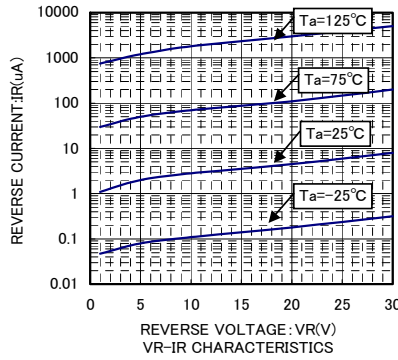
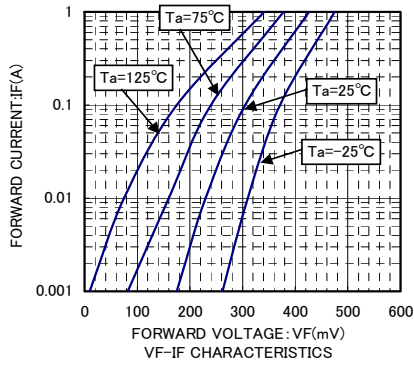
Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	$V_{RM}$	30	V
Reverse voltage (DC)	$V_R$	30	V
Average rectified forward current	$I_o$	1	A
Forward current surge peak (60Hz / 1cyc)	$I_{FSM}$	30	A
Junction temperature	$T_j$	125	°C
Storage temperature	$T_{stg}$	-40 to +125	°C

(\*1) Mounted on epoxy board. 180° Half sine wave

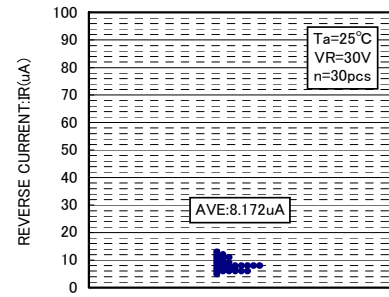
**●Electrical characteristic (Ta=25°C)**

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_{F1}$	-	0.39	0.46	V	$I_F=0.5A$
	$V_{F2}$	-	0.43	0.48	V	$I_F=1.0A$
Reverse current	$I_{R1}$	-	3.0	20	$\mu A$	$V_R=15V$
	$I_{R2}$	-	9.0	50	$\mu A$	$V_R=30V$

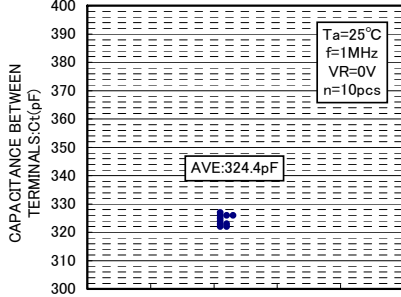
●Electrical characteristic curves



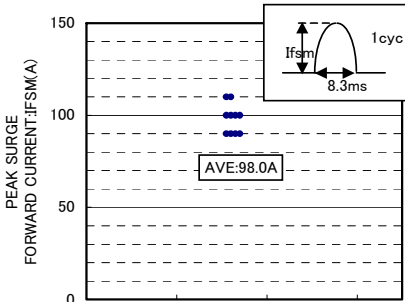
VF DISPERSION MAP



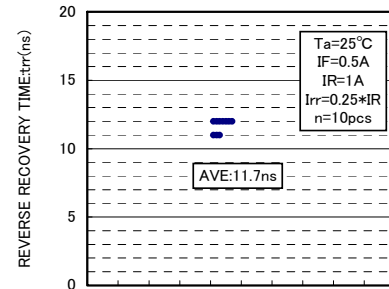
IR DISPERSION MAP



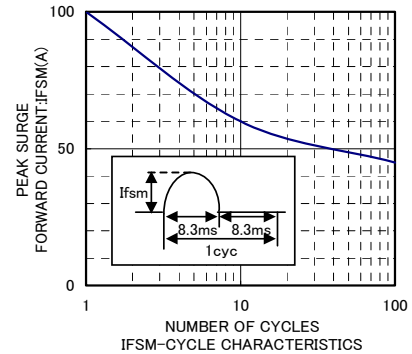
Ct DISPERSION MAP



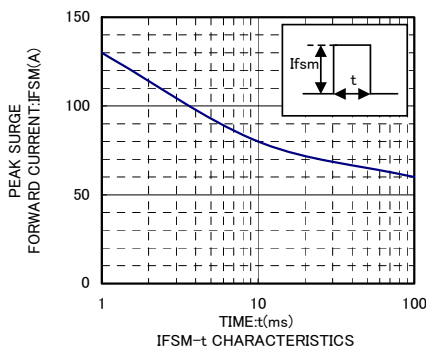
IFSM DISERSION MAP



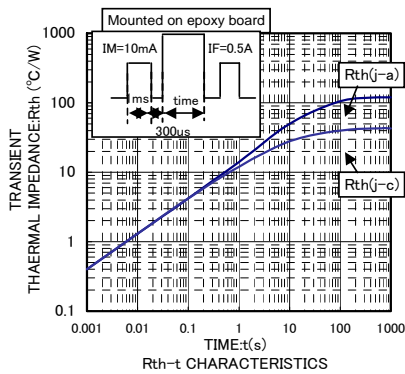
trr DISPERSION MAP



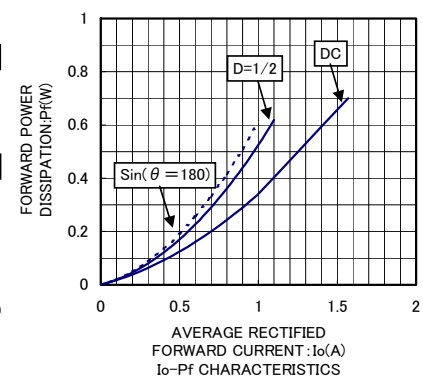
IFSM-CYCLE CHARACTERISTICS



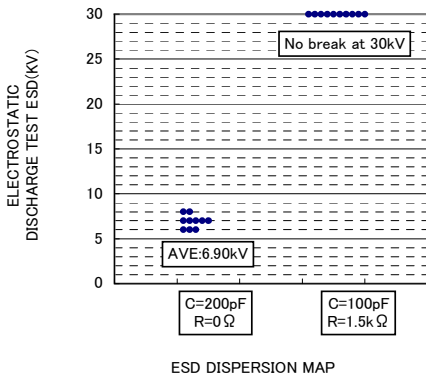
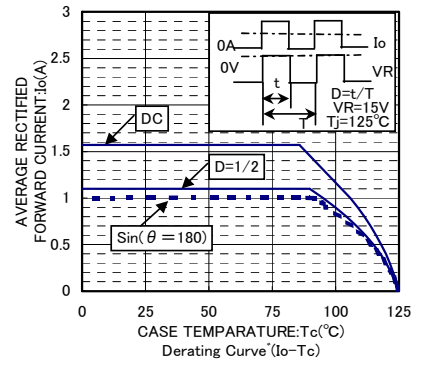
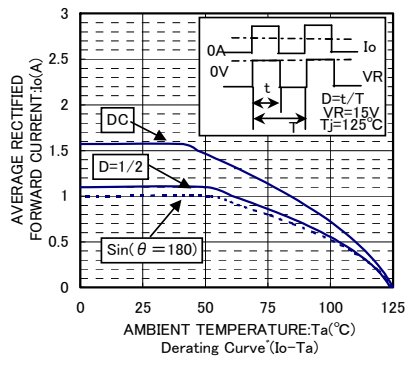
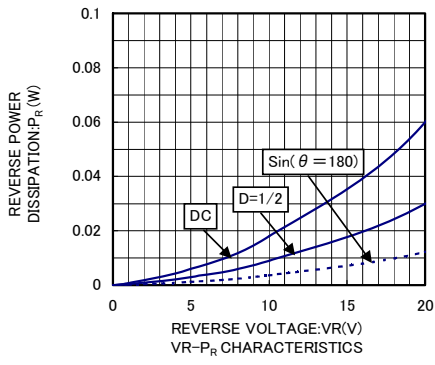
IFSM-t CHARACTERISTICS



Rth-t CHARACTERISTICS



Io-Pf CHARACTERISTICS



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