

# Schottky Barrier Diode

## RB090MS-30

### ●Applications

General rectification

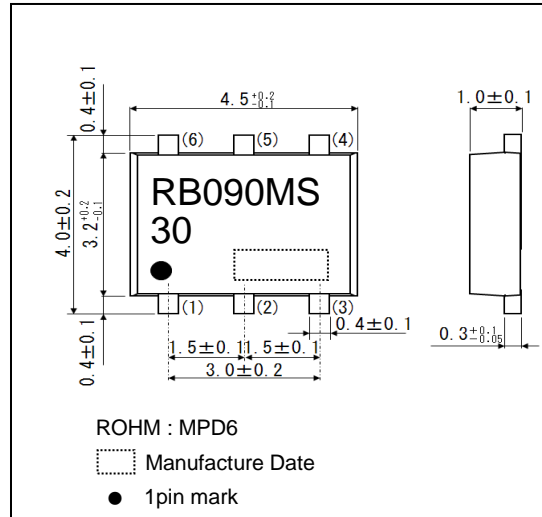
### ●Features

- 1) Small power mold type. (MPD6)
- 2) Low VF
- 3) High reliability

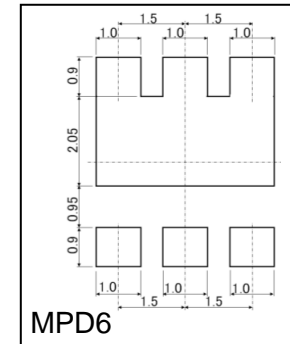
### ●Construction

Silicon epitaxial

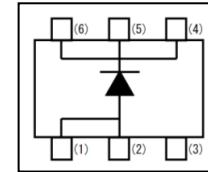
### ●External Dimensions(Unit : mm)



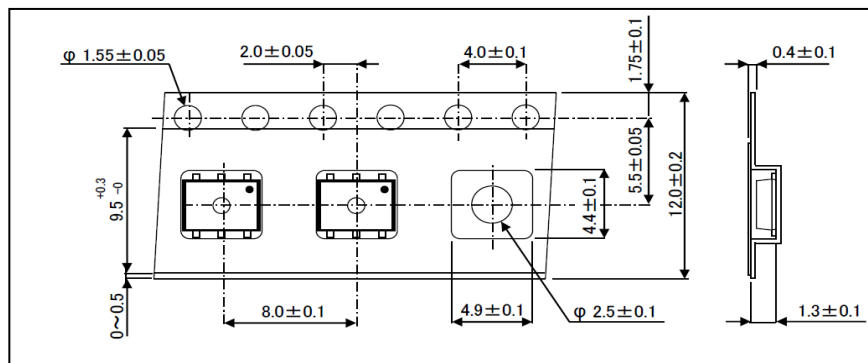
### ●Land size figure(Unit : mm)



### ●Structure



### ●Taping specifications(Unit : mm)



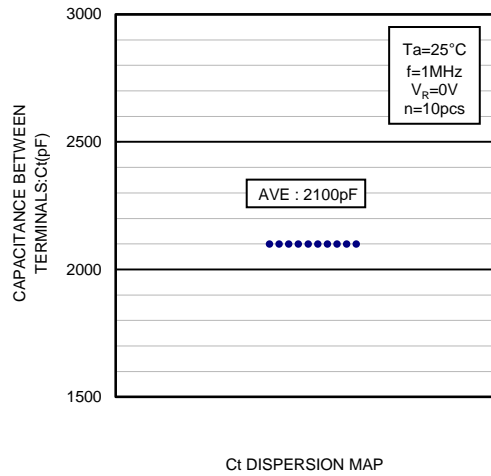
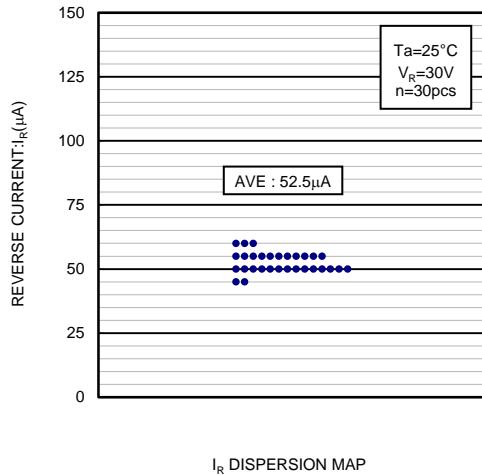
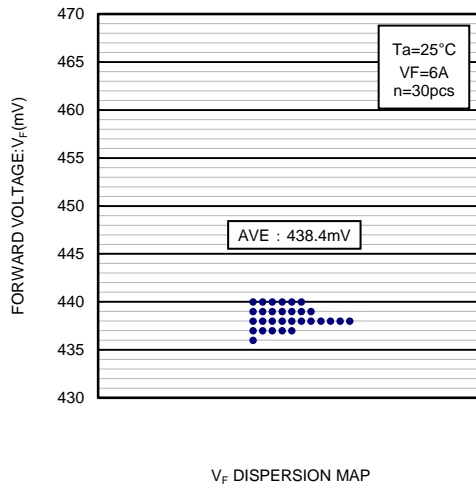
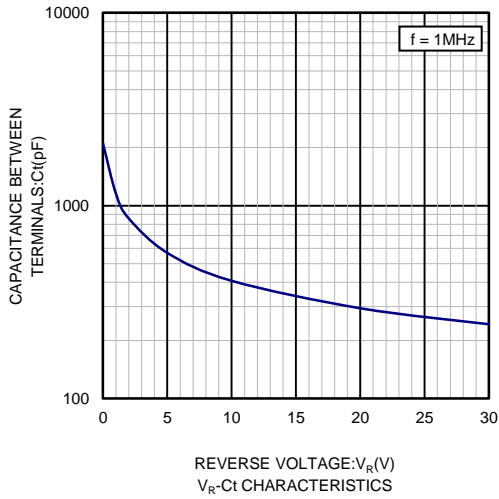
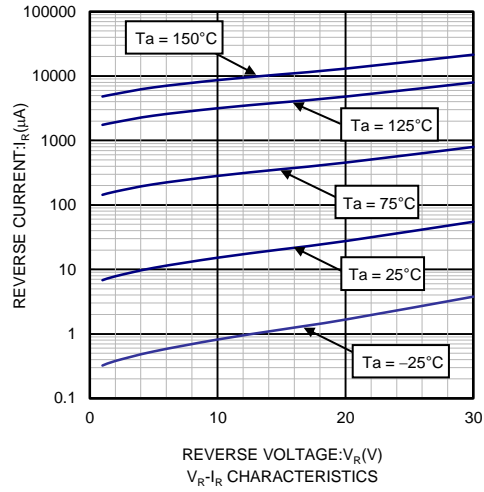
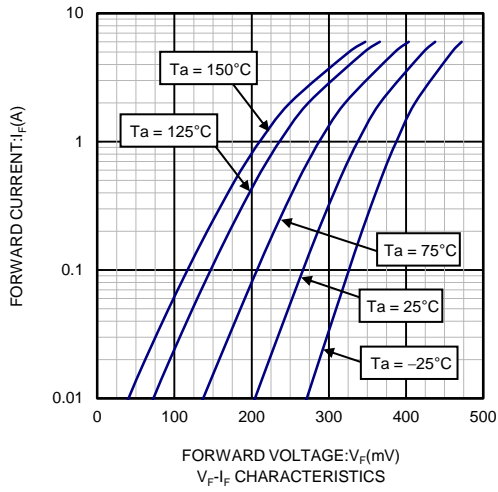
### ●Absolute Maximum Ratings(Ta=25°C)

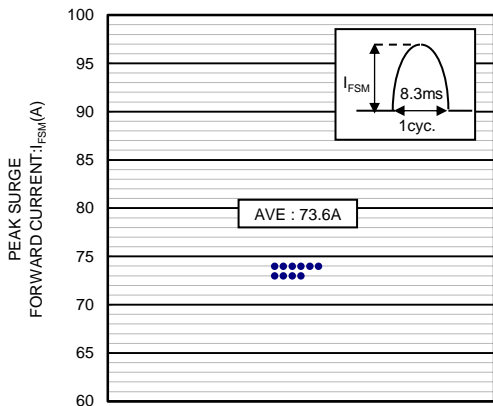
Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive)	$V_{RM}$	30	V
Reverse voltage (DC)	$V_R$	30	V
Average rectified forward current	$I_o$	6	A
Forward current surge peak (60Hz·1cyc)	$I_{FSM}$	30	A
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{stg}$	-55 to +150	°C

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

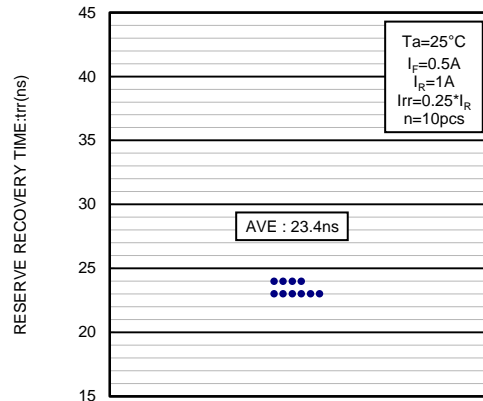
### ●Electrical Characteristics(Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_F$	-	-	0.55	V	$I_F=6.0A$
Reverse current	$I_R$	-	-	200	μA	$V_R=30V$

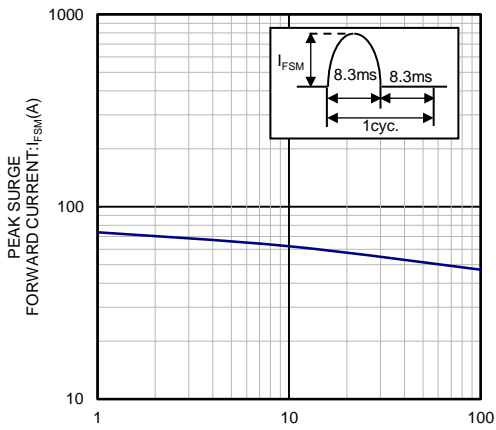




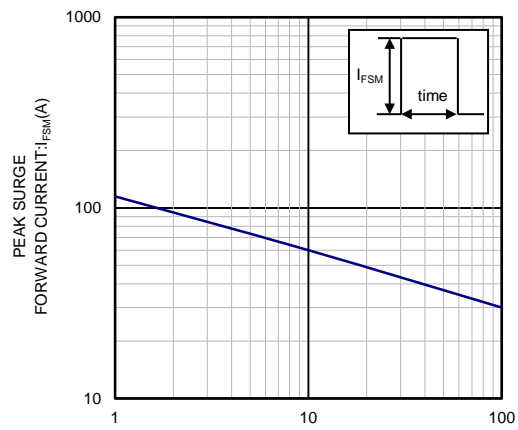
$I_{FSM}$  DISRESION MAP



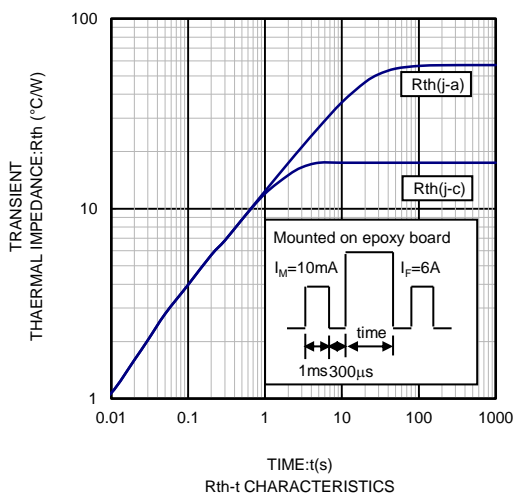
$trr$  DISPERSION MAP



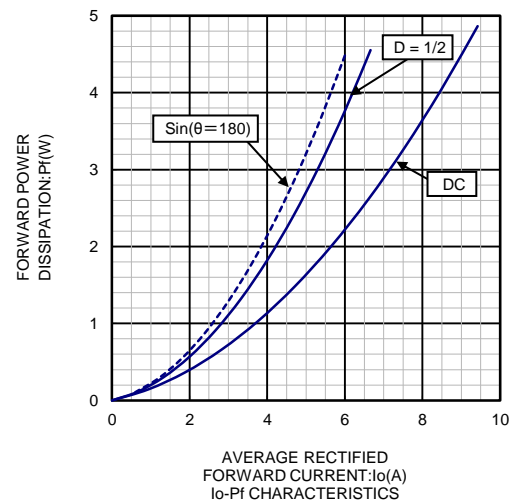
$I_{FSM}$ -CYCLE CHARACTERISTICS



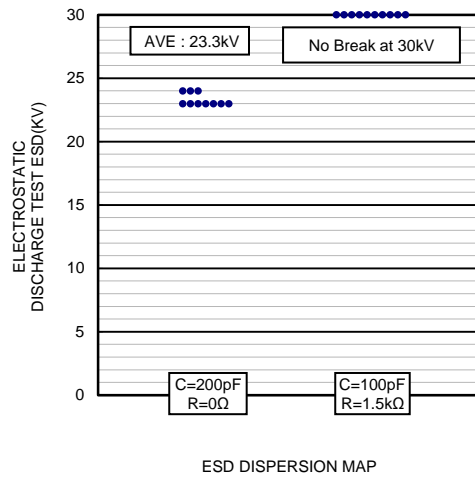
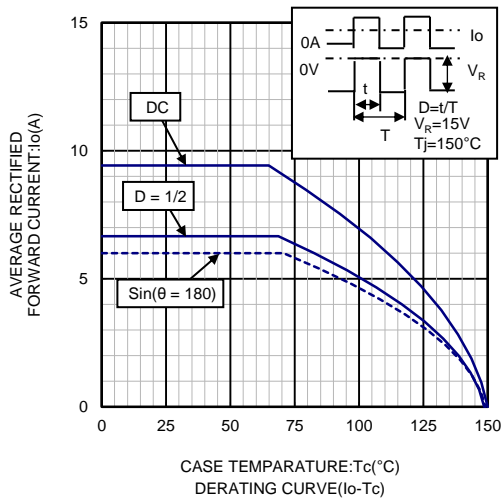
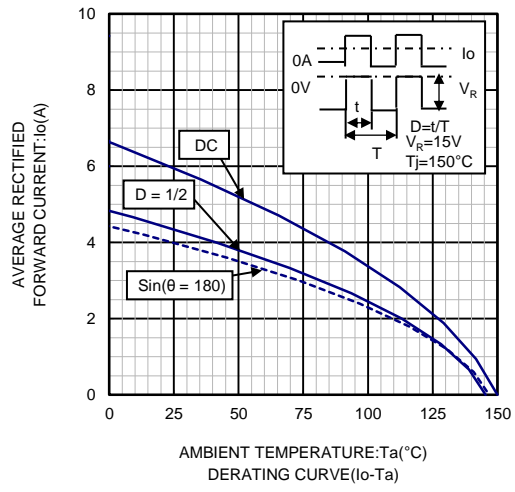
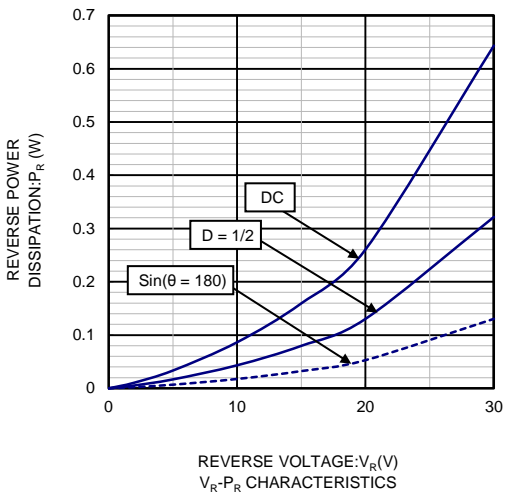
$I_{FSM}$ - $t$  CHARACTERISTICS



$R_{th}$ - $t$  CHARACTERISTICS



AVERAGE RECTIFIED FORWARD CURRENT:  $I_o$ (A)  
 $I_o$ -Pf CHARACTERISTICS



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