

# Schottky Barrier Diode

RB541XN

●Applications

Rectify small power

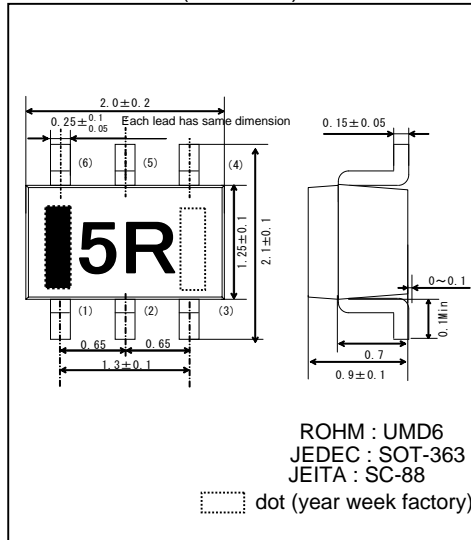
●Features

- 1) Small mold type. (UMD6)
- 2) Low  $V_F$
- 3) High reliability

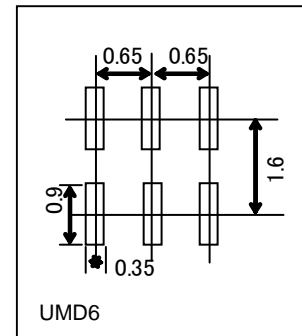
●Construction

Silicon epitaxial planer

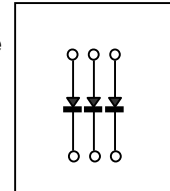
●Dimensions (Unit : mm)



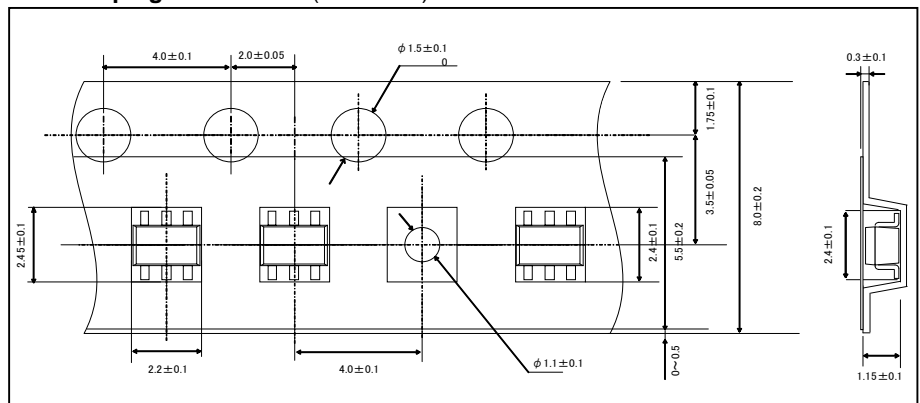
●Land size figure (Unit : mm)



●Structure



●Taping dimensions (Unit : mm)



●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Reverse voltage (DC)	$V_R$	30	V
Average rectified forward current (*1)	$I_o$	100	mA
Forward voltage surge peak (60Hz · 1cyc) (*2)	$I_{FSM}$	500	mA
Junction temperature	$T_j$	125	°C
Storage temperature	$T_{stg}$	-40 to +125	°C

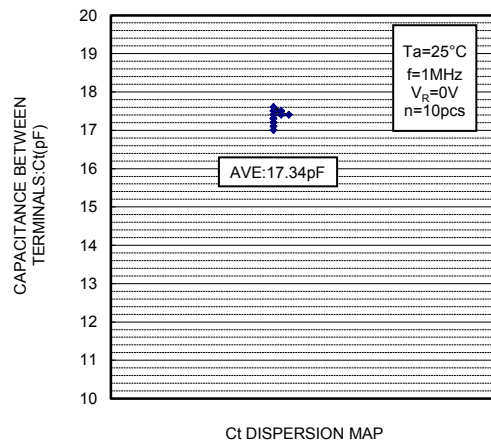
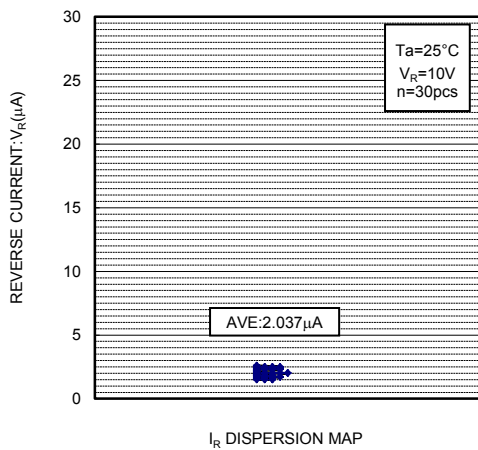
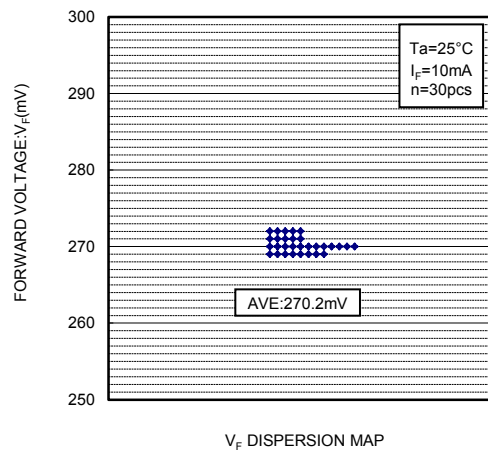
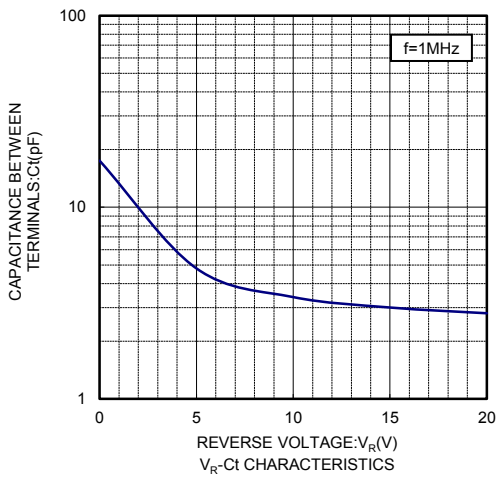
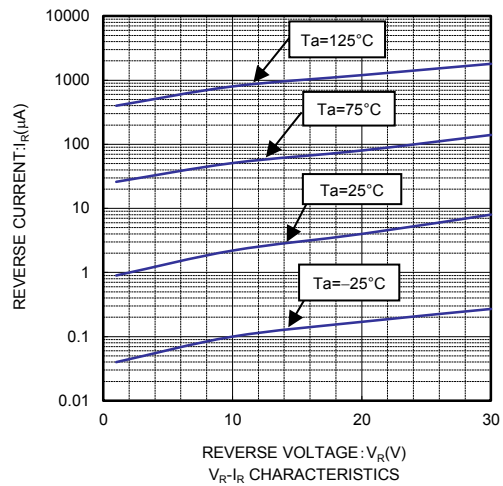
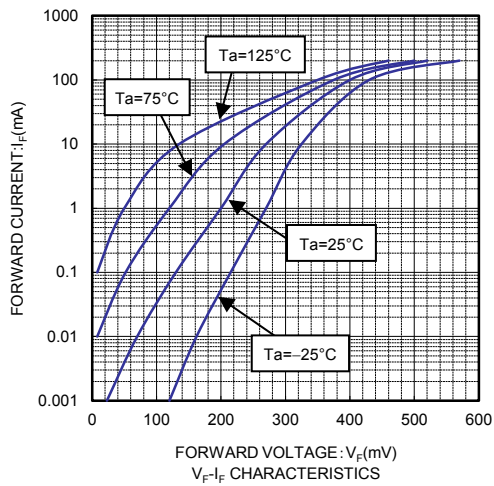
(\*1) Rating of per diode:1/3 $I_o$

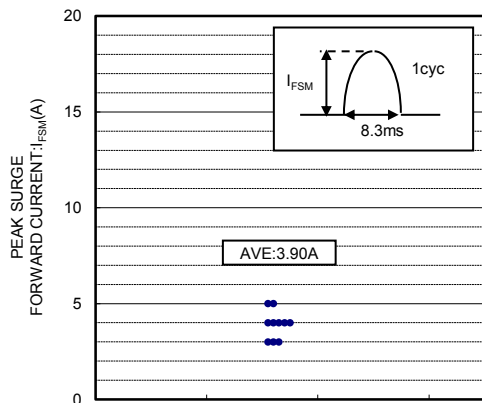
(\*2) Rating of per diode

●Electrical characteristics (Ta=25°C)

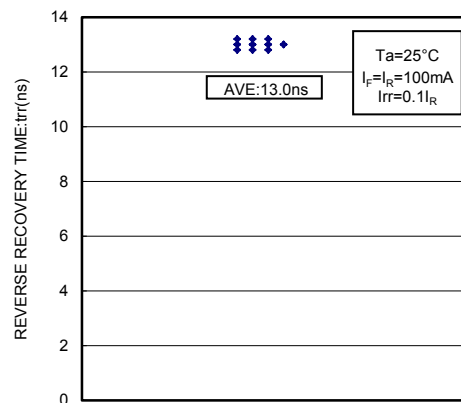
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_F$	-	-	0.35	V	$I_F=10mA$
Reverse current	$I_R$	-	-	10	μA	$V_R=10V$

\*Rating of per diode

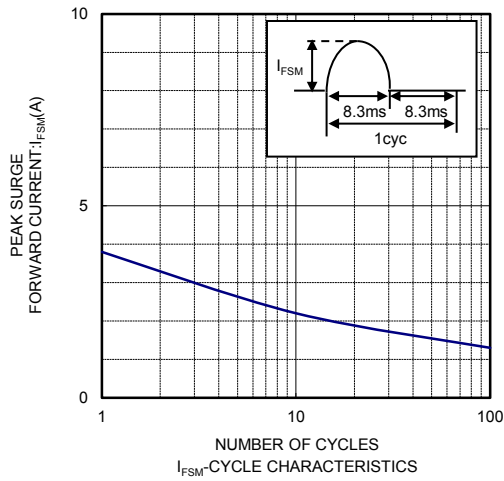




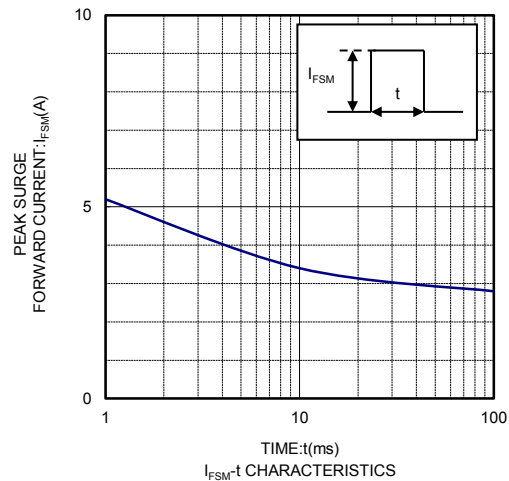
$I_{FSM}$  DISPERSION MAP



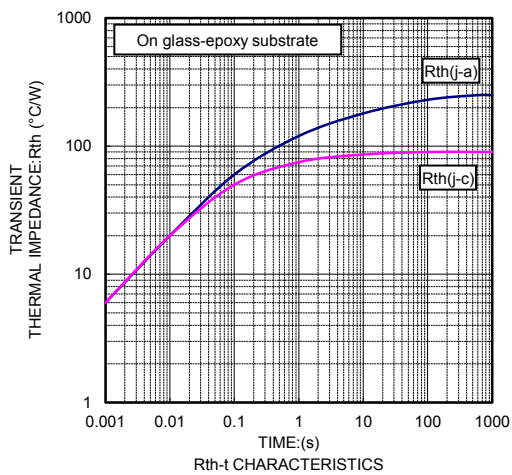
$trr$  DISPERSION MAP



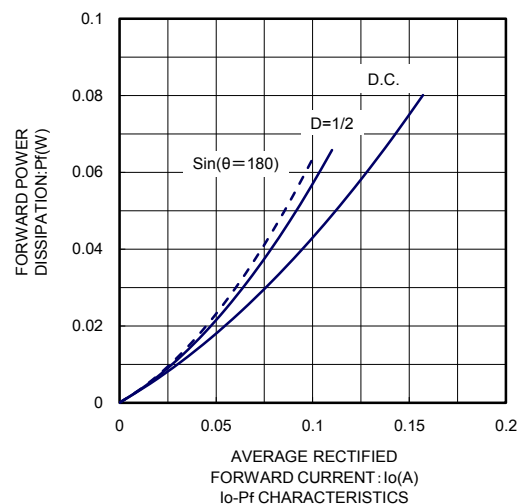
$I_{FSM}$ -CYCLE CHARACTERISTICS



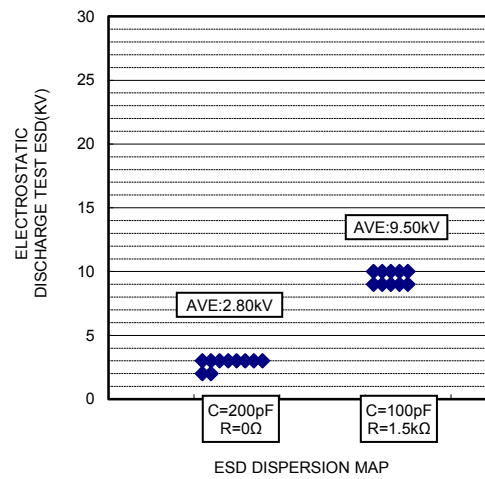
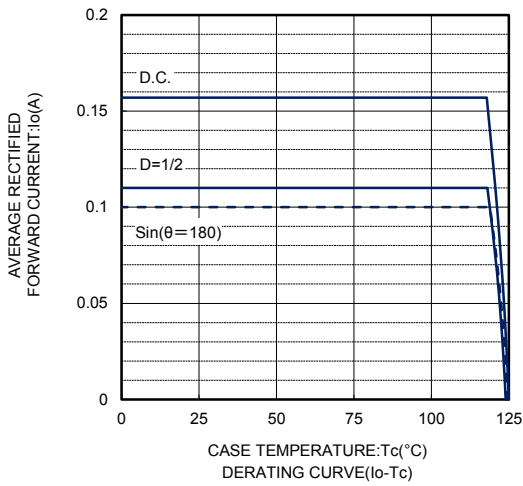
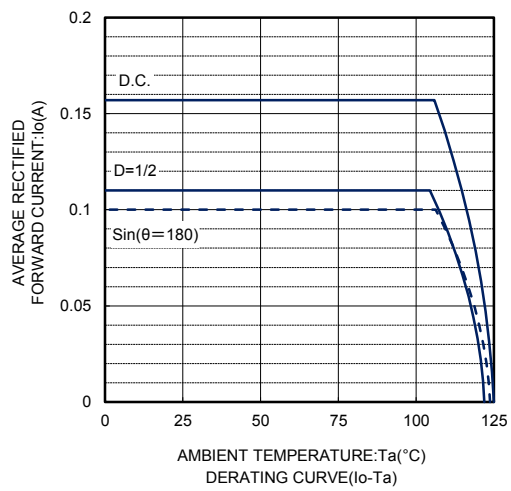
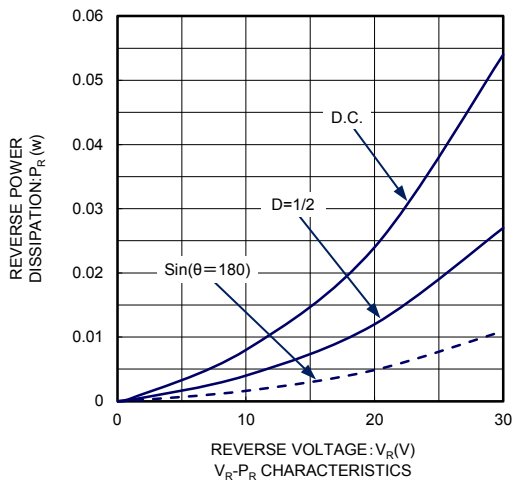
$I_{FSM}$ - $t$  CHARACTERISTICS



$R_{th}$ - $t$  CHARACTERISTICS



$I_o$ - $P_f$  CHARACTERISTICS



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