

# Schottky Barrier Diode

RB225NS-40

●Applications

General rectification

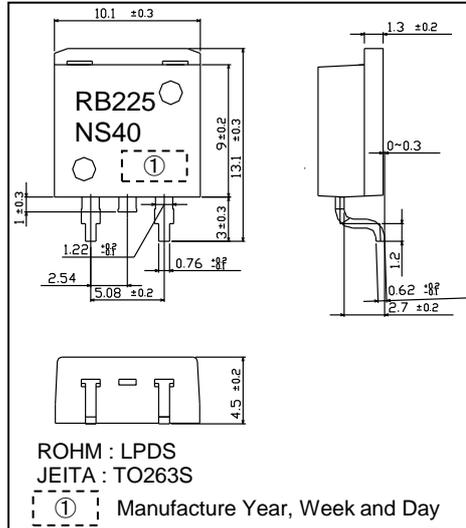
●Features

- 1) Cathode common dual type.(LPDS)
- 2) Low  $I_R$

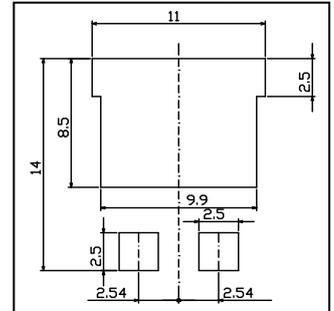
●Construction

Silicon epitaxial planar

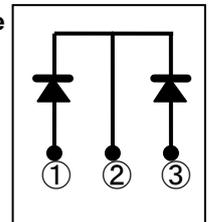
●Dimensions (Unit : mm)



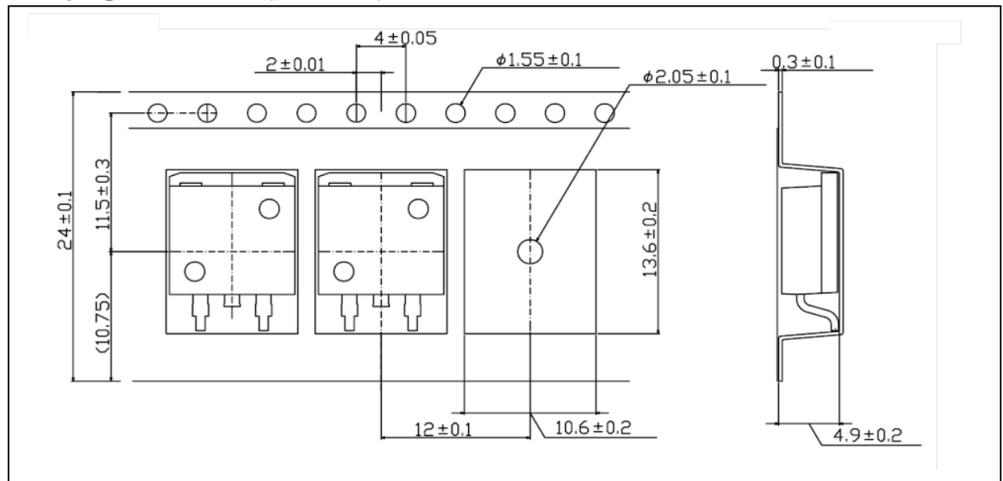
●Land size figure (Unit : mm)



●Structure



●Taping dimensions (Unit : mm)



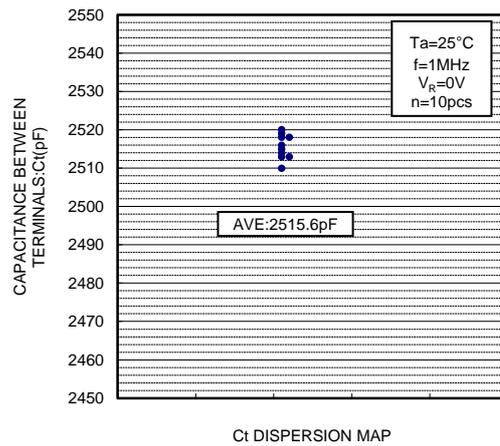
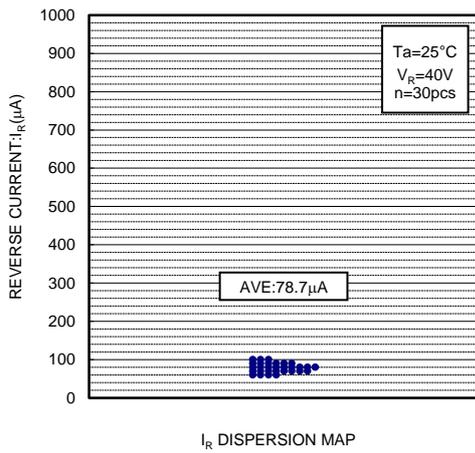
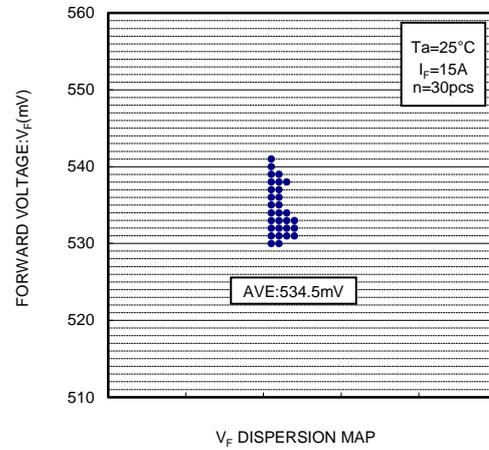
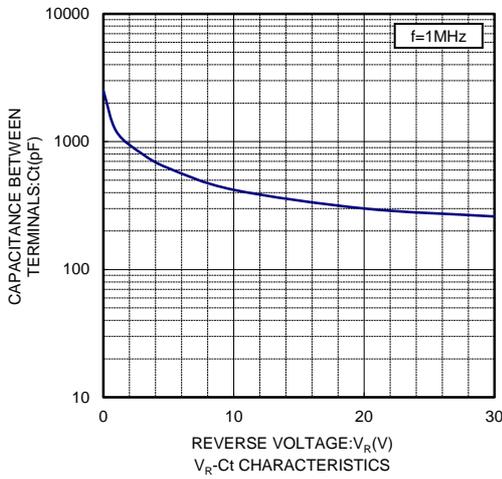
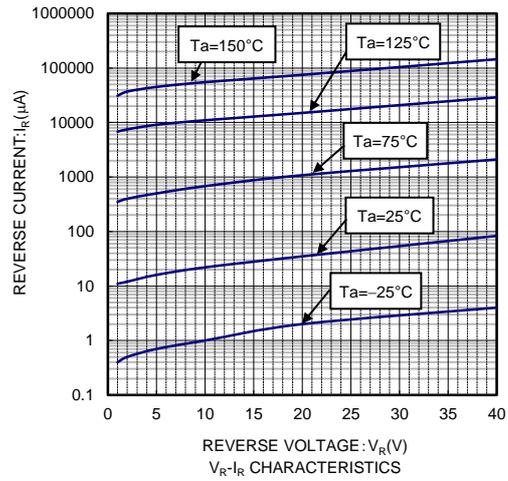
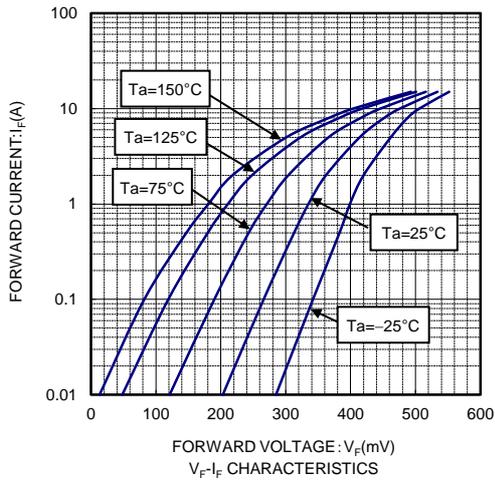
●Absolute maximum ratings (Tc=25°C)

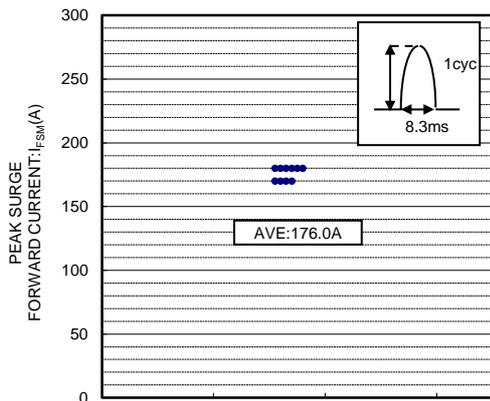
Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive)	$V_{RM}$	40	V
Reverse voltage (DC)	$V_R$	40	V
Average rectified forward current (*1)	$I_o$	30	A
Forward current surge peak (60Hz · 1cyc) (*1)	$I_{FSM}$	100	A
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{stg}$	-40 to +150	°C

(\*1) 60Hz half sin wave, resistive load at Tc=70°C. 1/2  $I_o$  per diode

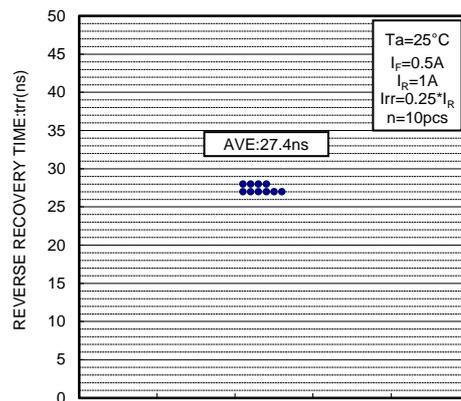
●Electrical characteristics (Tj=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_F$	-	0.53	0.63	V	$I_F=15A$
Reverse current	$I_R$	-	0.08	0.5	mA	$V_R=40V$
Thermal resistance	$R_{th}$ (J-C)	-	-	2.00	°C/W	junction to case

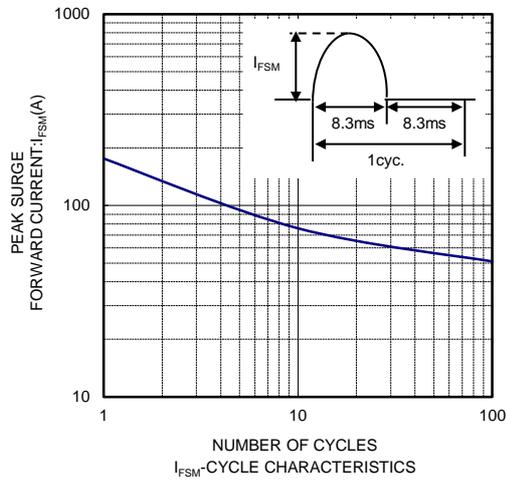




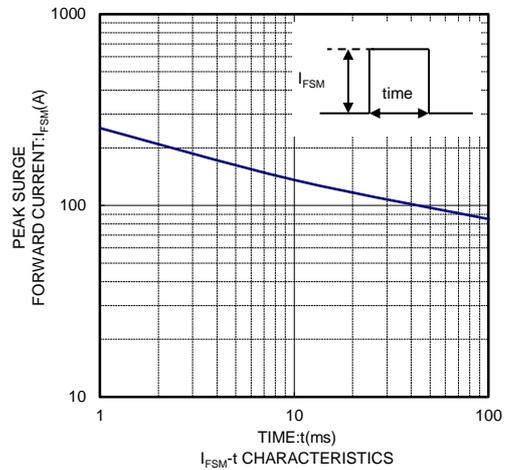
$I_{FSM}$  DISPERSION MAP



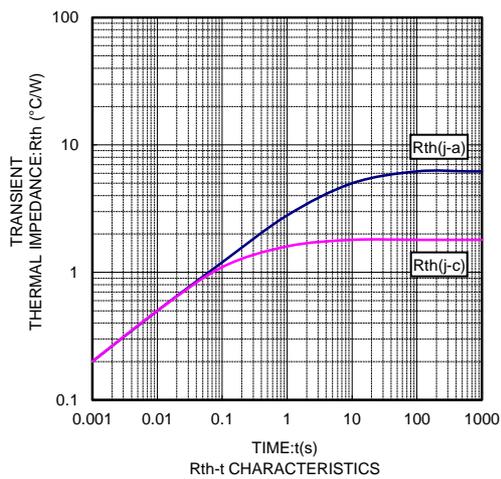
$t_{rr}$  DISPERSION MAP



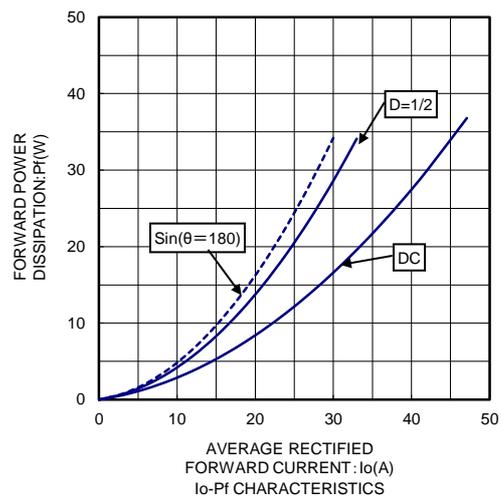
$I_{FSM}$  CYCLE CHARACTERISTICS



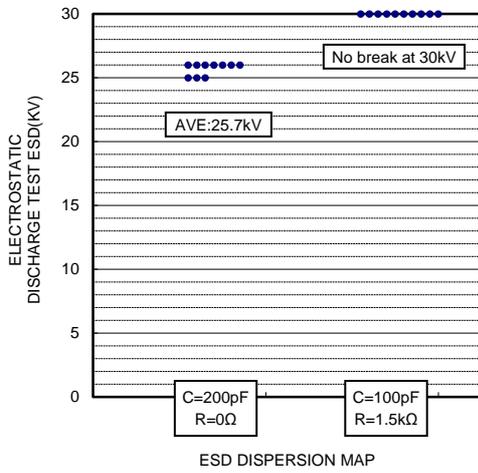
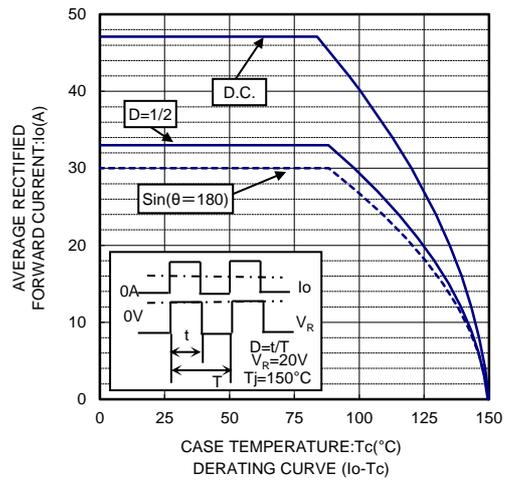
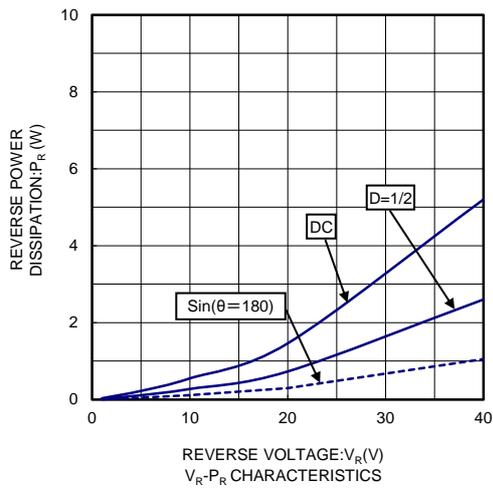
$I_{FSM}$ - $t$  CHARACTERISTICS



$R_{th}$ - $t$  CHARACTERISTICS



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



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