

Schottky Barrier Diode

RB225NS-40

●Applications

General rectification

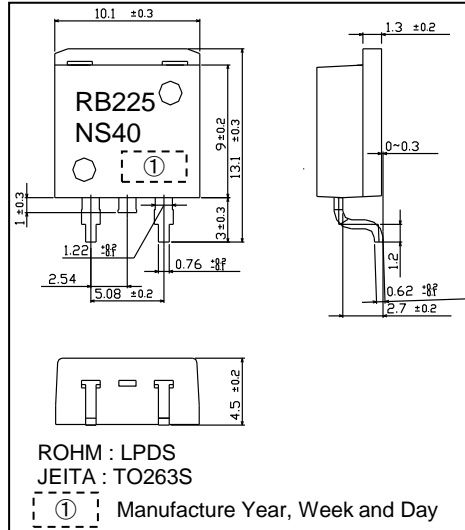
●Features

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

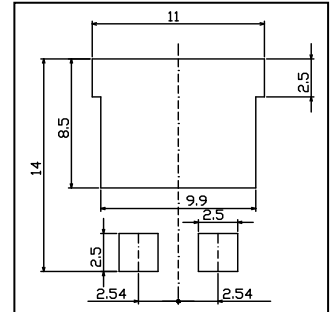
●Construction

Silicon epitaxial planer

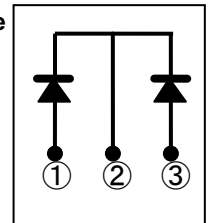
●Dimensions (Unit : mm)



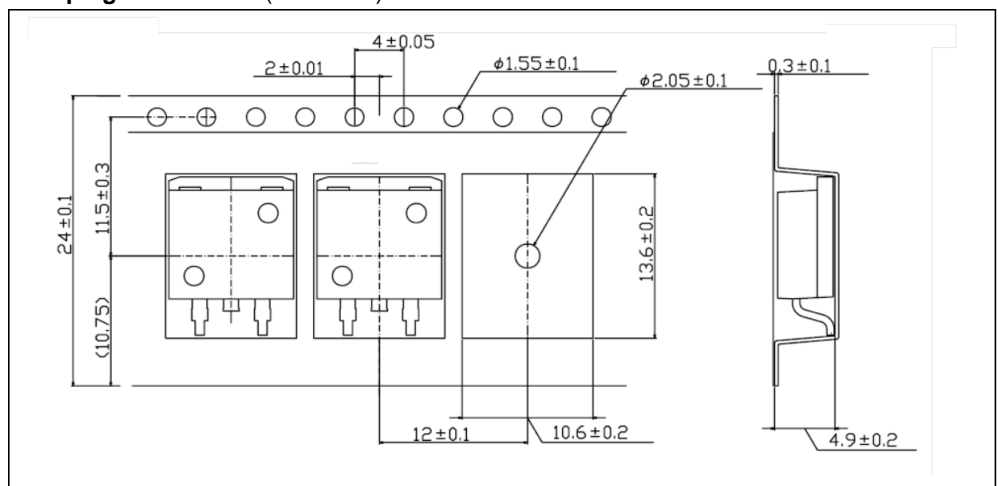
●Land size figure (Unit : mm)



●Structure



●Taping dimensions (Unit : mm)



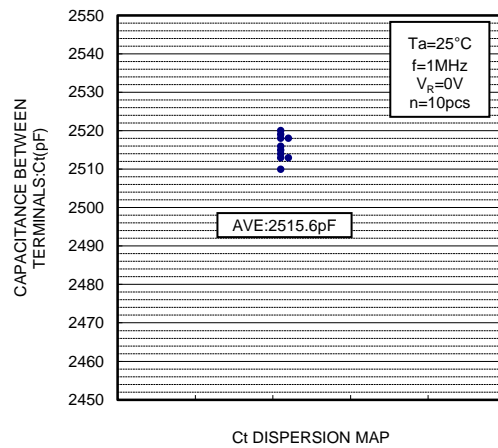
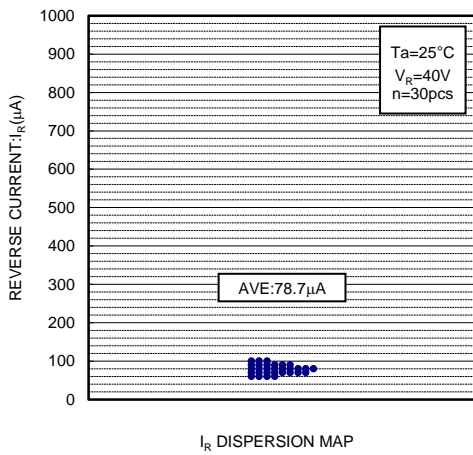
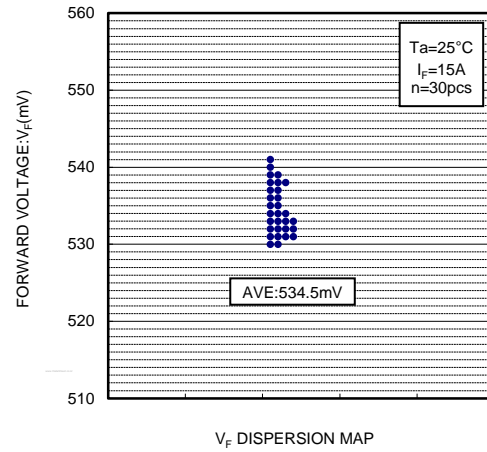
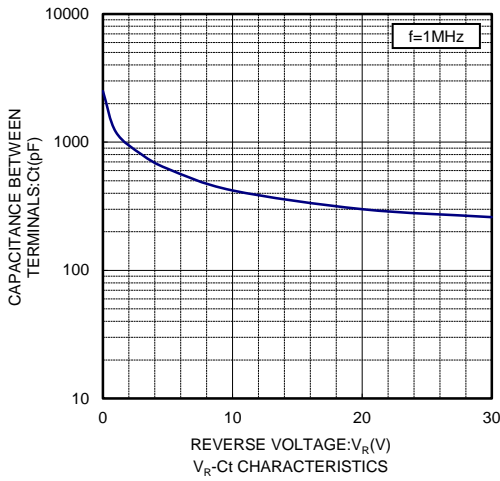
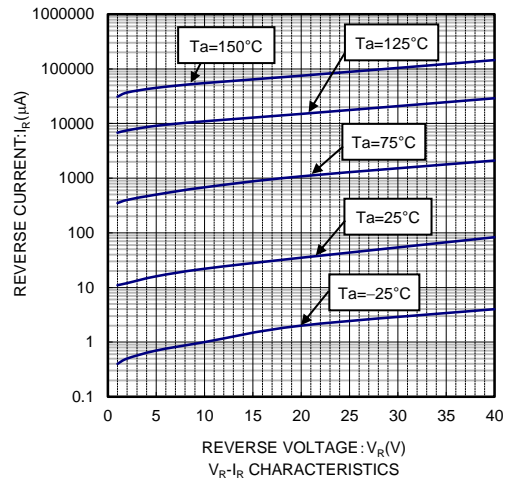
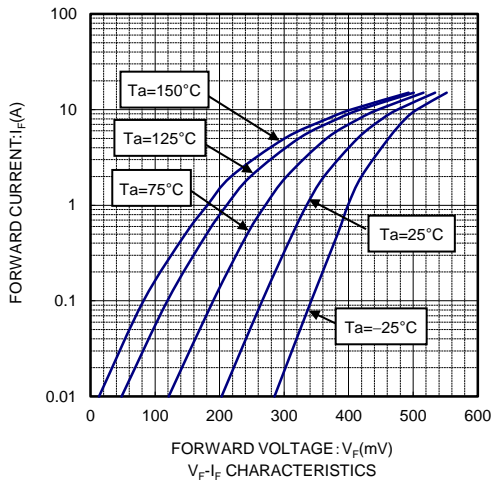
●Absolute maximum ratings ($T_c=25^\circ\text{C}$)

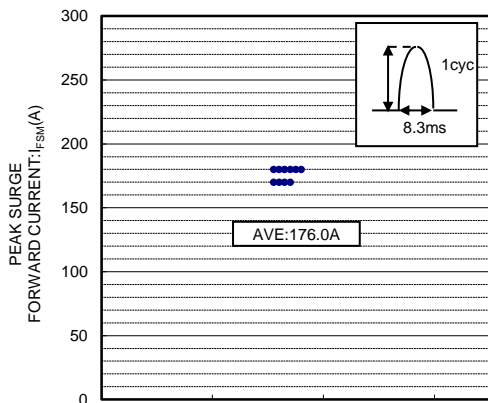
Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive)	V_{RM}	40	V
Reverse voltage (DC)	V_R	40	V
Average rectified forward current (*1)	I_o	30	A
Forward current surge peak (60Hz · 1cyc) (*1)	I_{FSM}	100	A
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-40 to +150	$^\circ\text{C}$

(*1) 60Hz half sin wave, resistive load at $T_c=70^\circ\text{C}$. 1/2 I_o per diode

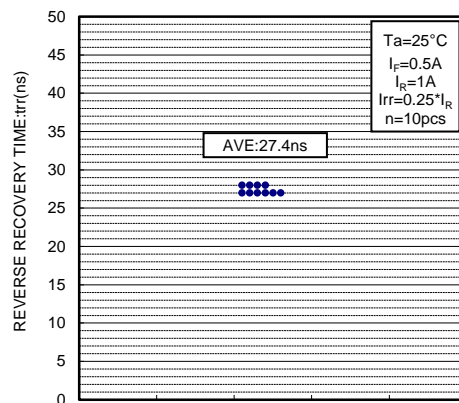
●Electrical characteristics ($T_j=25^\circ\text{C}$)

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

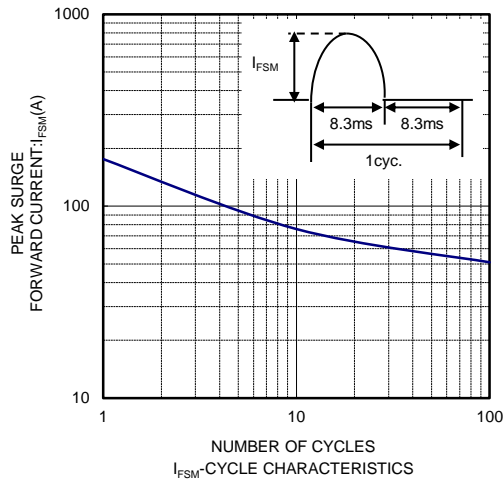




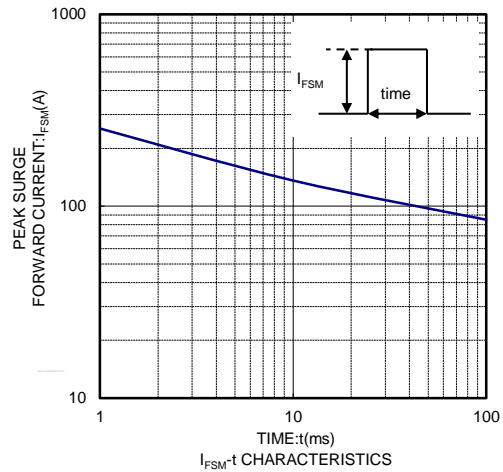
I_{FSM} DISPERSION MAP



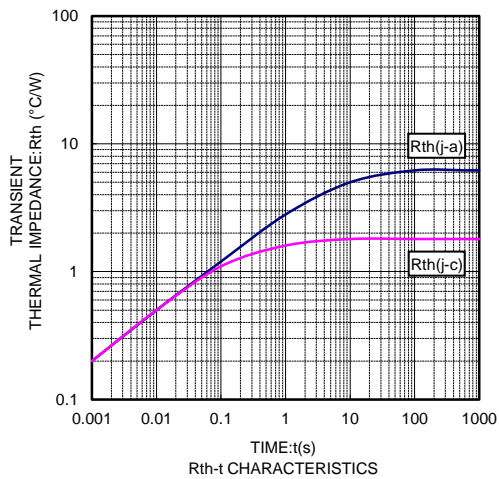
t_{rr} DISPERSION MAP



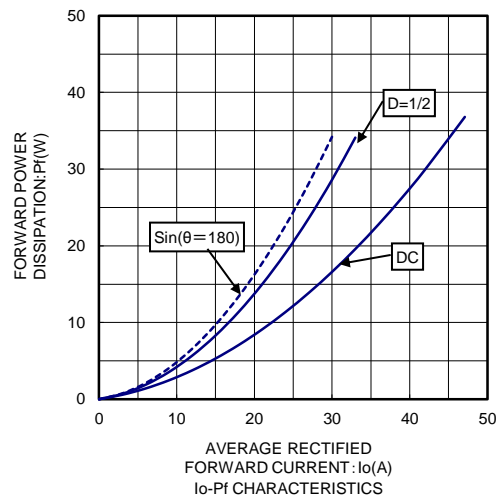
I_{FSM} CYCLE CHARACTERISTICS



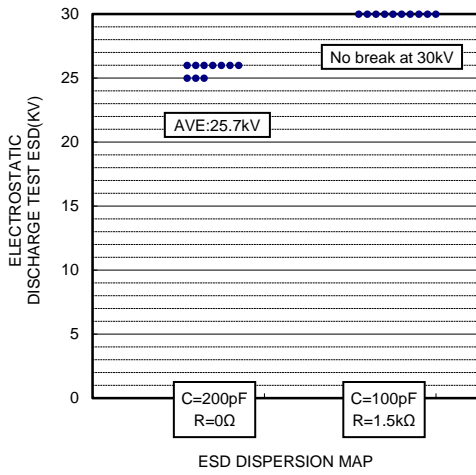
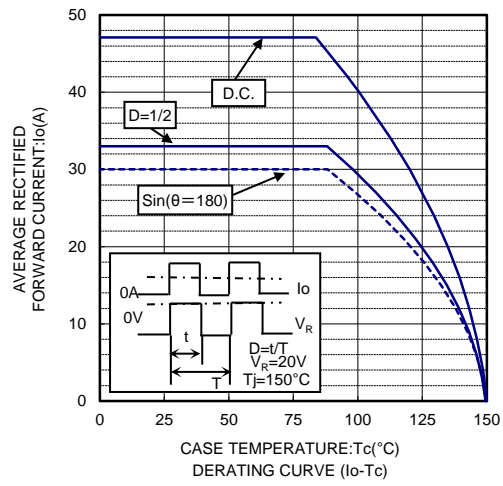
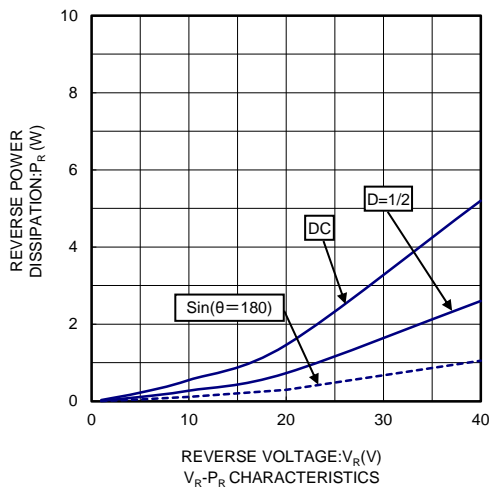
I_{FSM} - t CHARACTERISTICS



R_{th} - t CHARACTERISTICS



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



Notes

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