

Super Fast Recovery Diode

RFUH10NS4S
●Series

Super Fast Recovery

●Applications

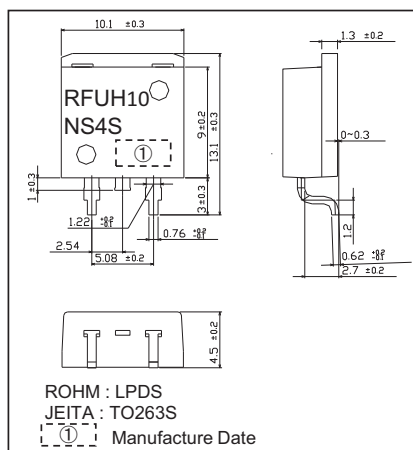
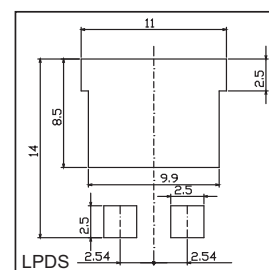
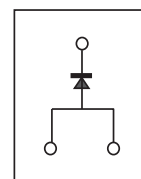
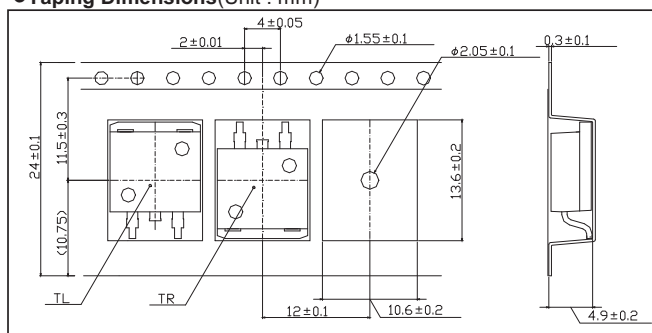
General rectification

●Features

- 1) Ultra low switching loss
- 2) High current overload capacity

●Construction

Silicon epitaxial planer type

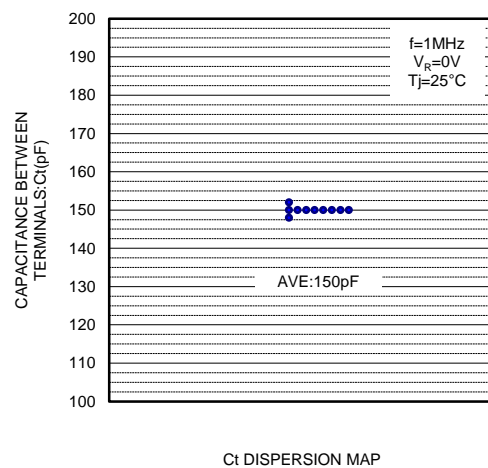
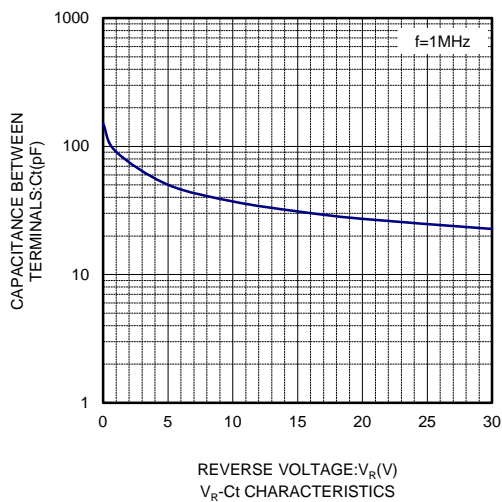
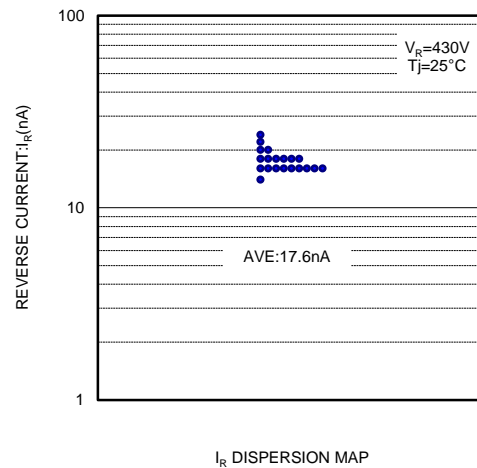
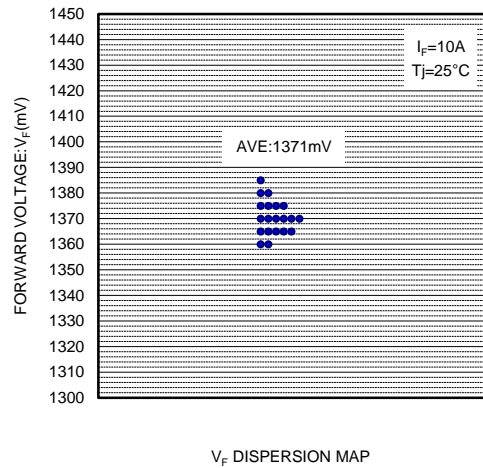
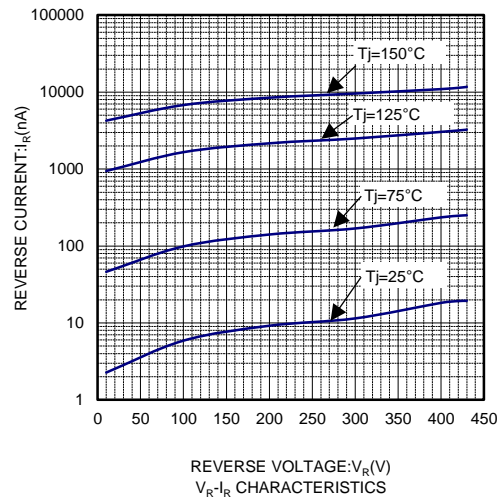
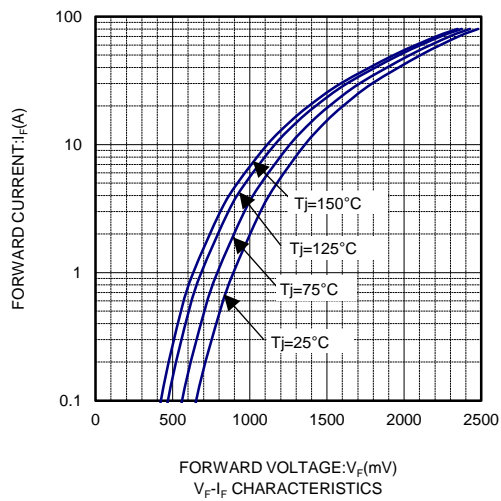
●Dimensions(Unit : mm)

●Land Size Figure(Unit : mm)

●Structure

●Taping Dimensions(Unit : mm)

●Absolute Maximum Ratings(Tc=25°C)

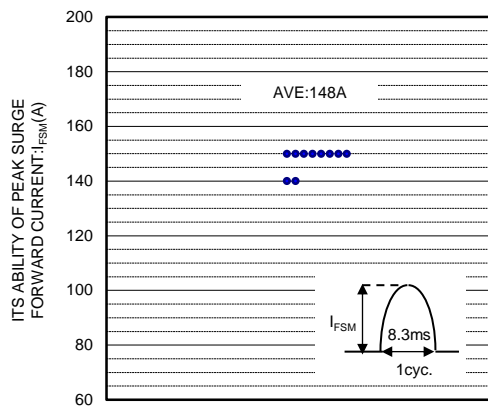
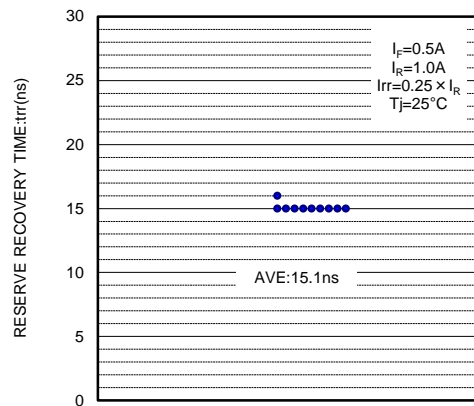
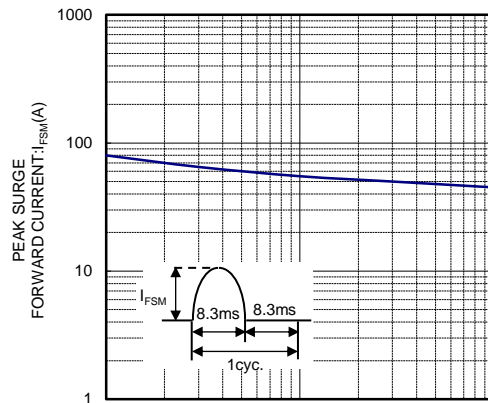
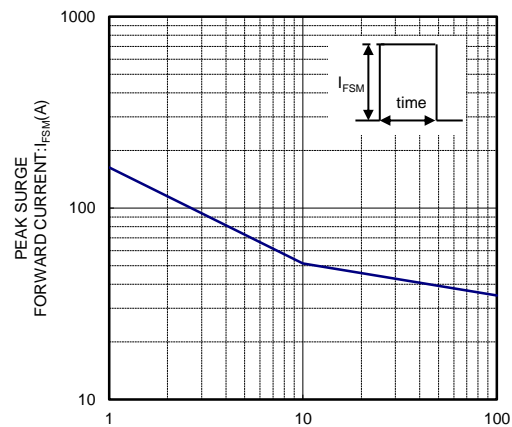
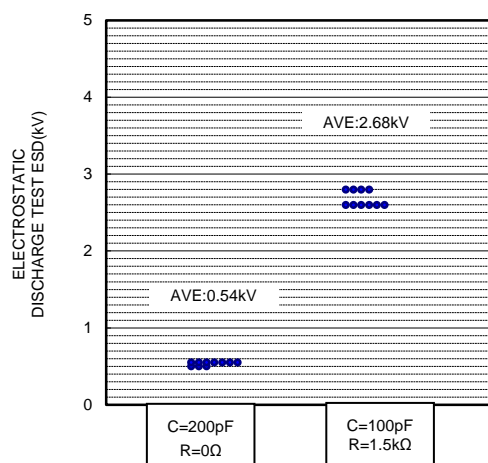
Parameter	Symbol	Conditions	Limits	Unit
Repetitive peak reverse voltage	V_{RM}	Duty ≤ 0.5	430	V
Reverse voltage	V_R	Direct voltage	430	V
Average rectified forward current	I_o	60Hz half sin wave , Resistive load Tc=70°C	10	A
Forward current surge peak	I_{FSM}	60Hz half sin wave , Non-repetitive at Tj=25°C	80	A
Junction temperature	Tj		150	°C
Storage temperature	Tstg		-55 to +150	°C

(*1) 1-3pin common circuit

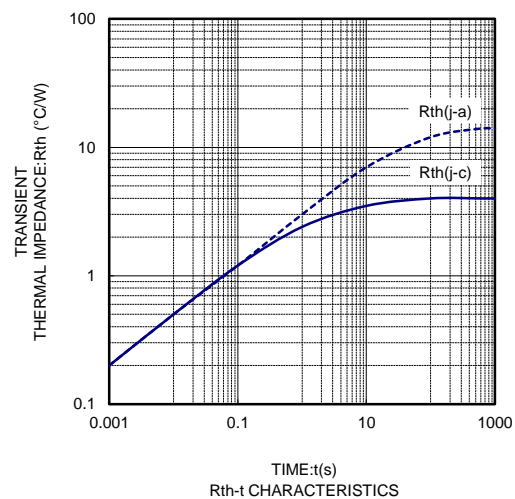
●Electrical Characteristics(Tj=25°C)

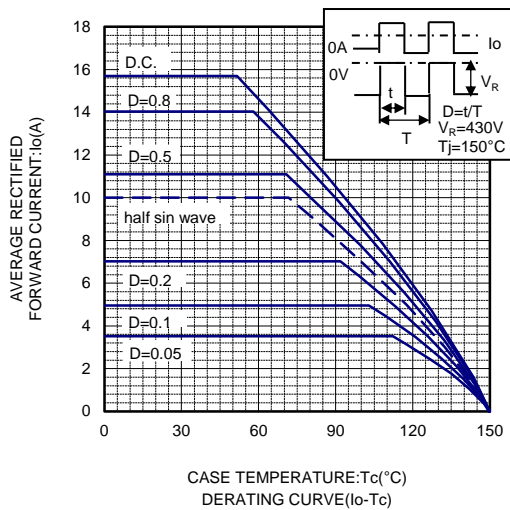
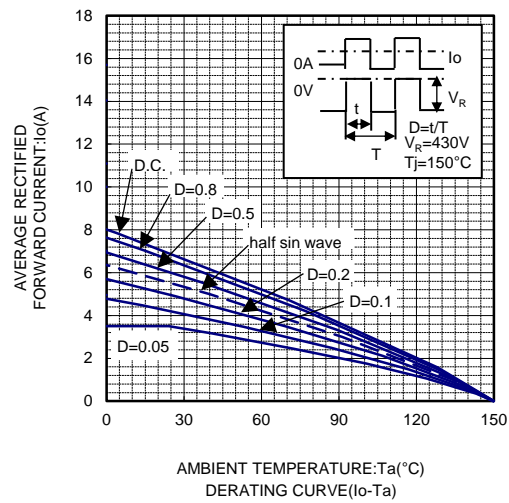
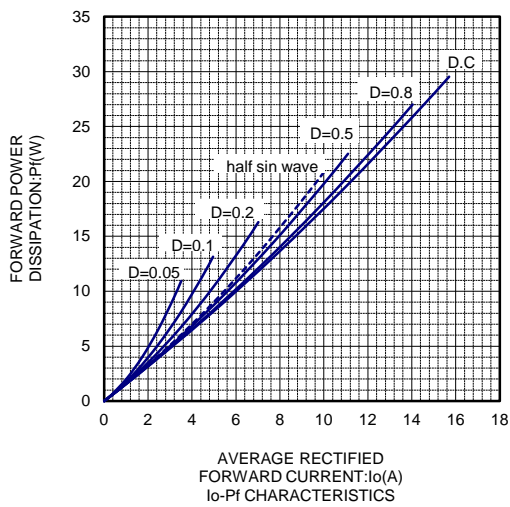
Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage	V_F	$I_F=10A$	—	1.4	1.7	V
Reverse current	I_R	$V_R=430V$	—	0.05	10	μA
Reverse recovery Time	trr	$I_F=0.5A, I_R=1A, I_{rr}=0.25 \times I_R$	—	15	25	ns
Thermal resistance	Rth(j-c)	Junction to case	—	—	4.0	°C/W



 I_{FSM} DISPERSION MAP trr DISPERSION MAPNUMBER OF CYCLES
 I_{FSM} CYCLE CHARACTERISTICS I_{FSM} - t CHARACTERISTICS

ESD DISPERSION MAP

 R_{th} - t CHARACTERISTICS



Notes

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