# Super Fast Recovery Diode

RFN10BM3SFH Datasheet

Series

Standard Fast Recovery

### Application

General rectification

#### Features

- 1) Low switching loss
- 2) High current overload capacity

# Construction

Silicon epitaxial planar type

●Dimensions (Unit: mm) RFN10BM 38 1

0.75±0.1

⊕ 0.25M C A B

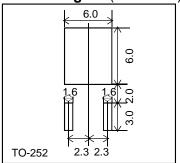
ROHM: TO-252 JEITA: SC-63

2.3

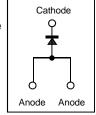
1 : Manufacture Date

AEC-Q101 Qualified

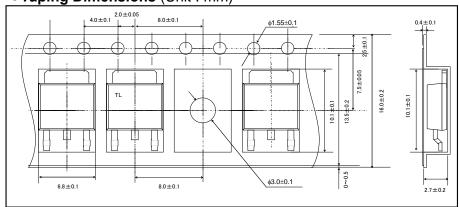
●Land Size Figure (Unit : mm)



Structure



● Taping Dimensions (Unit: mm)



0.5±0.1

0.9±0.2

## ● Absolute Maximum Ratings (T<sub>c</sub>= 25°C)

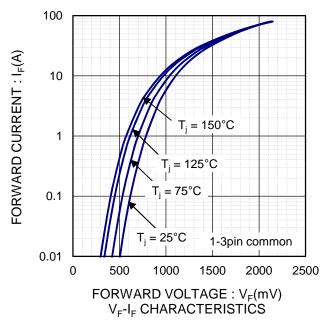
Parameter	Symbol	Conditions		Limits	Unit				
Repetitive peak reverse voltage	$V_{RM}$	Duty≦0.5		350	V				
Reverse voltage	$V_R$	Direct voltage		350	V				
Average rectified foward current	Io	60Hz half sin wave , Resistive load	T <sub>c</sub> =34°C	10	Α				
Forward current surge peak	I <sub>FSM</sub>	60Hz half sin wave ,Non-repetitive at T <sub>j</sub> =25°C <sup>(*)</sup>		80	Α				
Operating junction temperature	T <sub>j</sub>	-		150	°C				
Storage temperature	T <sub>stg</sub>	-		-55 to +150	°C				

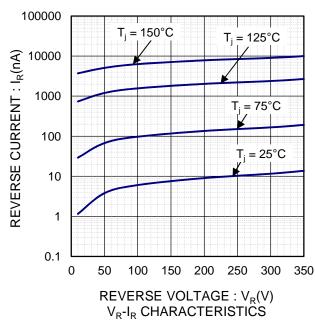
#### ●Electrical Characteristics (T<sub>i</sub> = 25°C)

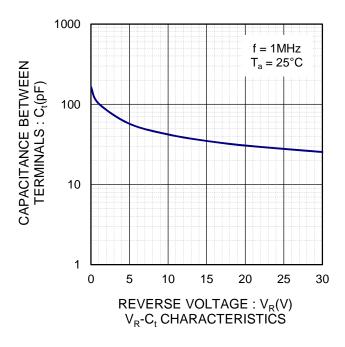
(*)	1-3pin	commom	circuit
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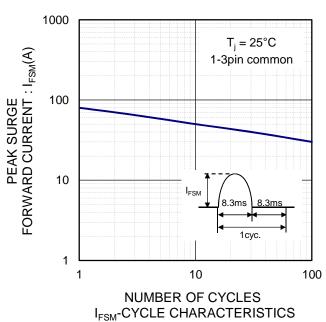
Parameter	Symbol	Conditions	Min.	Тур.	Max.	Unit
Forward voltage	$V_{F}$	I <sub>F</sub> =10A	1	1.25	1.5	V
Reverse current	$I_R$	$V_R=350V$	-	0.05	10	μΑ
Reverse recovery time	trr	I <sub>F</sub> =0.5A, I <sub>R</sub> =1A, Irr=0.25×I <sub>R</sub>	-	22	30	ns
Thermal resistance	R <sub>th(j-c)</sub>	Junction to case	-	-	6.0	°C/W

#### •Electrical characteristic curves

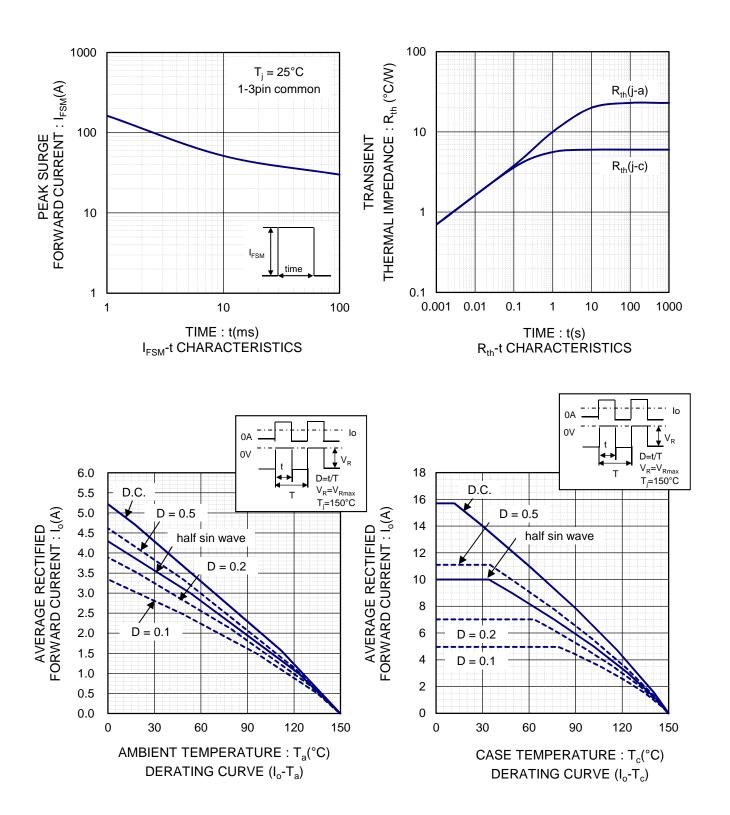




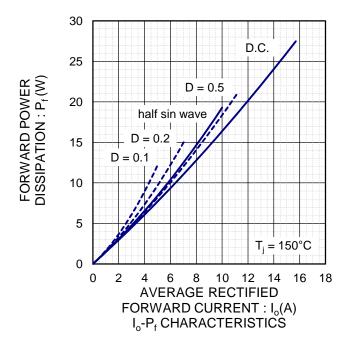




#### • Electrical characteristic curves



#### •Electrical characteristic curves



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