

D1NL40U

Fast Recovery Diodes
400V, 1A

Feature

- High Recovery Speed
- Pb free terminal
- RoHS:Yes

OUTLINE

Package (House Name): AX057



Equivalent circuit



Absolute Maximum Ratings (unless otherwise specified : Tl=25°C)

Item	Symbol	Conditions	Ratings	Unit
Storage temperature	T _{stg}		-55 to 150	°C
Junction temperature	T _j		-55 to 150	°C
Repetitive peak reverse voltage	V _{RRM}		400	V
Average forward current	I _{F(AV)}	50Hz sine wave, Resistance load, On glass-epoxy substrate, Tl=137°C	1	A
Average forward current	I _{F(AV)}	50Hz sine wave, Resistance load, On glass-epoxy substrate, Ta=25°C	0.9	A
Surge forward current	I _{FSM}	50Hz sine wave, Non-repetitive 1 cycle, Peak value, Tj=25°C	50	A

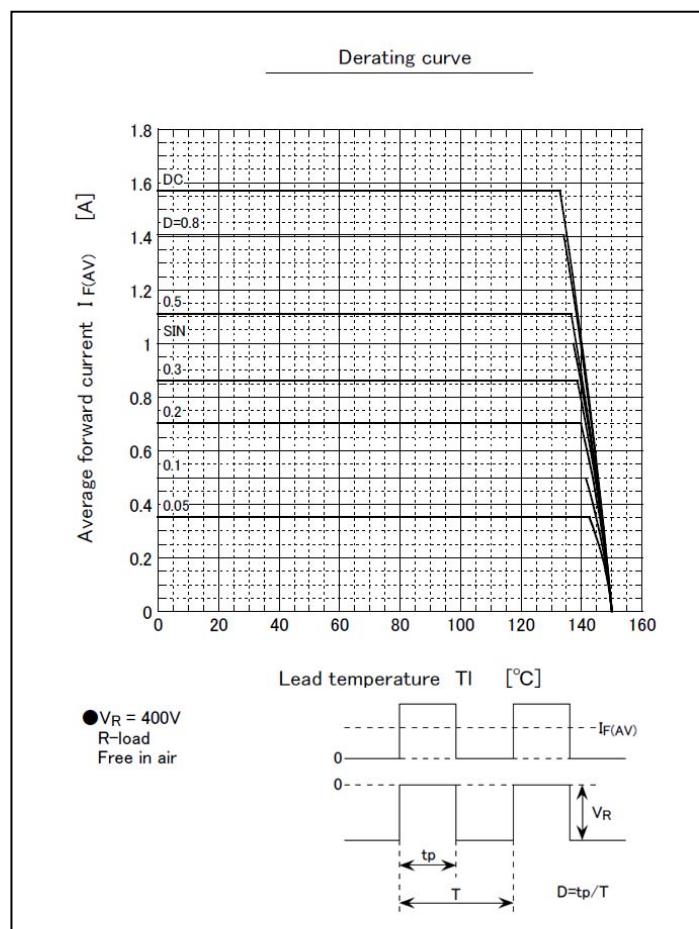
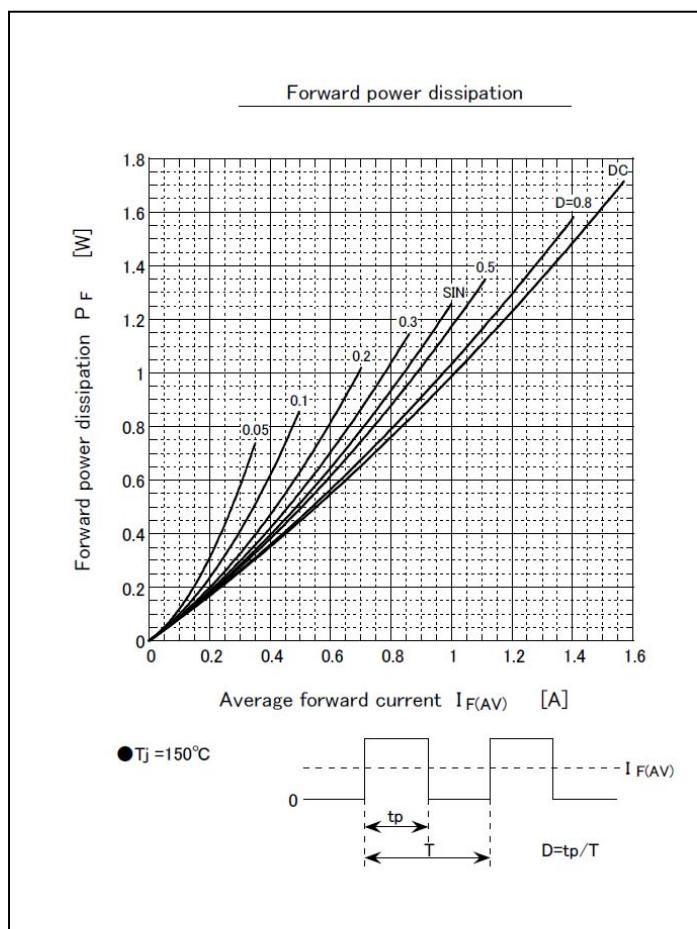
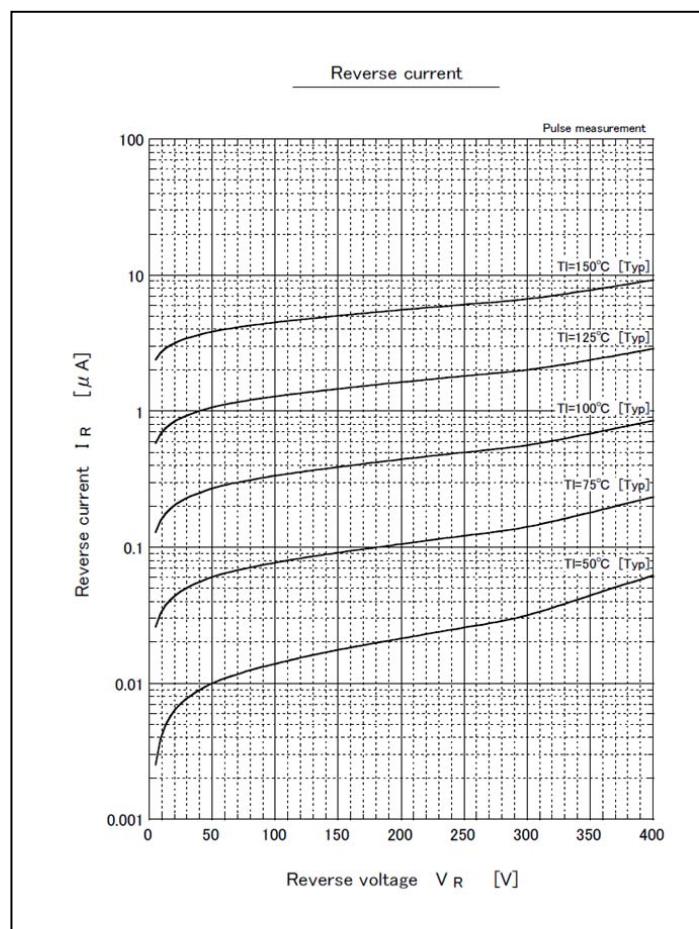
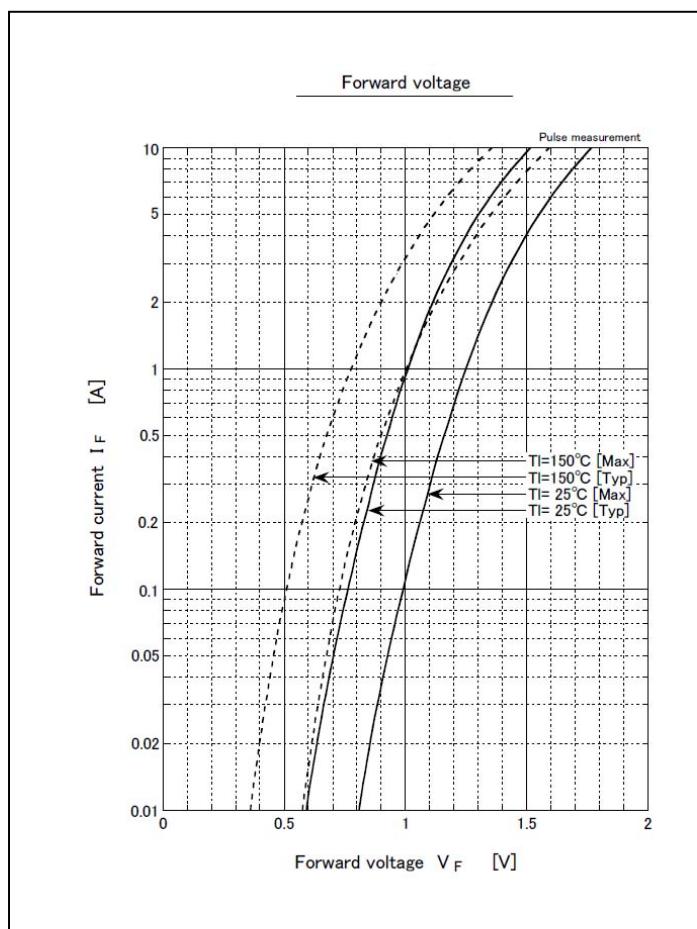
※ :See the original Specifications

Electrical Characteristics (unless otherwise specified : Tl=25°C)

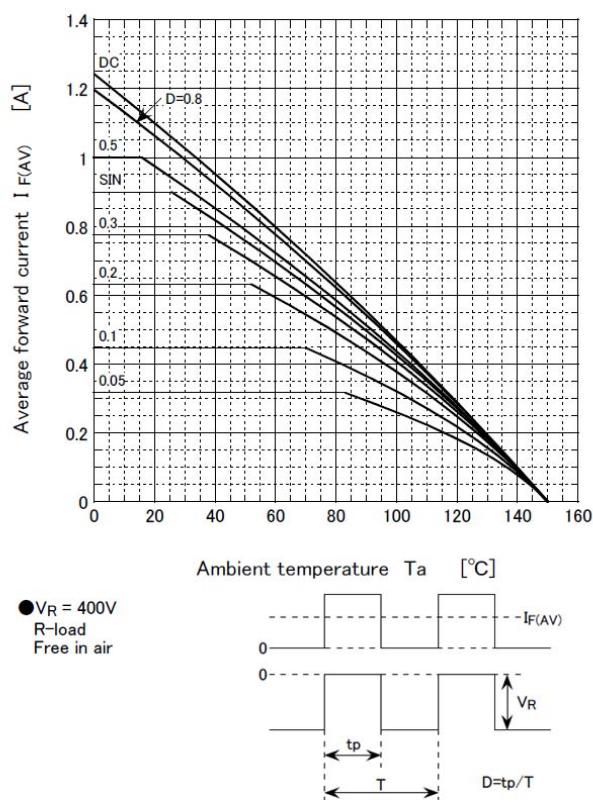
Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	IF=1A, Pulse measurement			1.25	V
Reverse current	I_R	VR=400V, Pulse measurement			10	μA
Reverse recovery time	trr	IF=0.5A, IR=1.0A, 0.25IR			25	ns
Total capacitance	Ct	f=1MHz, VR=10V		12		pF
Thermal resistance	Rth(j-l)	Junction to lead, On glass-epoxy substrate			10	°C/W
Thermal resistance	Rth(j-a)	Junction to ambient, On glass-epoxy substrate			113	°C/W

※ :See the original Specifications

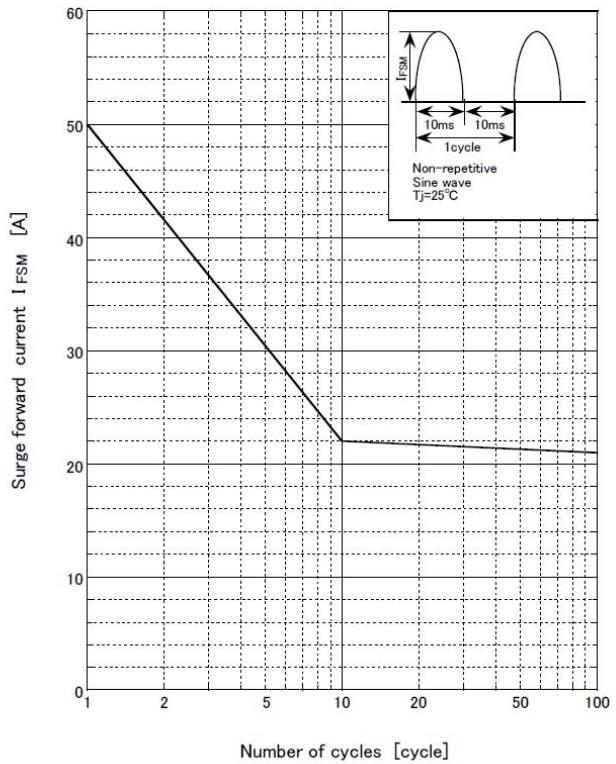
CHARACTERISTIC DIAGRAMS



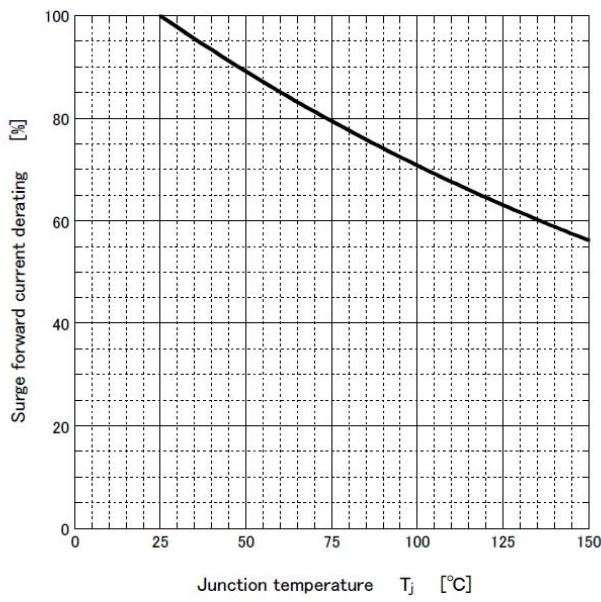
Derating curve



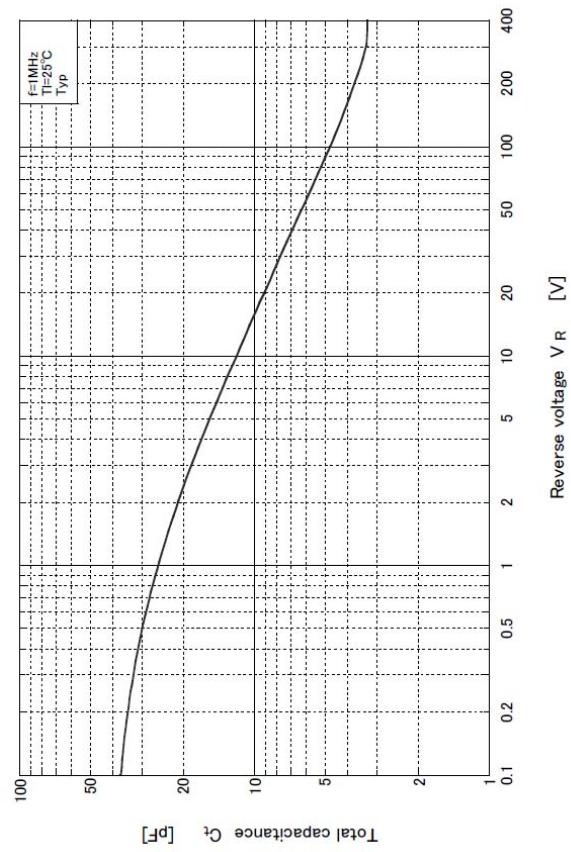
Surge forward current capability



Surge forward current derating vs Junction temperature



Total capacitance



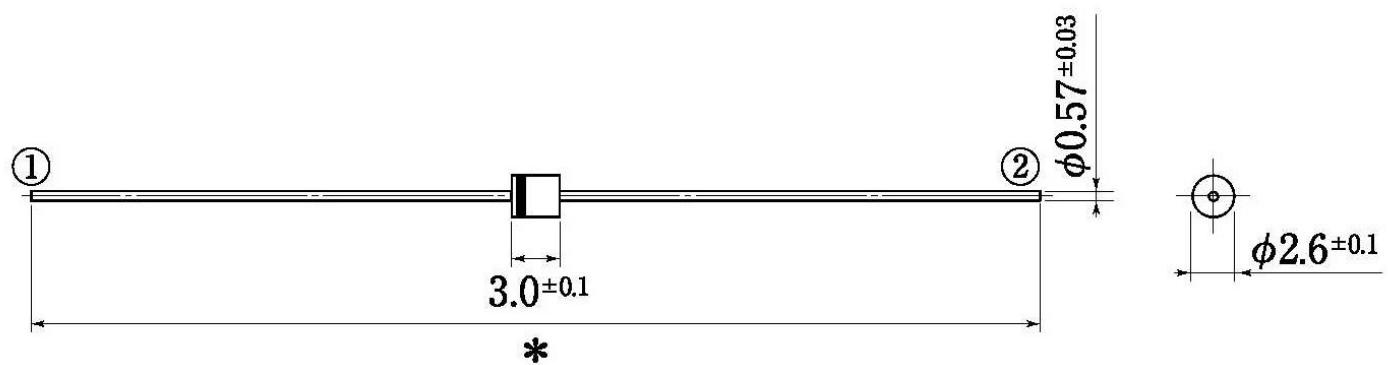
Outline Dimensions

unit:mm

scale: 2/1

A1

JEDEC Code	—
JEITA Code	—
House Name	AX057



Notes

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【Specific applications】

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