ShinDengen

D1NK60

Fast Recovery Diodes
600V, 0.8A

Feature

- High Voltage
- Low Noise
- Pb free terminal
- RoHS:Yes

OUTLINE

Package (House Name): AX057

Equivalent circuit

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

Item	Symbol	Conditions	Ratings	Unit
Storage temperrature	Tstg		-55 to 150	℃
Junction temperature	Tj		-55 to 150	℃
Repetitive peak reverse voltage	V_{RRM}		600	V
Average forward current	I_F(AV)	50Hz sine wave, Resistance load, On glass-epoxy substrate, Tl=139℃ ※	0.8	A
Average forward current	I_F(AV)	50Hz sine wave, Resistance load, On glass-epoxy substrate, Ta=26℃ ※	0.8	A
Surge forward current	I_{FSM}	50Hz sine wave, Non-repetitive 1 cycle, Peak value, Tj=25℃	35	A

※ ：See the original Specifications

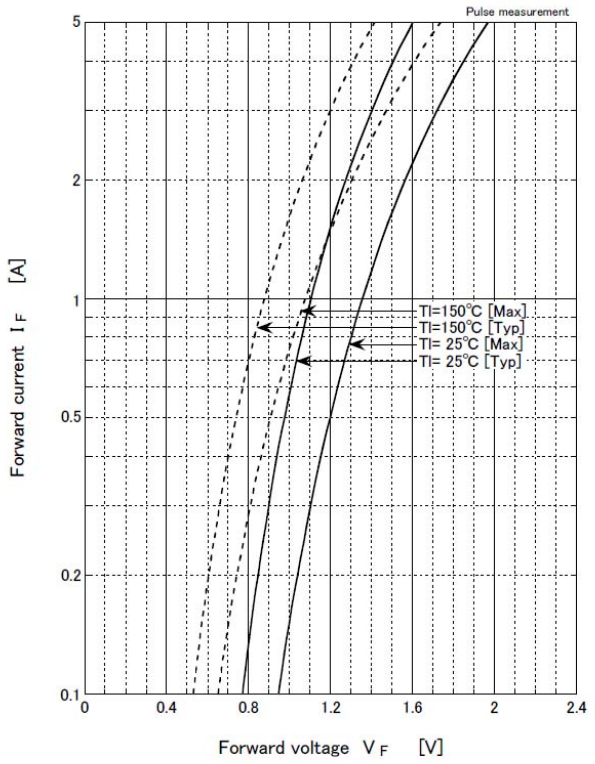
Electrical Characteristics (unless otherwise specified : Tl=25℃)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	IF=0.8A, Pulse measurement			1.3	V
Reverse current	I_R	VR=600V, Pulse measurement			10	μA
Reverse recovery time	trr	IF=0.5A, IR=1.0A, 0.25IR			75	ns
Total capacitance	Ct	f=1MHz, VR=10V		8		pF
Thermal resistance	Rth(j-l)	Junction to lead, On glass-epoxy substrate ※			10	℃/W
Thermal resistance	Rth(j-a)	Junction to ambient, On glass-epoxy substrate ※			113	℃/W

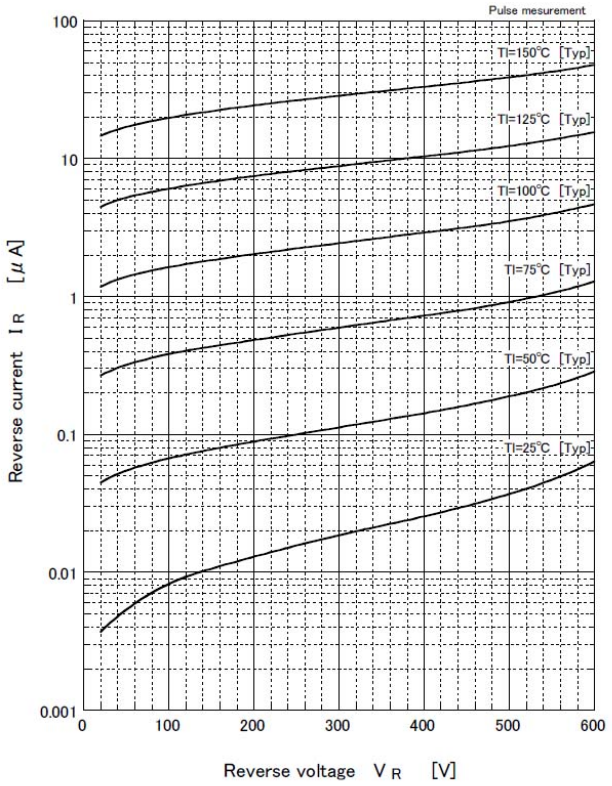
※ ：See the original Specifications

CHARACTERISTIC DIAGRAMS

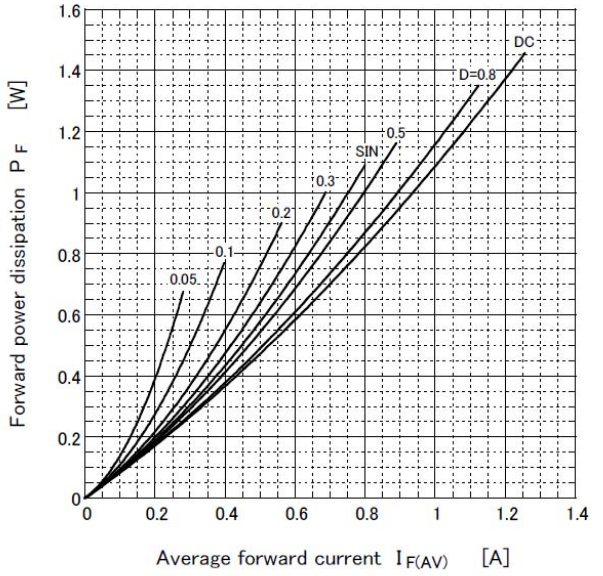
Forward voltage



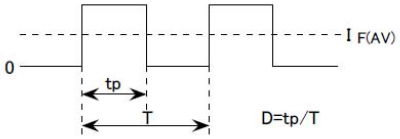
Reverse current



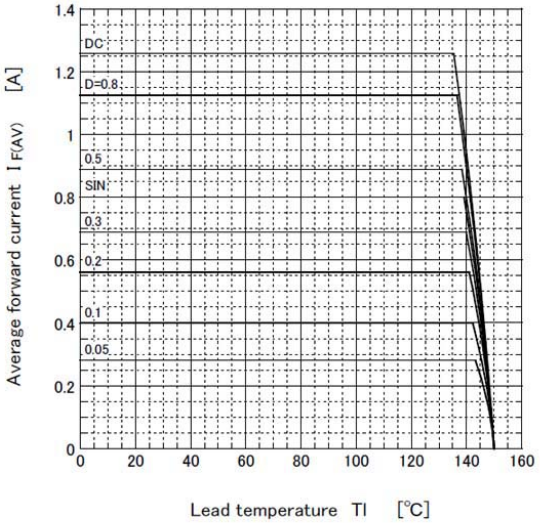
Forward power dissipation



●Tj =150℃



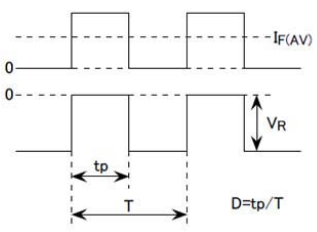
Derating curve



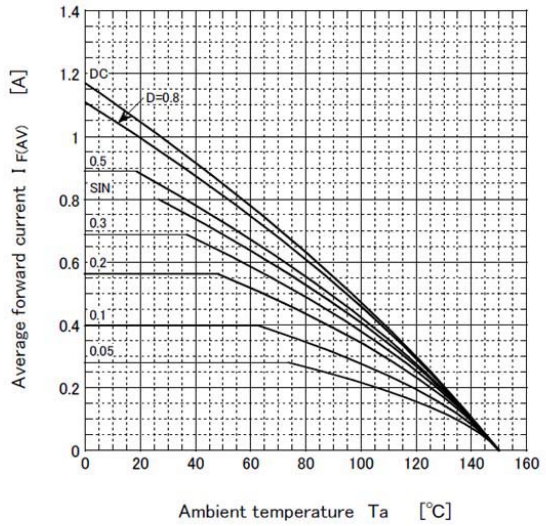
●V_R = 600V
R-load
Free in air

●Substrate detail

Type	Glass-epoxy
Size	90mm×150mm
Thickness	1mm
Conductor thickness	35μm
Pattern area	306.1mm²



Derating curve



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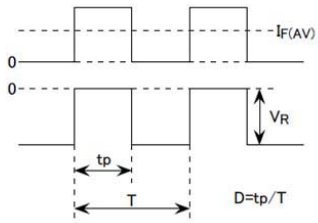
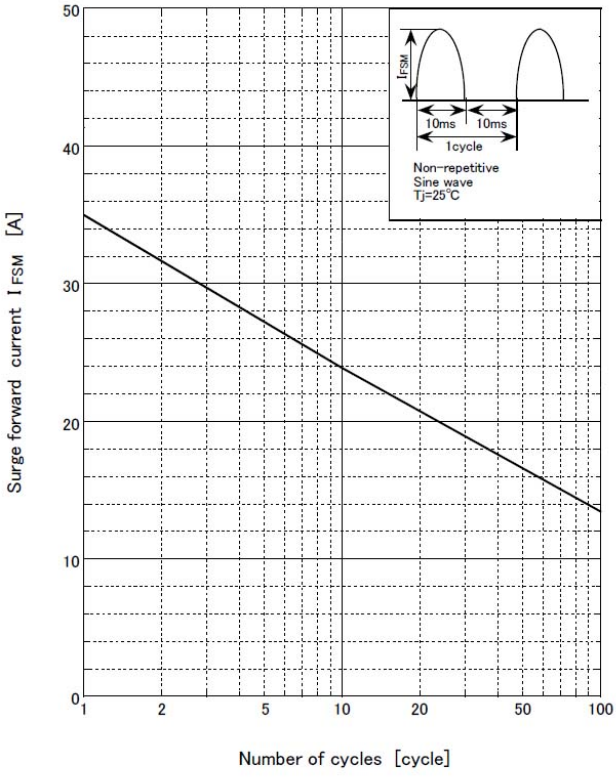
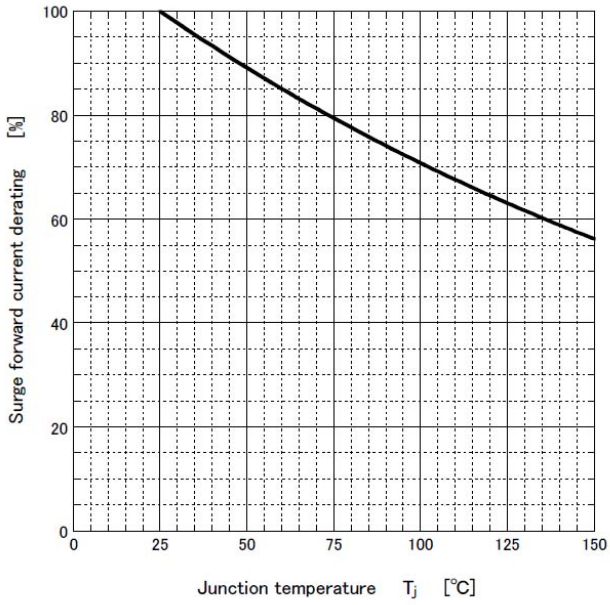


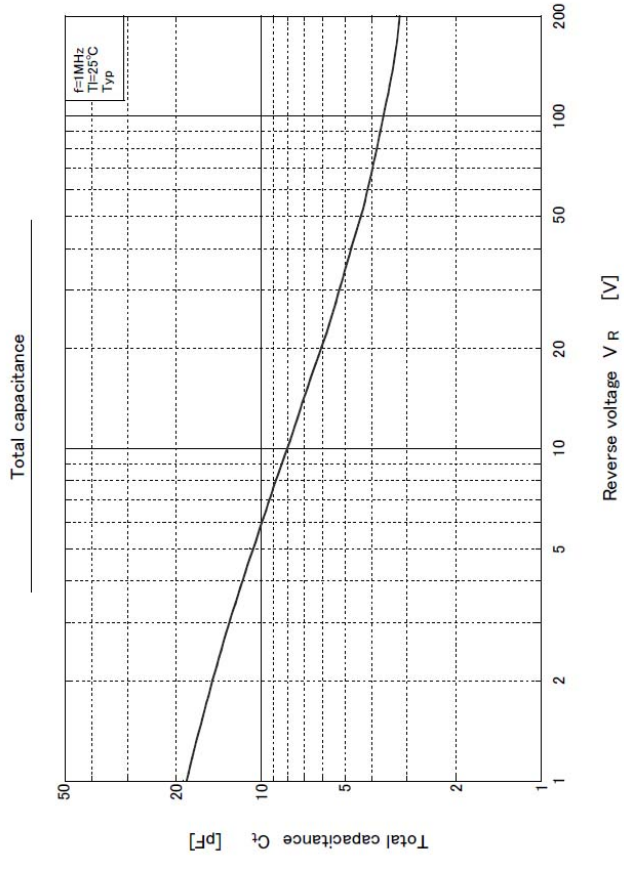
Surge forward current capability

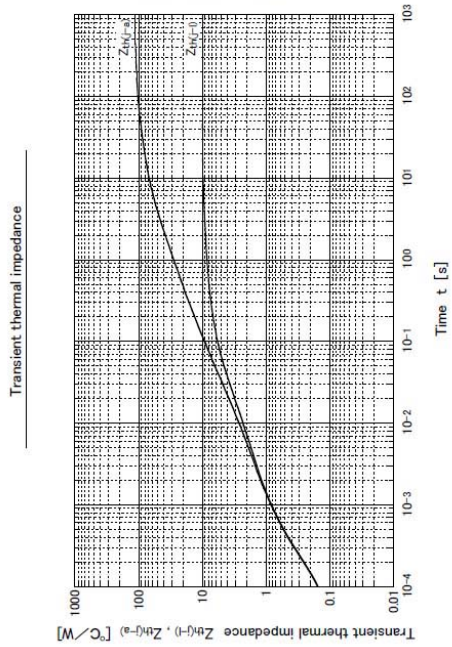


Surge forward current derating vs Junction temperature



Total capacitance





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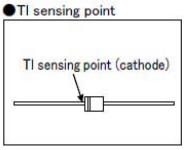
●TI sensing point



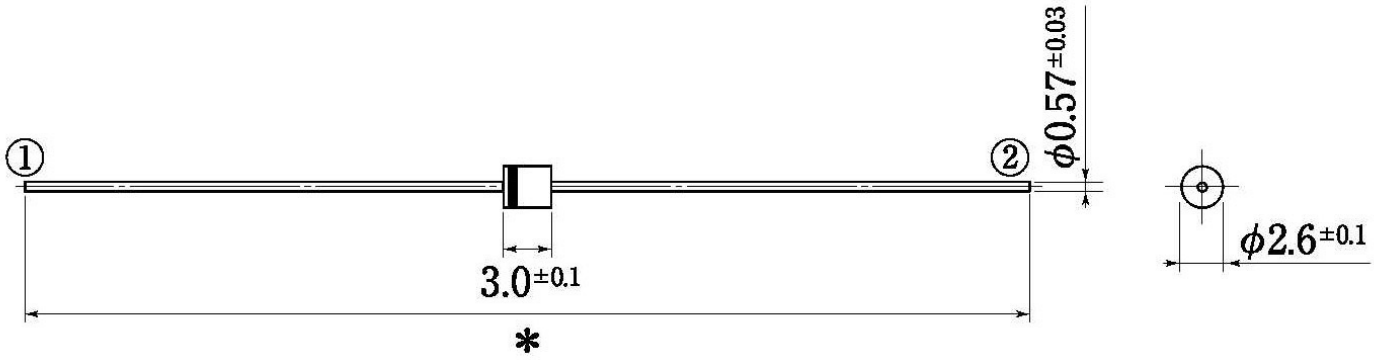
Outline Dimensions

unit:mm

scale: 2/1

A1

JEDEC Code	–
JEITA Code	–
House Name	AX057



* $26.0^{+1.5}_{-0.0}$ (Spec Code: 5070)
  $52.0^{+2.0}_{-1.0}$ (Spec Code: 5060)

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