ShinDengen

D2L20U

Fast Recovery Diodes
200V, 1.5A

Feature

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

OUTLINE

Package (House Name): AX078

Equivalent circuit

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

Item	Symbol	Conditions	Ratings	Unit
Storage temperrature	Tstg		-40 to 150	℃
Junction temperature	Tj		-40 to 150	℃
Repetitive peak reverse voltage	V_{RRM}		200	V
Average forward current	I_F(AV)	50Hz sine wave, Resistance load, On glass-epoxy substrate, Tl=125℃ ※	1.5	A
Average forward current	I_F(AV)	50Hz sine wave, Resistance load, On glass-epoxy substrate, Ta=25℃ ※	1.3	A
Surge forward current	I_{FSM}	50Hz sine wave, Non-repetitive 1 cycle, Peak value, Tj=25℃	40	A

※ :See the original Specifications

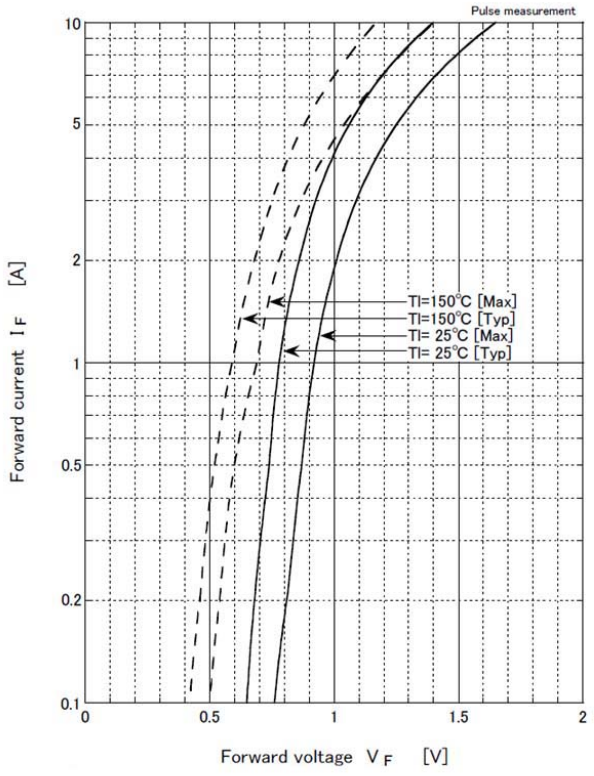
Electrical Characteristics (unless otherwise specified : Tl=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	IF=1.5A, Pulse measurement			0.98	V
Reverse current	I_R	VR=200V, Pulse measurement			10	μA
Reverse recovery time	trr	IF=0.5A, IR=1.0A, 0.1IR			35	ns
Thermal resistance	Rth(j-l)	Junction to lead, On glass-epoxy substrate ※			17	°C/W
Thermal resistance	Rth(j-a)	Junction to ambient, On glass-epoxy substrate ※			105	°C/W

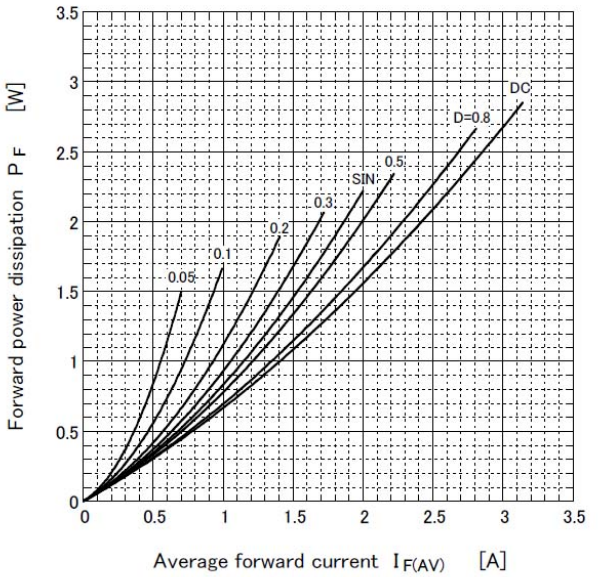
※ :See the original Specifications

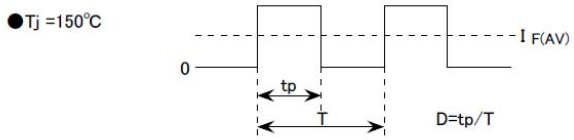
CHARACTERISTIC DIAGRAMS

Forward voltage

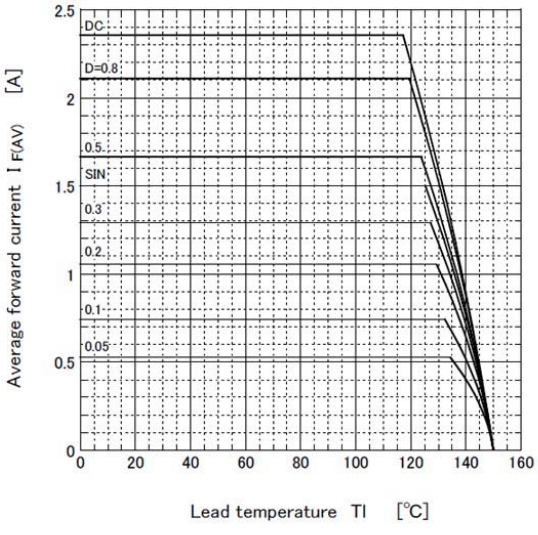


Forward power dissipation

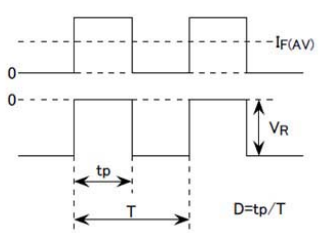




Derating curve



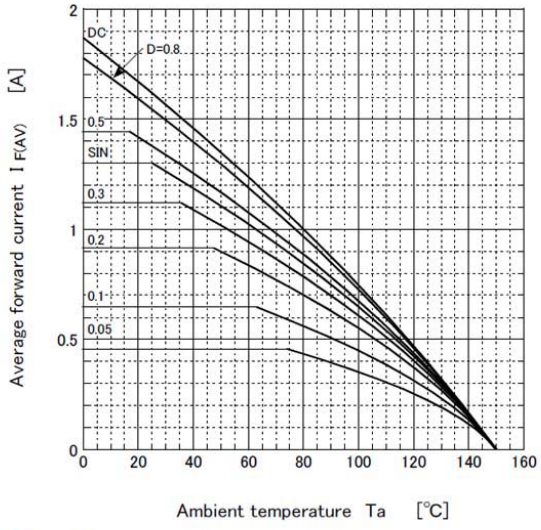
●V_R = 200V
R-load
Free in air



●Substrate detail

Type	Glass-epoxy
Size	90mm×150mm
Thickness	1mm
Conductor thickness	35μm
Pattern area	305.5mm²

Derating curve



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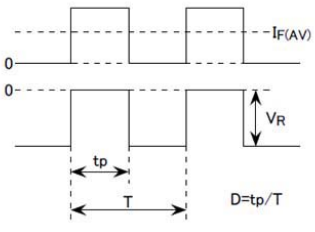
R-load
Free in air



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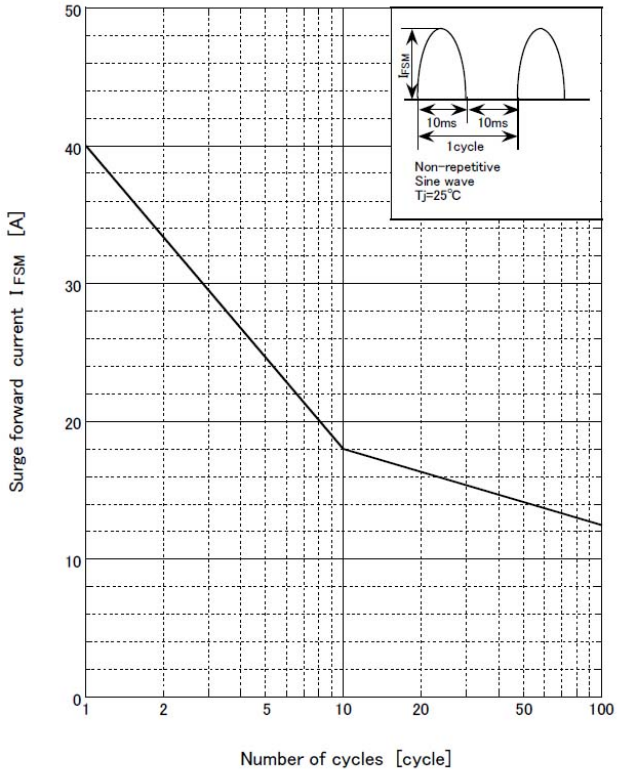
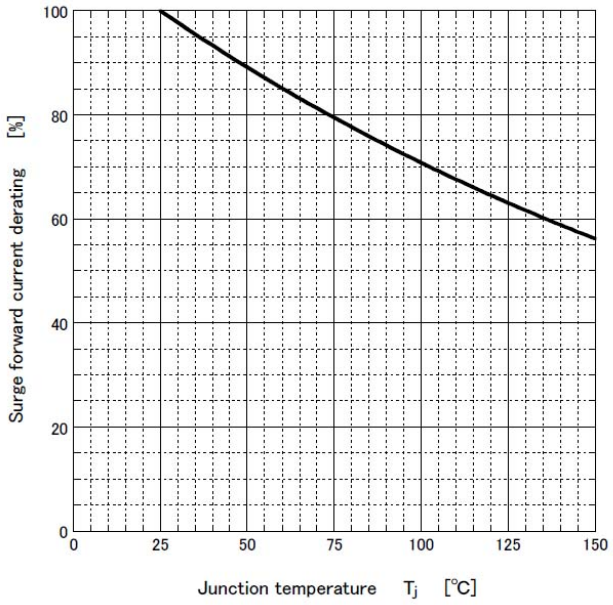
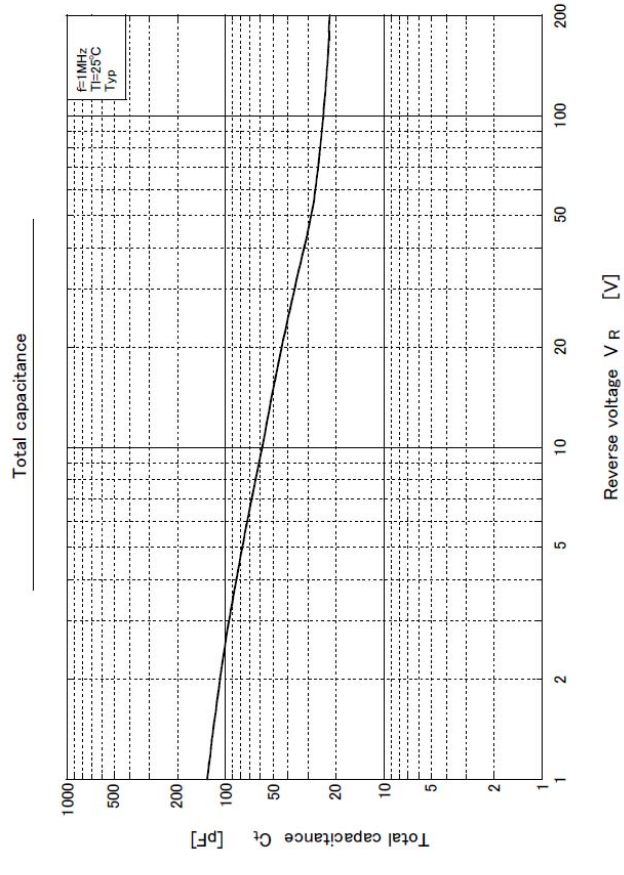
Surge forward current capability



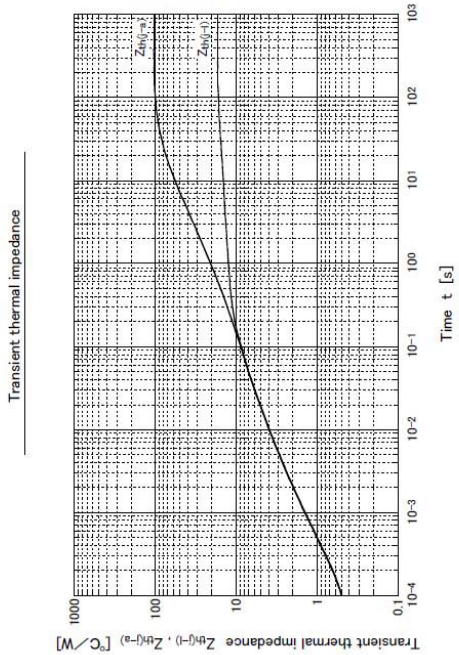
Surge forward current derating
vs Junction temperature



Total capacitance



Transient thermal impedance



●Substrate detail

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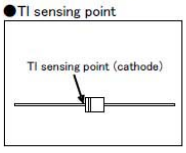
●Tl sensing point



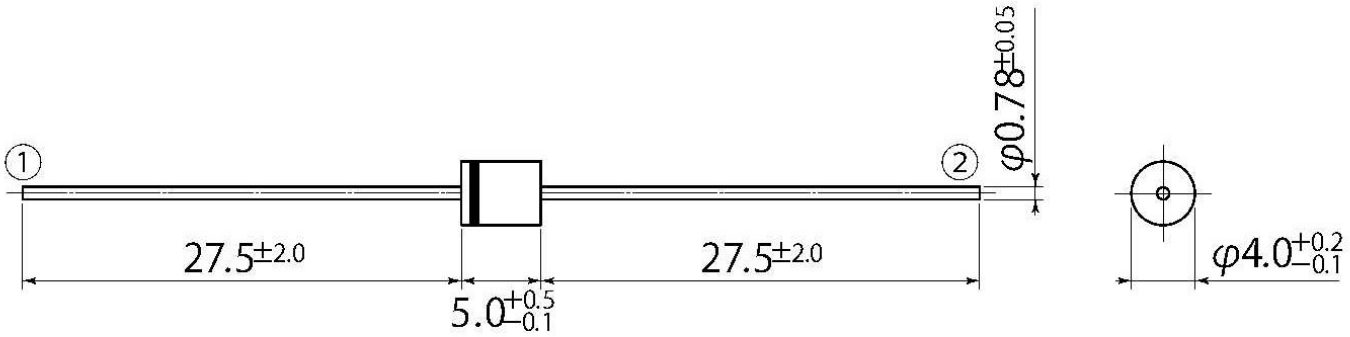
Outline Dimensions

unit:mm

scale: 2/1

A4

JEDEC Code	–
JEITA Code	–
House Name	AX078



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