

D2L20U

Fast Recovery Diodes

200V, 1.5A

Feature

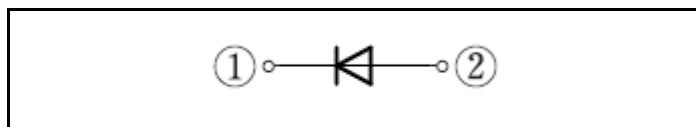
- High Recovery Speed
- Pb free terminal
- RoHS:Yes

OUTLINE

Package (House Name): AX078



Equivalent circuit



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

Item	Symbol	Conditions	Ratings	Unit
Storage temperature	Tstg		-40 to 150	°C
Junction temperature	Tj		-40 to 150	°C
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°C *	1.5	A
Average forward current	I _{F(AV)}	50Hz sine wave, Resistance load, On glass-epoxy substrate, Ta=25°C *	1.3	A
Surge forward current	I _{FSM}	50Hz sine wave, Non-repetitive 1 cycle, Peak value, Tj=25°C	40	A

* :See the original Specifications

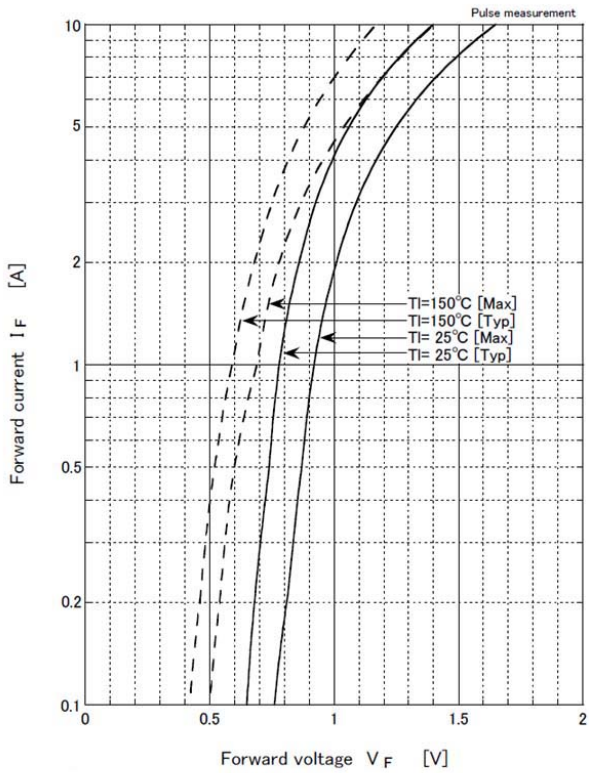
Electrical Characteristics (unless otherwise specified : Tl=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	$I_F=1.5A$, Pulse measurement			0.98	V
Reverse current	I_R	$V_R=200V$, Pulse measurement			10	μA
Reverse recovery time	t_{rr}	$I_F=0.5A$, $I_R=1.0A$, $0.1I_R$			35	ns
Thermal resistance	$R_{th(j-l)}$	Junction to lead, On glass-epoxy substrate *			17	$^{\circ}C/W$
Thermal resistance	$R_{th(j-a)}$	Junction to ambient, On glass-epoxy substrate *			105	$^{\circ}C/W$

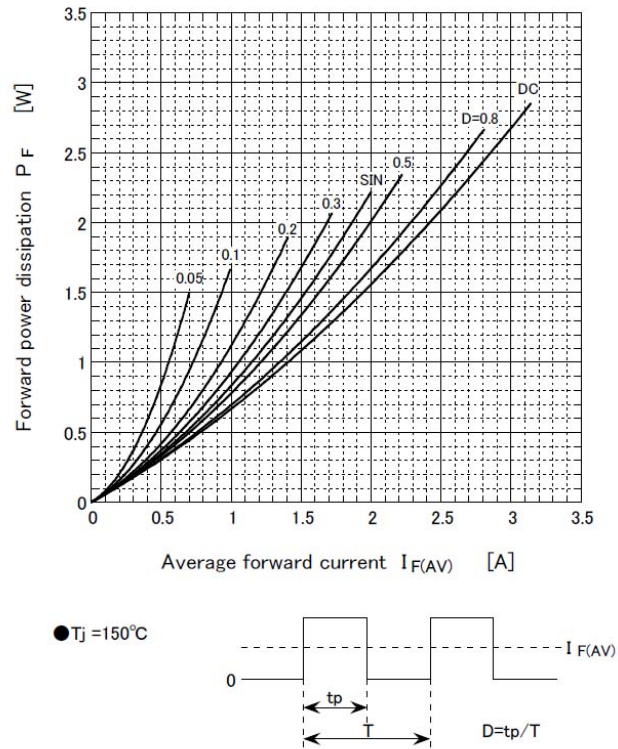
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CHARACTERISTIC DIAGRAMS

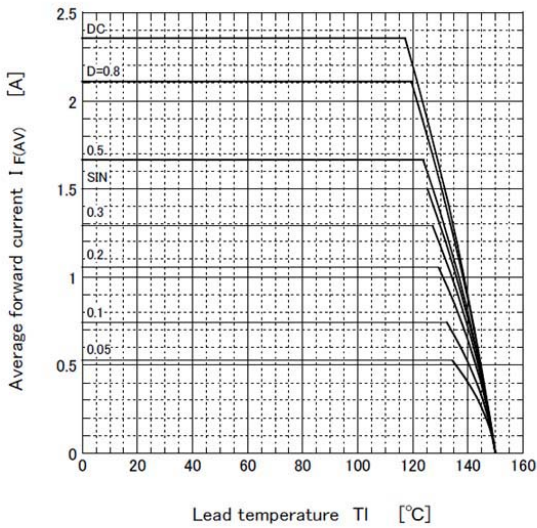
Forward voltage



Forward power dissipation



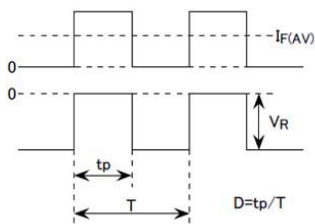
Derating curve



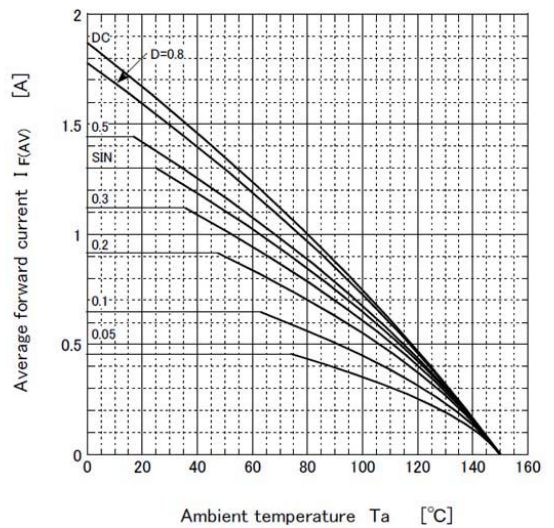
● $V_R = 200\text{V}$
R-load
Free in air

● Substrate detail

Type	Glass-epoxy
Size	90mm X 150mm
Thickness	1mm
Conductor thickness	35 μm
Pattern area	305.5mm ²



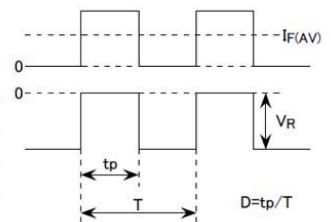
Derating curve



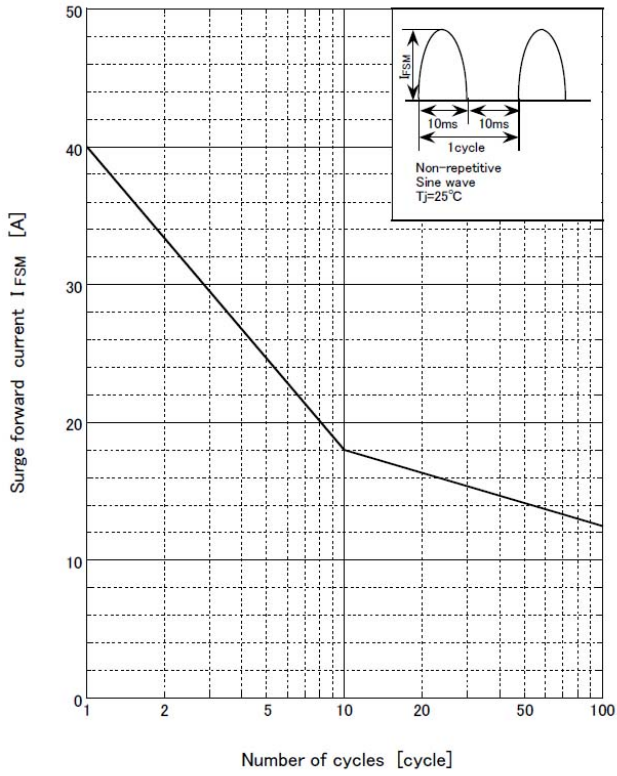
● $V_R = 200\text{V}$
R-load
Free in air

● Substrate detail

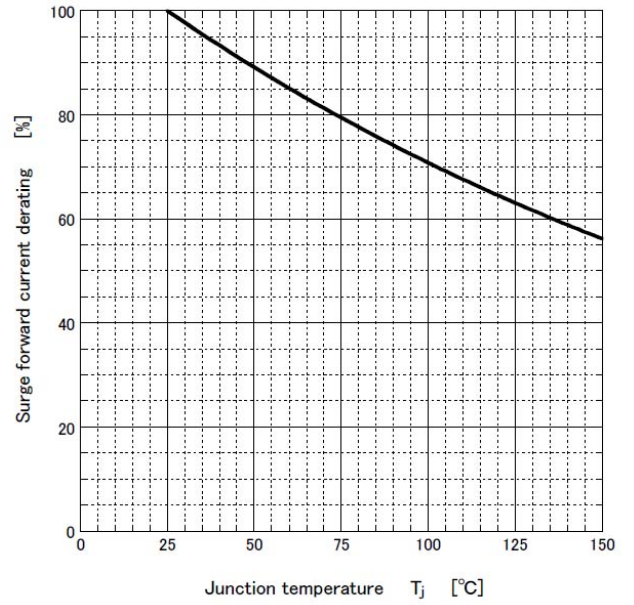
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Size	90mm X 150mm
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Pattern area	305.5mm ²



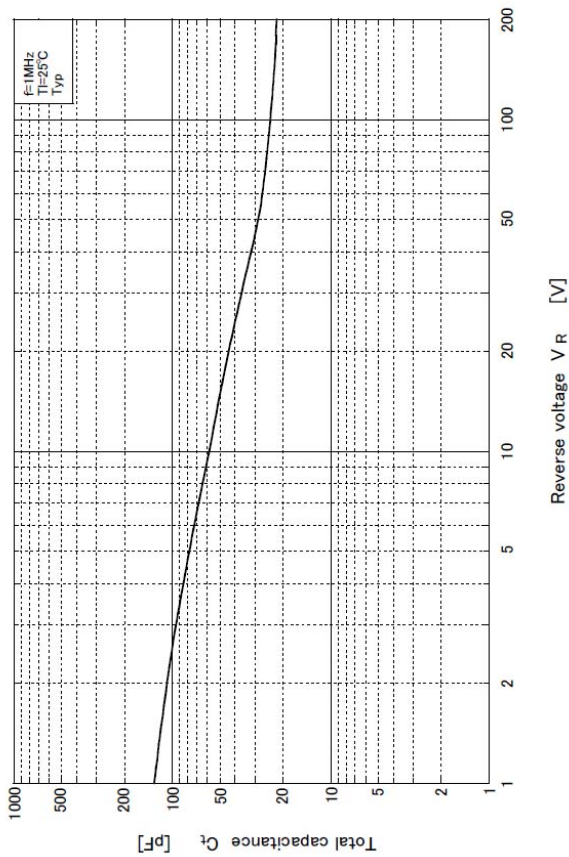
Surge forward current capability



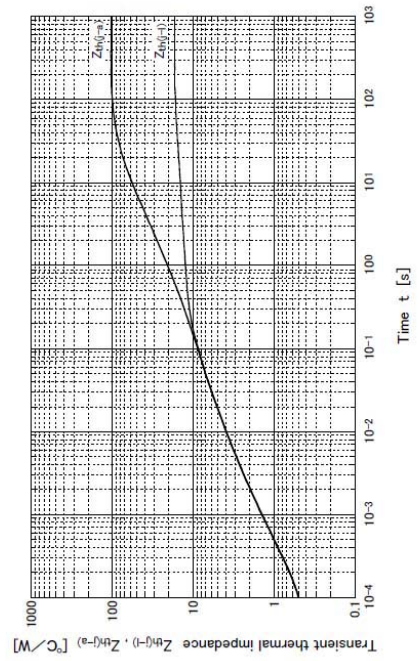
Surge forward current derating vs Junction temperature



Total capacitance



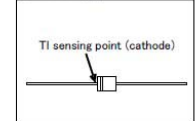
Transient thermal impedance



Substrate detail

Type	Glass-epoxy
Size	90mm × 150mm
Thickness	1mm
Conductor thickness	35μm
Pattern area	305.5mm ²

TI sensing point



Outline Dimensions

unit:mm

scale: 2/1

A4

JEDEC Code	—
JEITA Code	—
House Name	AX078

