ShinDengen

S2K100

Fast Recovery Diodes
1000V, 2A

Feature

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

OUTLINE

Package (House Name): AX10

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}		1000	V
Average forward current	I_F(AV)	50Hz sine wave, Resistance load, On glass-epoxy substrate, Tl=91℃ ※	2	A
Average forward current	I_F(AV)	50Hz sine wave, Resistance load, On glass-epoxy substrate, Ta=25℃ ※	0.9	A
Surge forward current	I_{FSM}	50Hz sine wave, Non-repetitive 1 cycle, Peak value, Tj=25℃	65	A
Surge forward current	I_{FSM1}	tp=1ms, Sine wave, Non-repetitive, Peak value, Tj=25℃	100	A

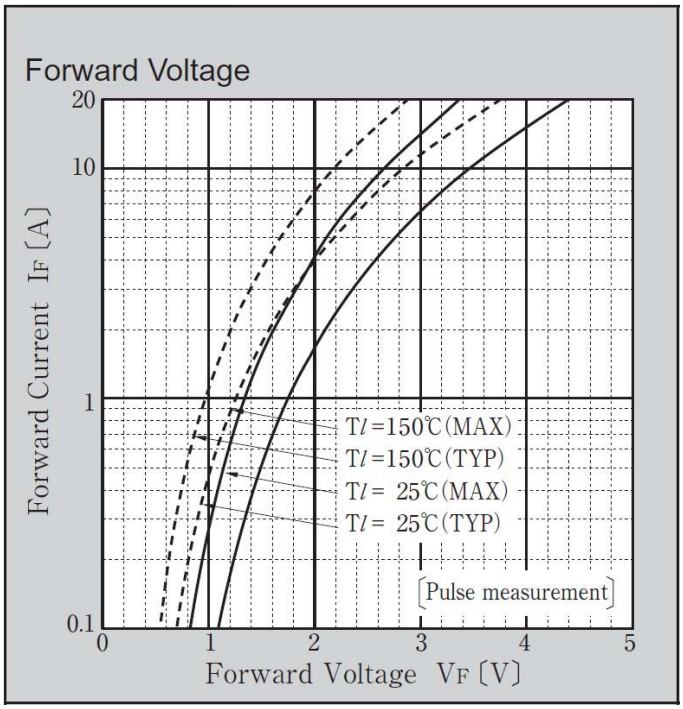
※ ：See the original Specifications

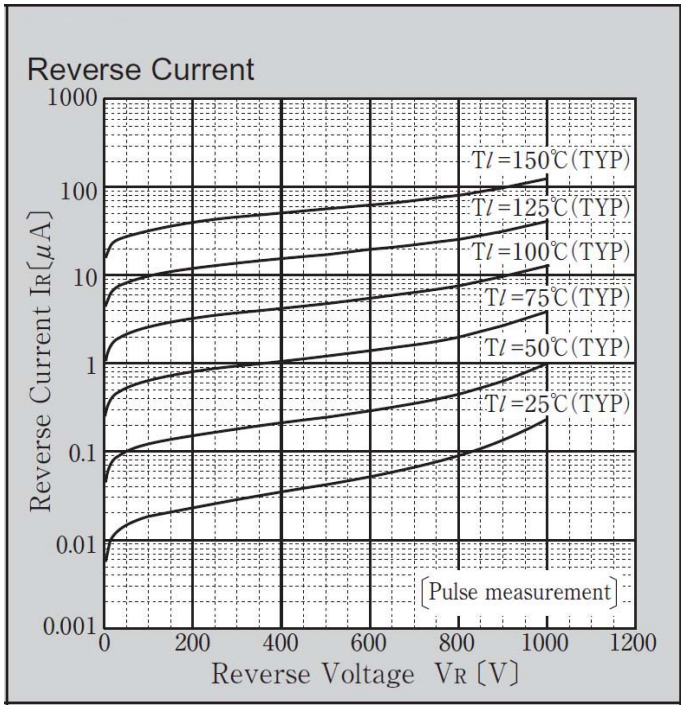
Electrical Characteristics (unless otherwise specified : Tl=25°C)

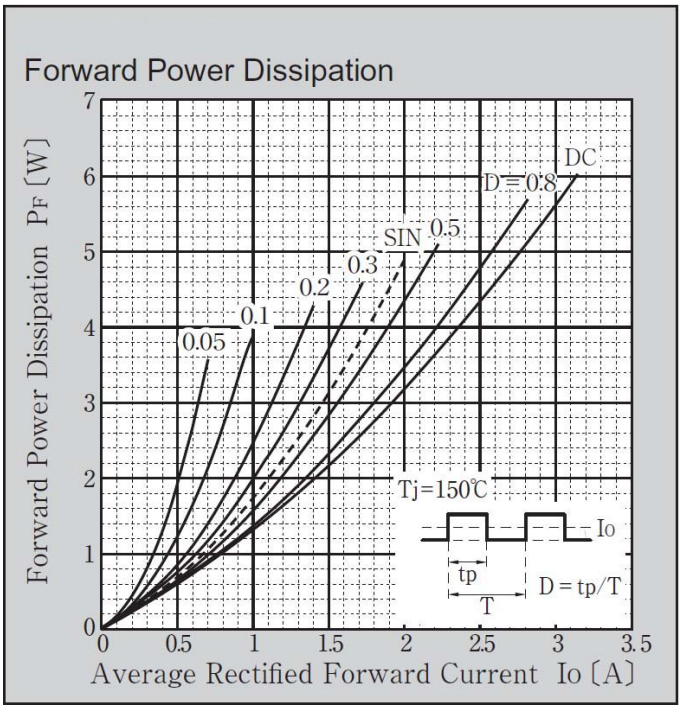
Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	IF=2A, Pulse measurement			2.1	V
Reverse current	I_R	VR=1000V, Pulse measurement			10	μA
Reverse recovery time	trr	IF=0.5A, IR=1.0A, 0.25IR			75	ns
Reverse recovery time	trr	IF=1.0A, VR=400V, di/dt=-50A/μs, 0.25IR			85	ns
Total capacitance	Ct	f=1MHz, VR=10V		14		pF
Thermal resistance	Rth(j-l)	Junction to lead, On glass-epoxy substrate ※			12	°C/W
Thermal resistance	Rth(j-a)	Junction to ambient, On glass-epoxy substrate ※			83	°C/W

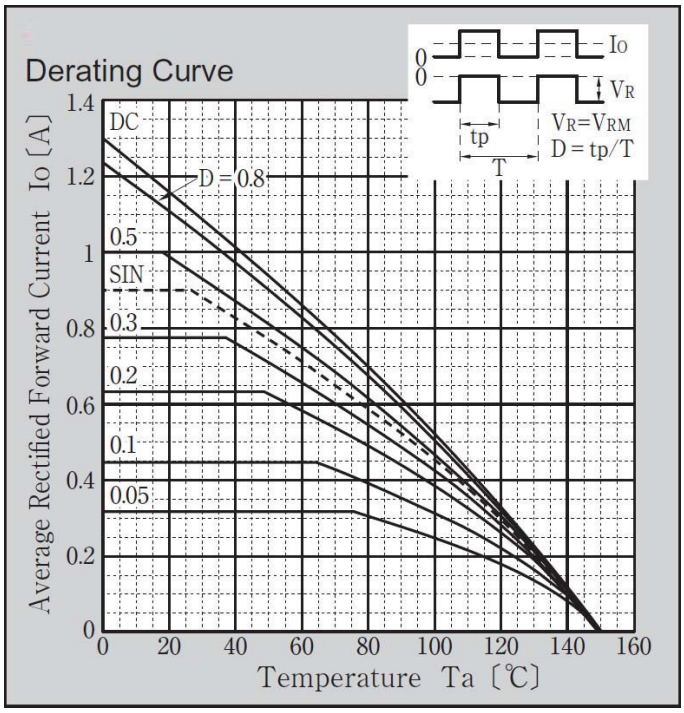
※ :See the original Specifications

CHARACTERISTIC DIAGRAMS

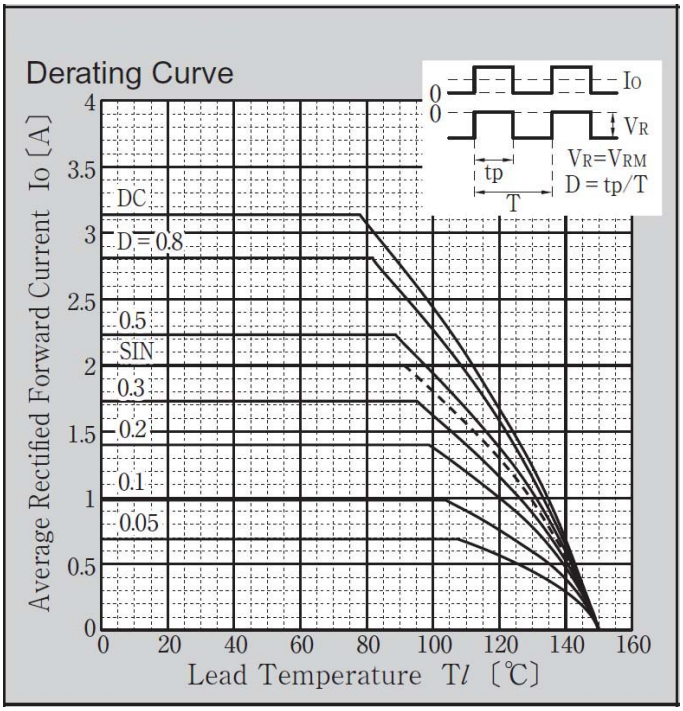




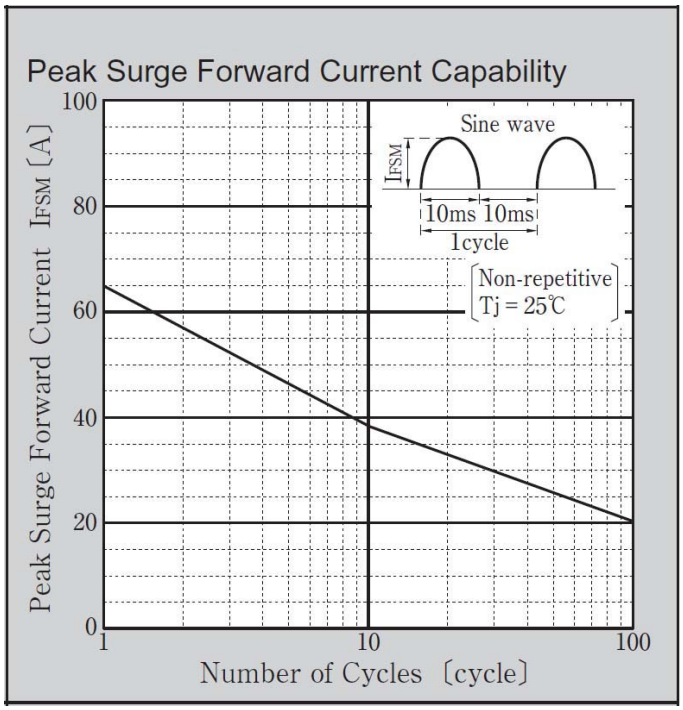




Derating Curve



Peak Surge Forward Current Capability



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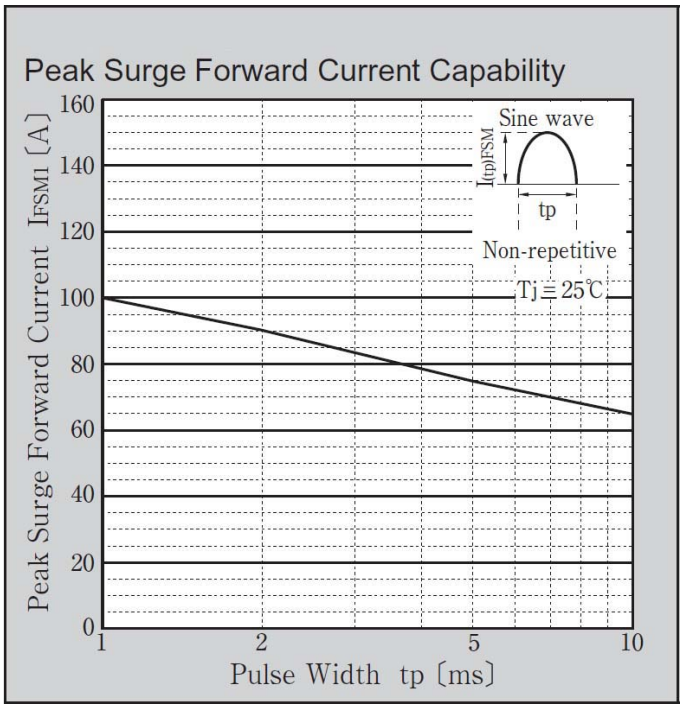
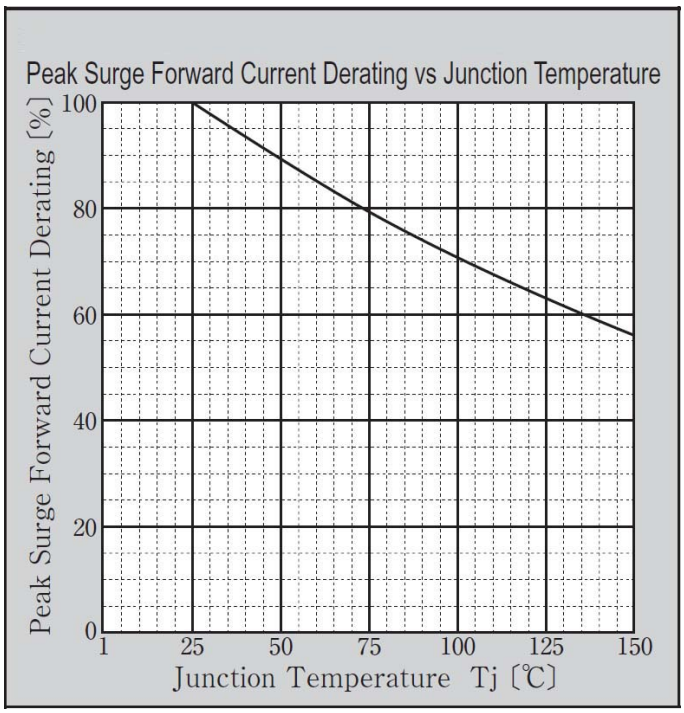
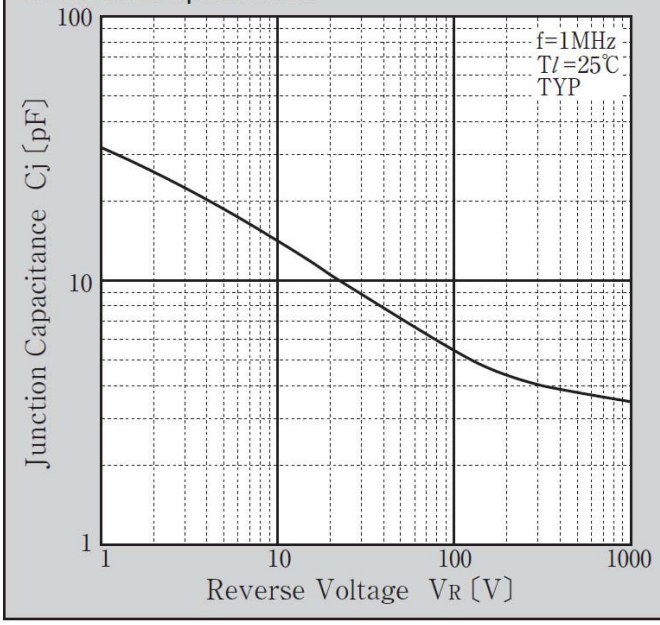


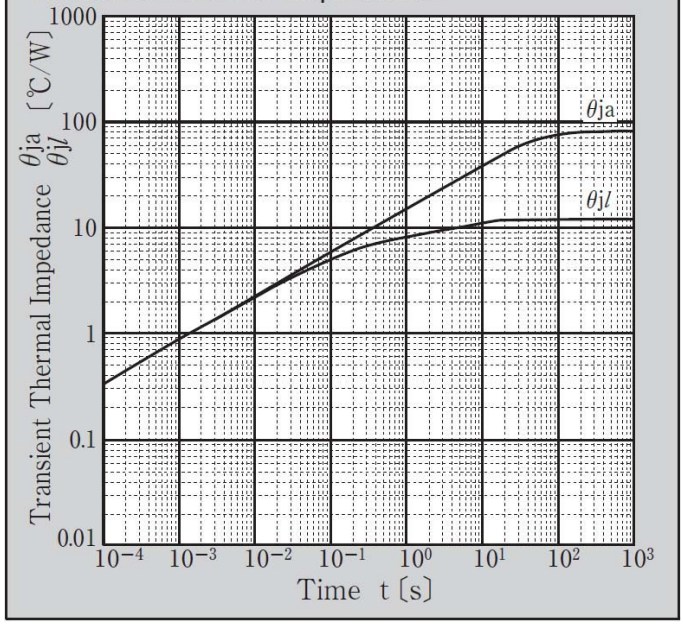
Peak Surge Forward Current Derating vs Junction Temperature



Junction Capacitance



Transient Thermal Impedance



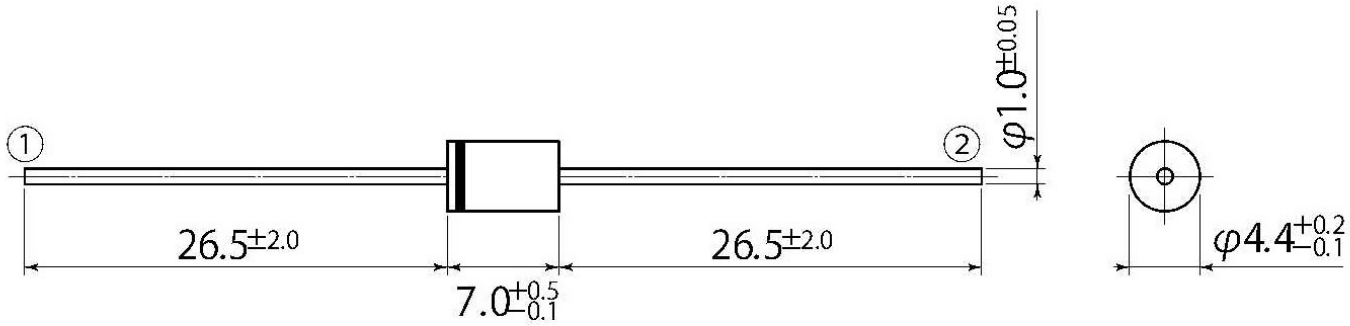
Outline Dimensions

unit:mm

scale: 2/1

A5

JEDEC Code	–
JEITA Code	–
House Name	AX10



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