

S3K60

Fast Recovery Diodes

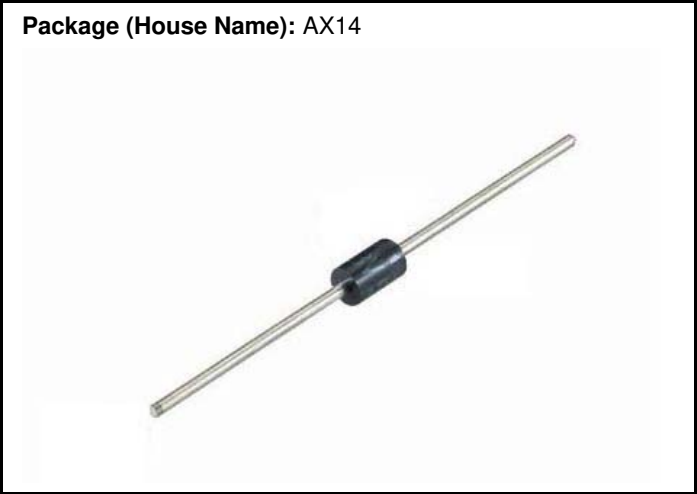
600V, 3A

Feature

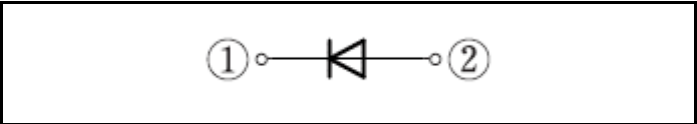
- High Voltage
- Low Noise
- Pb free terminal
- RoHS:Yes

OUTLINE

Package (House Name): AX14



Equivalent circuit



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

Item	Symbol	Conditions	Ratings	Unit
Storage temperrature	Tstg		-55 to 150	°C
Junction temperature	Tj		-55 to 150	°C
Repetitive peak reverse voltage	VRRM		600	V
Average forward current	IF(AV)	50Hz sine wave, Resistance load, On glass-epoxy substrate, Tl=123°C ※	3	A
Average forward current	IF(AV)	50Hz sine wave, Resistance load, On glass-epoxy substrate, Ta=25°C ※	1.7	A
Surge forward current	IFSM	50Hz sine wave, Non-repetitive 1 cycle, Peak value, Tj=25°C	120	A

※ :See the original Specifications

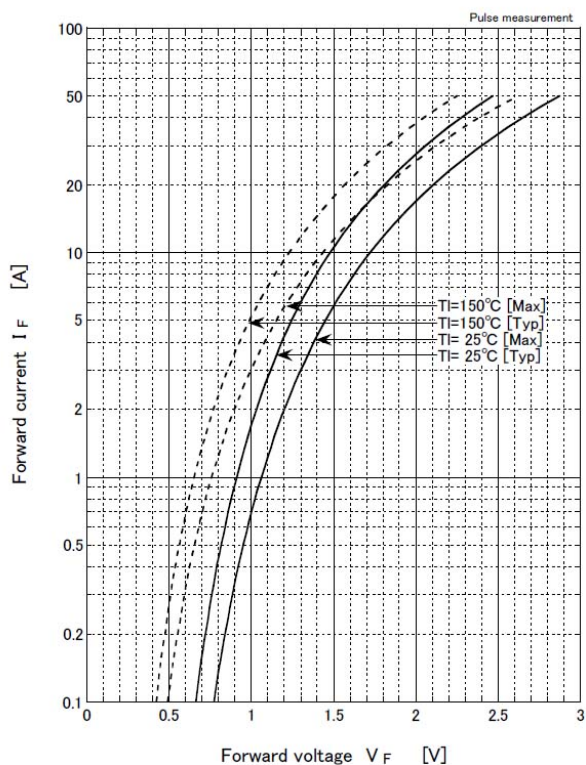
Electrical Characteristics (unless otherwise specified : Tl=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	IF=3A, Pulse measurement			1.3	V
Reverse current	I_R	VR=600V, Pulse measurement			10	μA
Reverse recovery time	t_{rr}	IF=0.5A, IR=1.0A, 0.1IR			100	ns
Thermal resistance	Rth(j-l)	Junction to lead, On glass-epoxy substrate ※			6.5	°C/W
Thermal resistance	Rth(j-a)	Junction to ambient On glass-epoxy substrate ※			60	°C/W

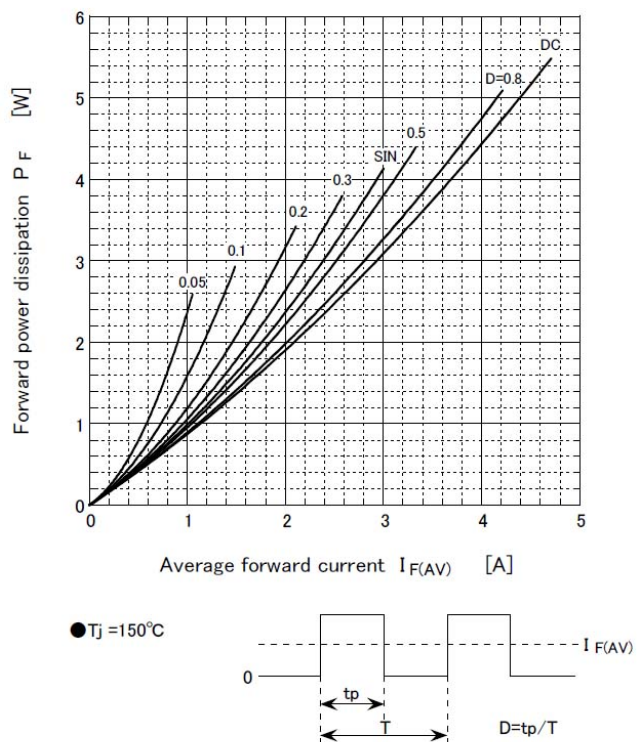
※ :See the original Specifications

CHARACTERISTIC DIAGRAMS

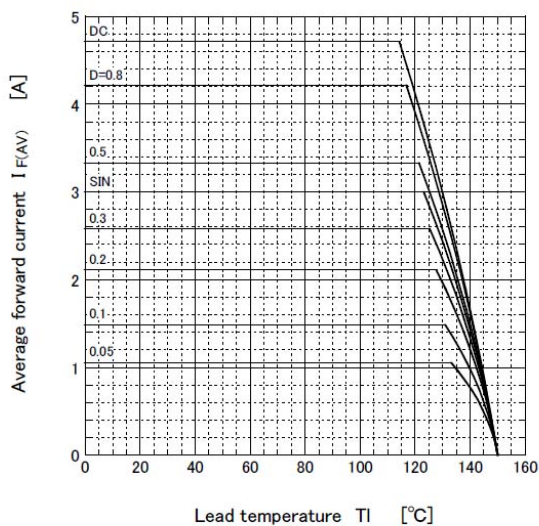
Forward voltage



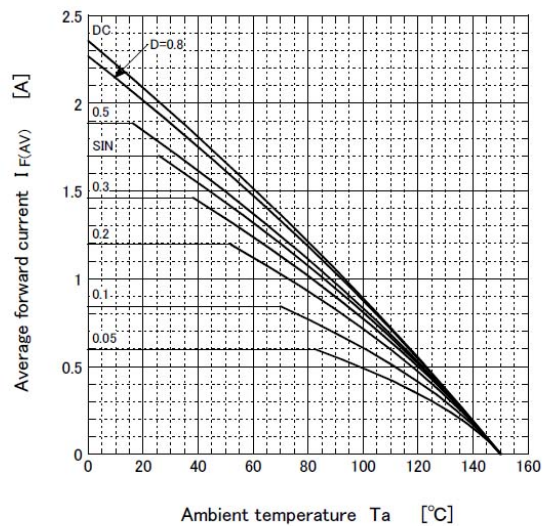
Forward power dissipation



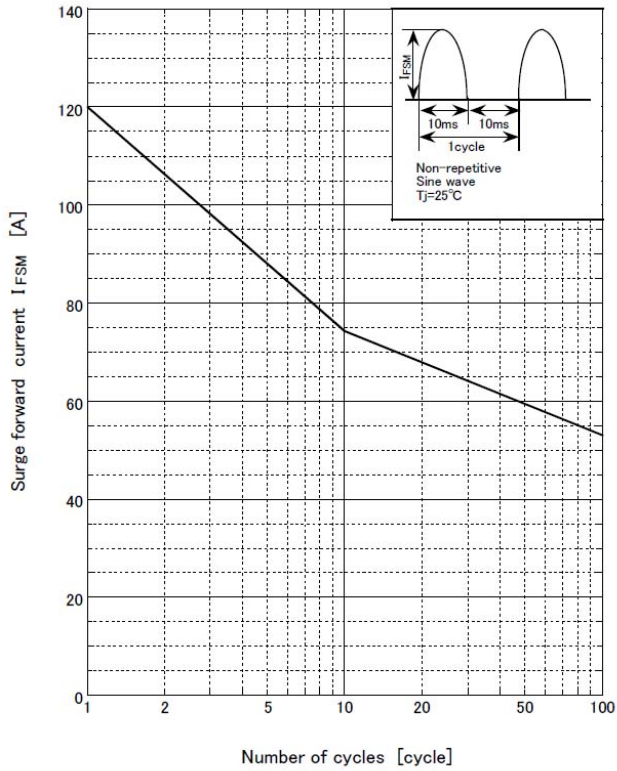
Derating curve



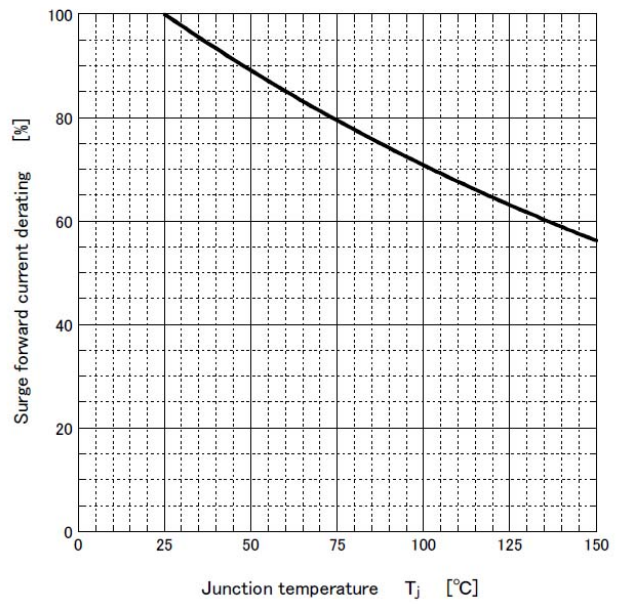
Derating curve



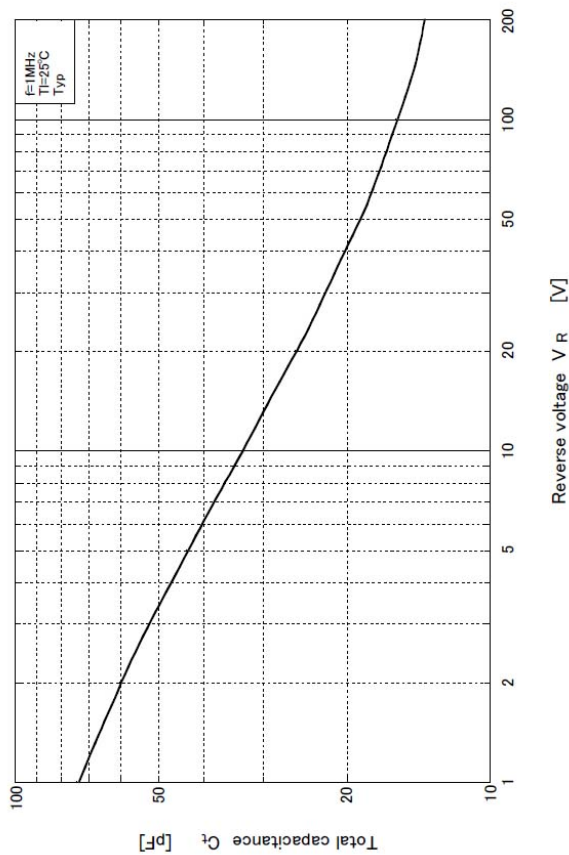
Surge forward current capability



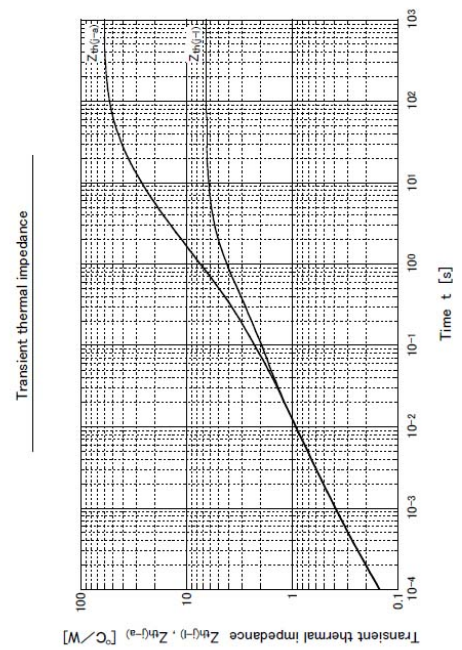
Surge forward current derating
vs Junction temperature



Total capacitance



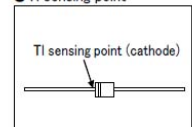
Transient thermal impedance



Substrate detail

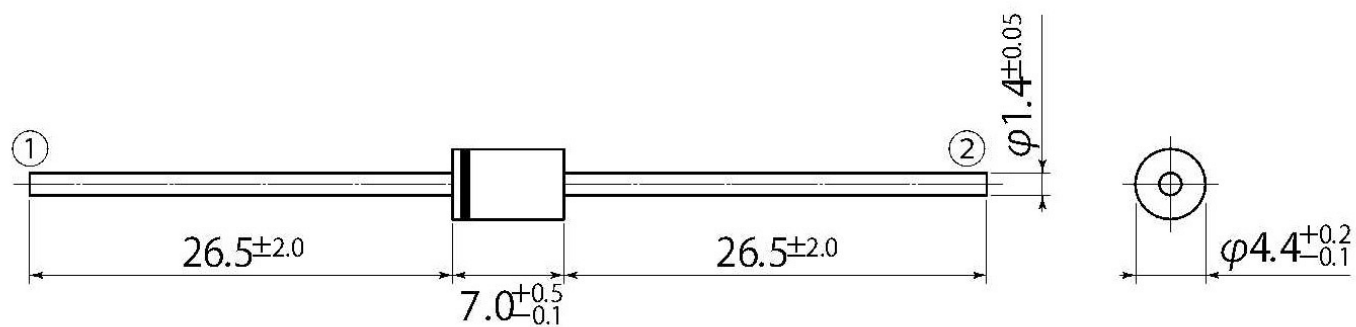
Type	Glass-epoxy
Size	90mm × 150mm
Thickness	1mm
Conductor thickness	35μm
Pattern area	515.6mm ²

TI sensing point



A7

JEDEC Code	—
JEITA Code	—
House Name	AX14



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