

S3V80

General Rectifying Diodes

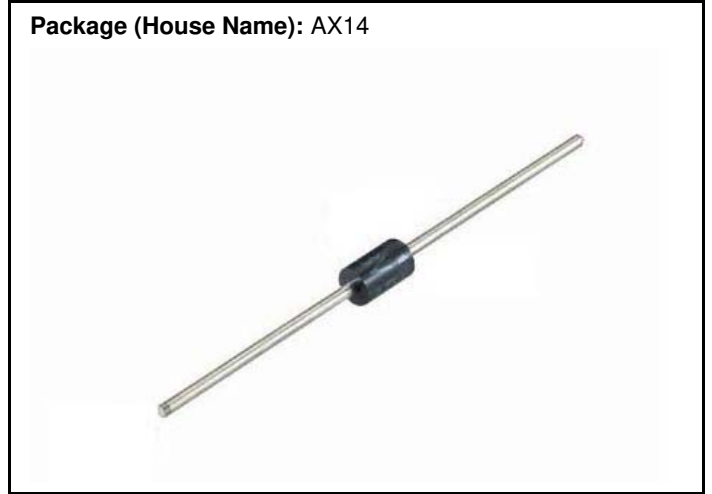
800V, 3.5A

Feature

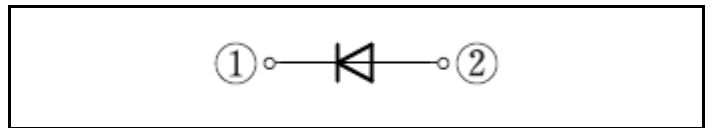
- High Voltage
- Pb free terminal
- RoHS:Yes

OUTLINE

Package (House Name): AX14



Equivalent circuit



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

Item	Symbol	Conditions	Ratings	Unit
Storage temperature	T _{stg}		-55 to 150	°C
Junction temperature	T _j		-55 to 150	°C
Repetitive peak reverse voltage	V _{RRM}		800	V
Average forward current	I _{F(AV)}	50Hz sine wave, Resistance load, 20×20×1mm copper heatsink, On glass-epoxy substrate, Ta=40°C ※	3.5	A
Average forward current	I _{F(AV)}	50Hz sine wave, Resistance load, On glass-epoxy substrate, Without heatsink, Ta=40°C ※	2.6	A
Surge forward current	I _{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, T _j =25°C	120	A
Surge forward current	I _{FSM1}	t _p =1ms, sine wave, Non-repetitive, peak value, T _j =25°C	310	A

※ : See the original Specifications

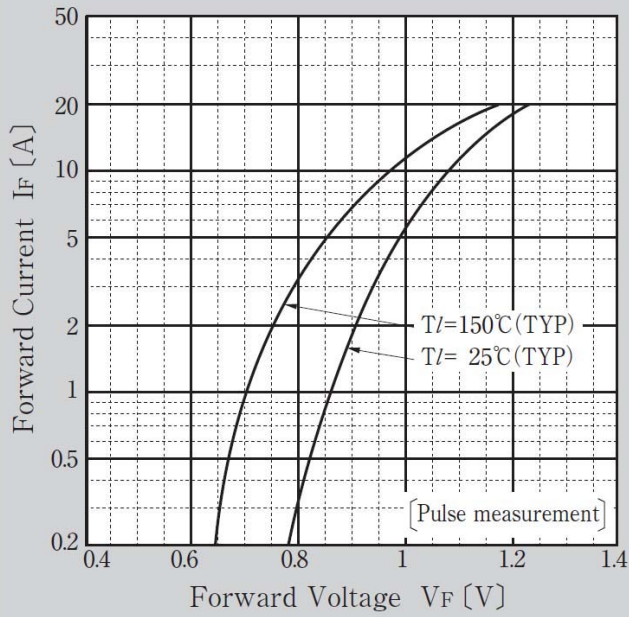
Electrical Characteristics (unless otherwise specified : Tl=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	$I_F=2.6A$, Pulse measurement			1.05	V
Reverse current	I_R	$V_R=800V$, Pulse measurement			10	μA
Thermal resistance	$R_{th(j-l)}$	Junction to lead, On glass-epoxy substrate *			6.5	$^{\circ}C/W$

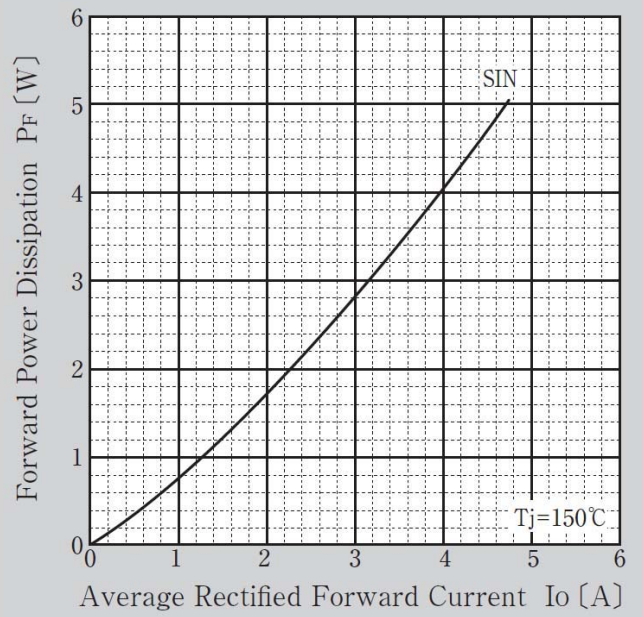
* : See the original Specifications

CHARACTERISTIC DIAGRAMS

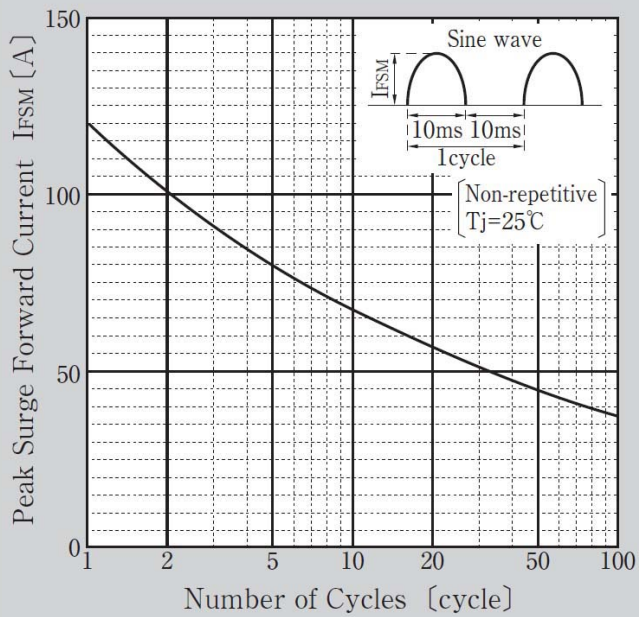
Forward Voltage



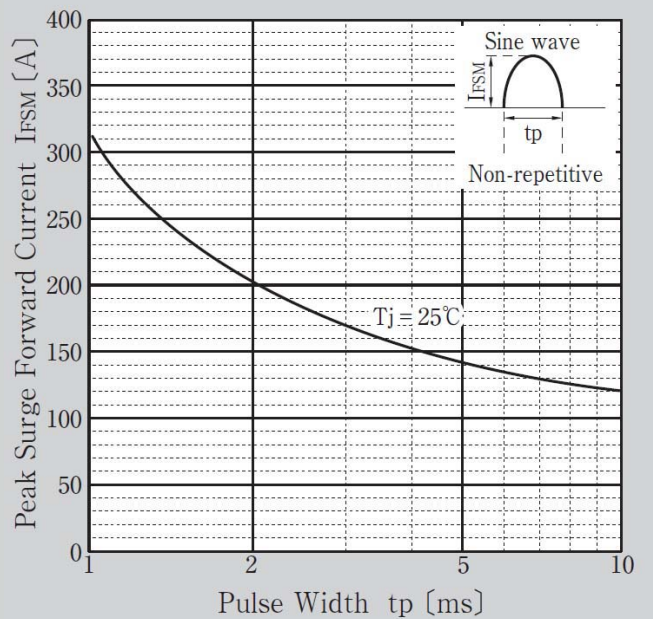
Forward Power Dissipation



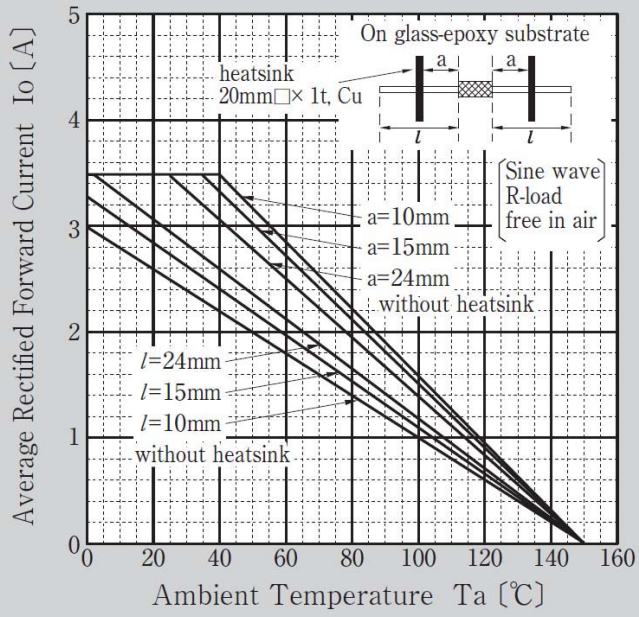
Peak Surge Forward Current Capability



Peak Surge Forward Current Capability



Derating Curve



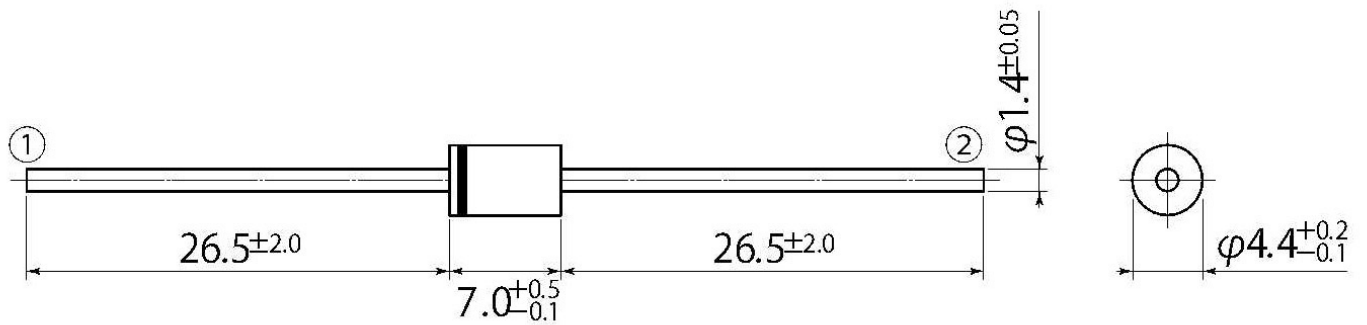
Outline Dimensions

unit:mm

scale: 2/1

A7

JEDEC Code	—
JEITA Code	—
House Name	AX14



Notes

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