

# SHINDENGEN

## General Purpose Rectifiers

UL Bridges

**U4SBA60**

**600V 4A**

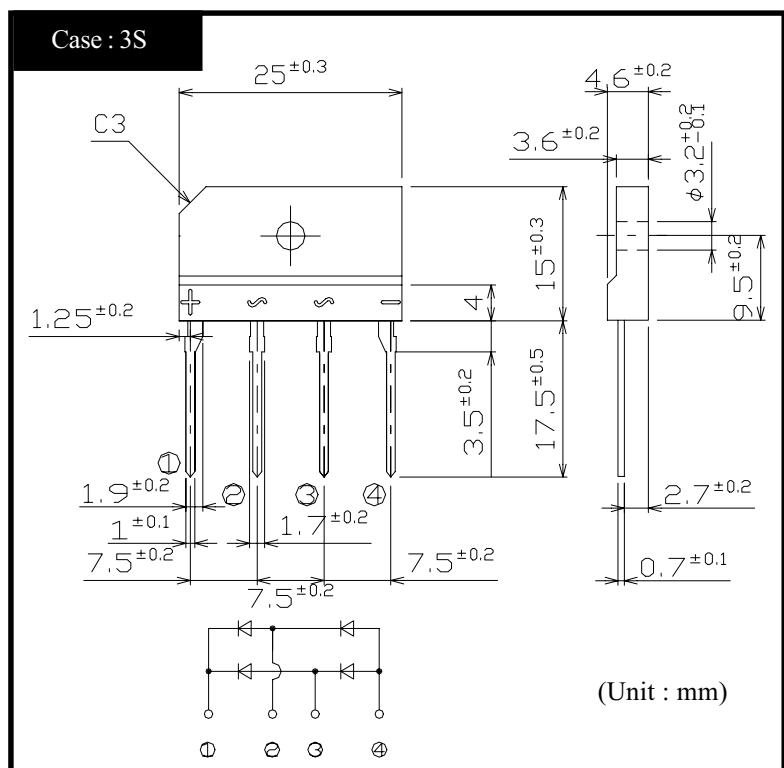
### FEATURES

- Thin Single In-Line Package
- UL Recognized  
(UL File No.E142422)
- High IFSM
- Applicable to Automatic Insertion

### APPLICATION

- Switching power supply
- Home Appliances, Office Equipment
- Telecommunication, Factory Automation

### OUTLINE DIMENSIONS



### RATINGS

#### ● Absolute Maximum Ratings (If not specified $T_c=25^\circ\text{C}$ )

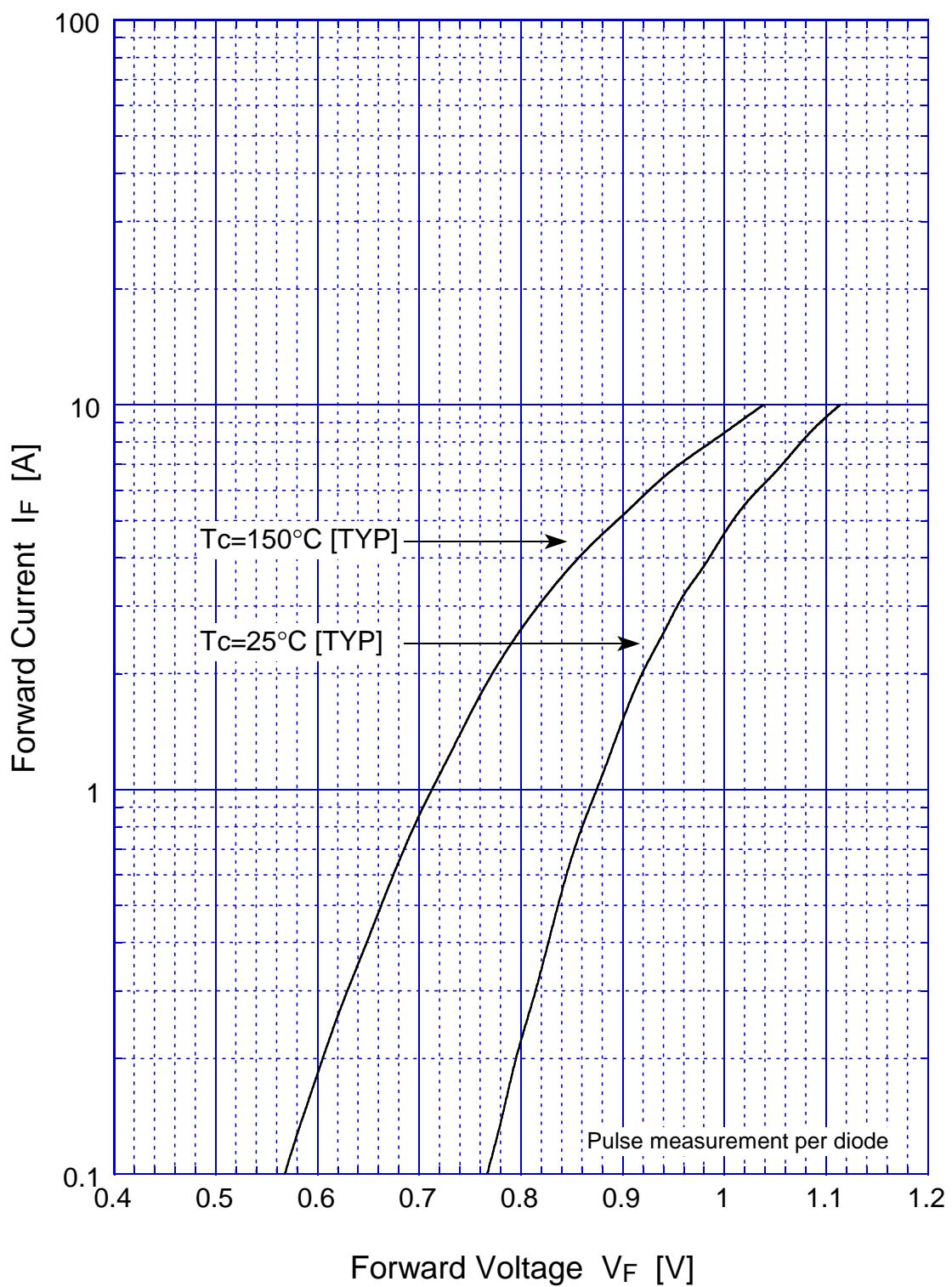
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	$T_{stg}$		-40~150	°C
Operating Junction Temperature	$T_j$		150	°C
Maximum Reverse Voltage	$V_{RM}$		600	V
Average Rectified Forward Current	$I_O$	50Hz sine wave, R-load With heatsink $T_c=108^\circ\text{C}$	4	A
		50Hz sine wave, R-load Without heatsink $T_a=25^\circ\text{C}$	2.3	
Peak Surge Forward Current	$I_{FSM}$	50Hz sine wave, Non-repetitive 1cycle peak value, $T_j=25^\circ\text{C}$	80	A
Current Squared Time	$I^2t$	$1\text{ms} \leq t < 10\text{ms}$ $T_j=25^\circ\text{C}$	32	$\text{A}^2\text{s}$
Dielectric Strength	$V_{dis}$	Terminals to case, AC 1 minute	2	kV
Mounting Torque	$T_{OR}$	(Recommended torque : $0.5\text{N}\cdot\text{m}$ )	0.8	$\text{N}\cdot\text{m}$

#### ● Electrical Characteristics (If not specified $T_c=25^\circ\text{C}$ )

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	$V_F$	$IF=2\text{A}$ , Pulse measurement, Rating of per diode	Max. 1.05	V
Reverse Current	$I_R$	$V_R=V_{RM}$ , Pulse measurement, Rating of per diode	Max. 10	$\mu\text{A}$
Thermal Resistance	$\theta_{jc}$	junction to case With heatsink	Max. 5.5	$^\circ\text{C}/\text{W}$
	$\theta_{jl}$	junction to lead Without heatsink	Max. 6	
	$\theta_{ja}$	junction to ambient Without heatsink	Max. 30	

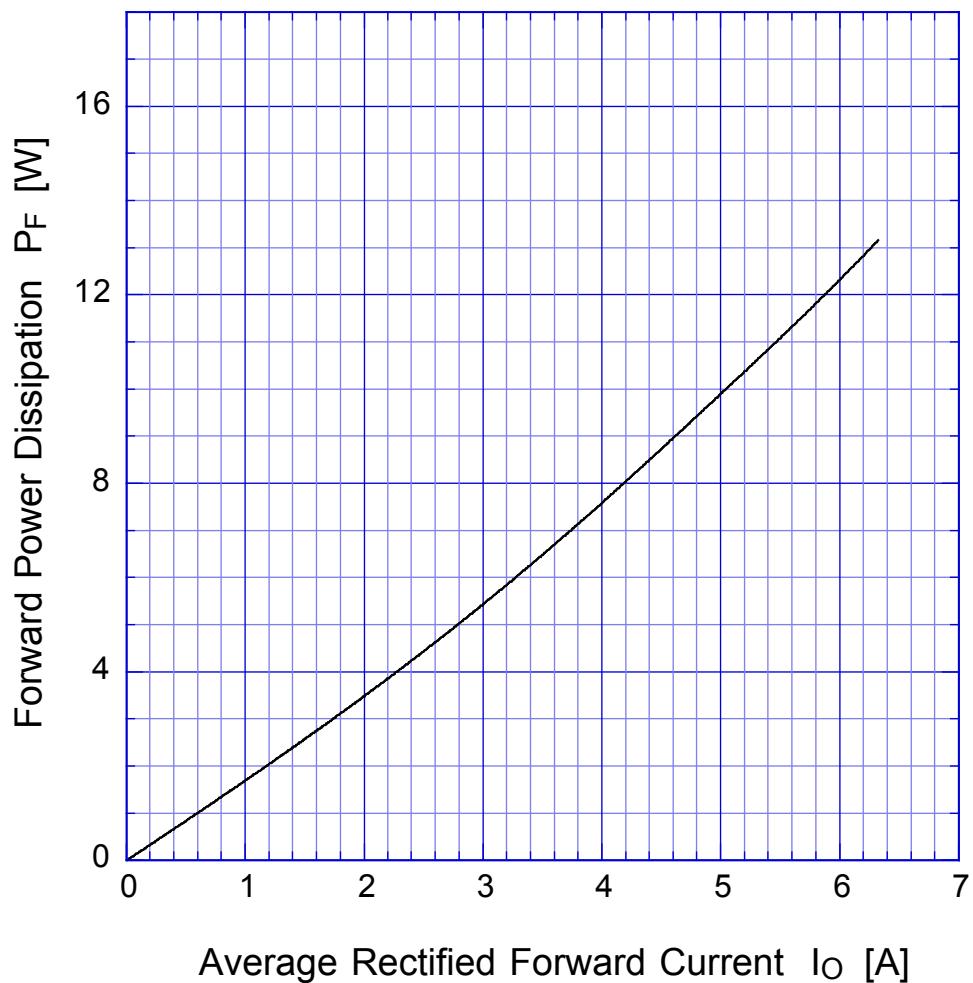
**U4SBAx**

Forward Voltage



**U4SBAx**

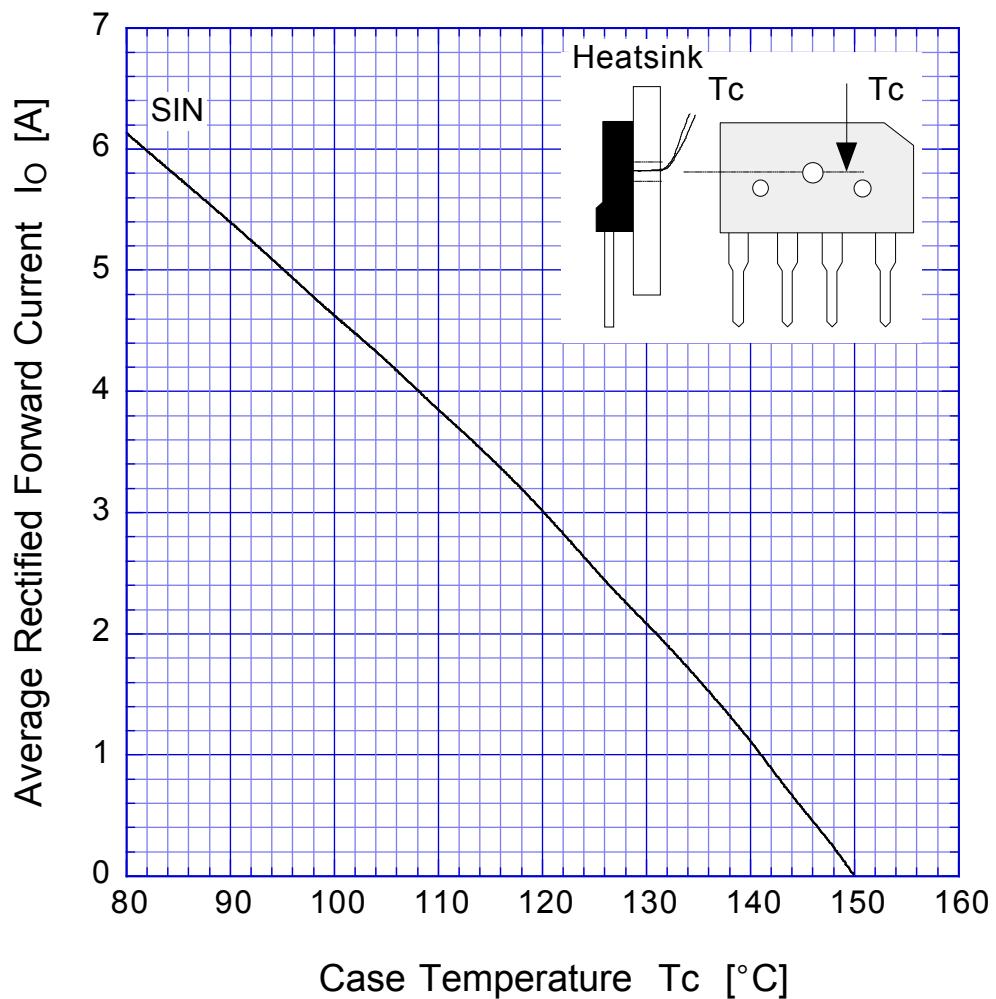
**Forward Power Dissipation**



$T_j = 150^\circ\text{C}$   
Sine wave

**U4SBAx**

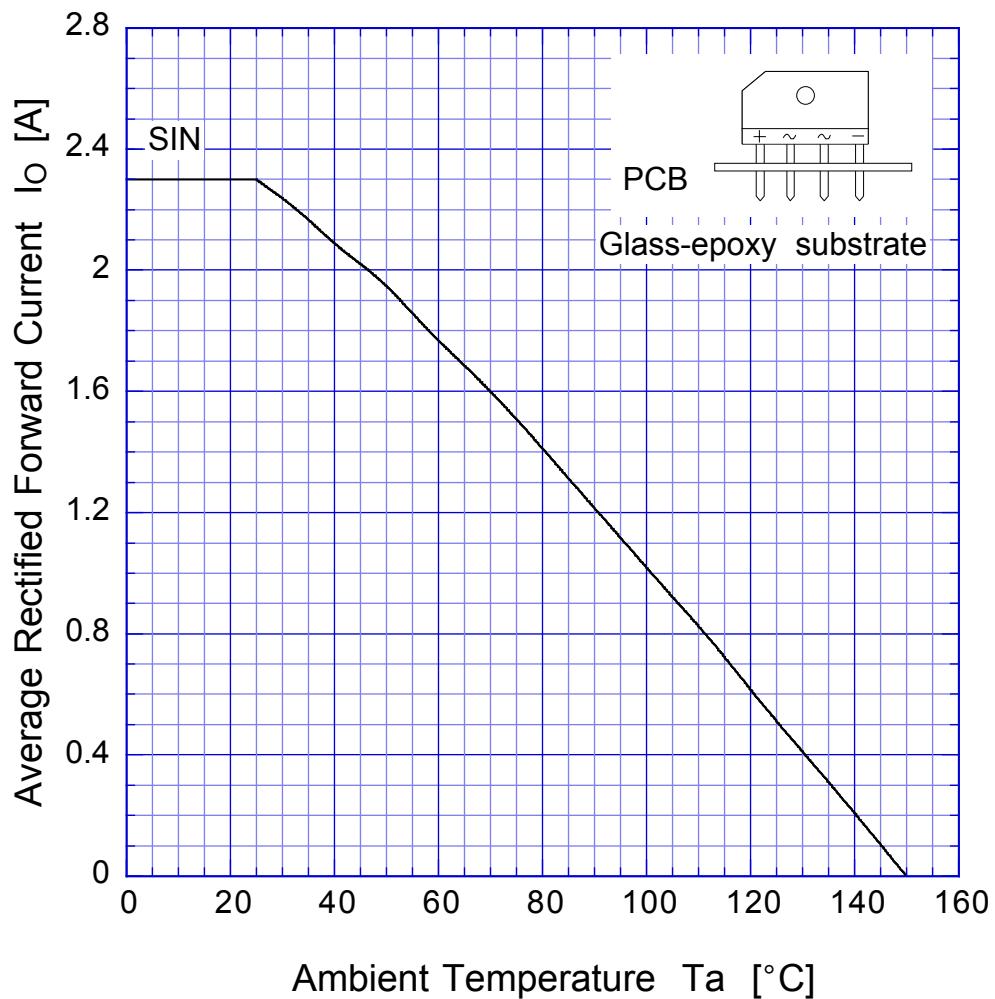
Derating Curve



Sine wave  
R-load  
with heatsink

**U4SBAx**

Derating Curve



Sine wave

R-load

Free in air

**U4SBAx**

**Peak Surge Forward Capability**

