

SHINDENGEN

General Purpose Rectifiers

UL Bridges

U4SB20

200V 4A

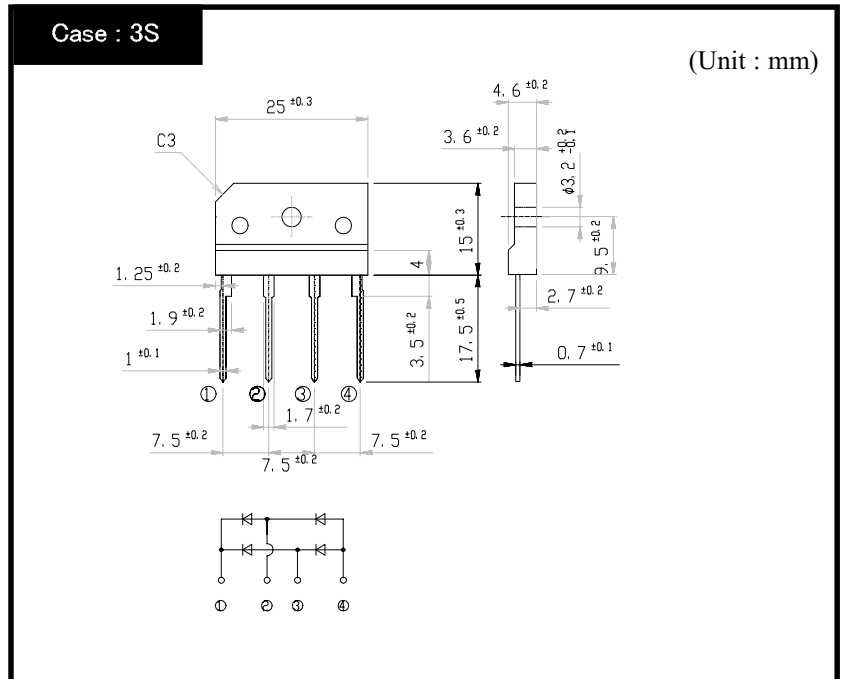
FEATURES

- 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°C)

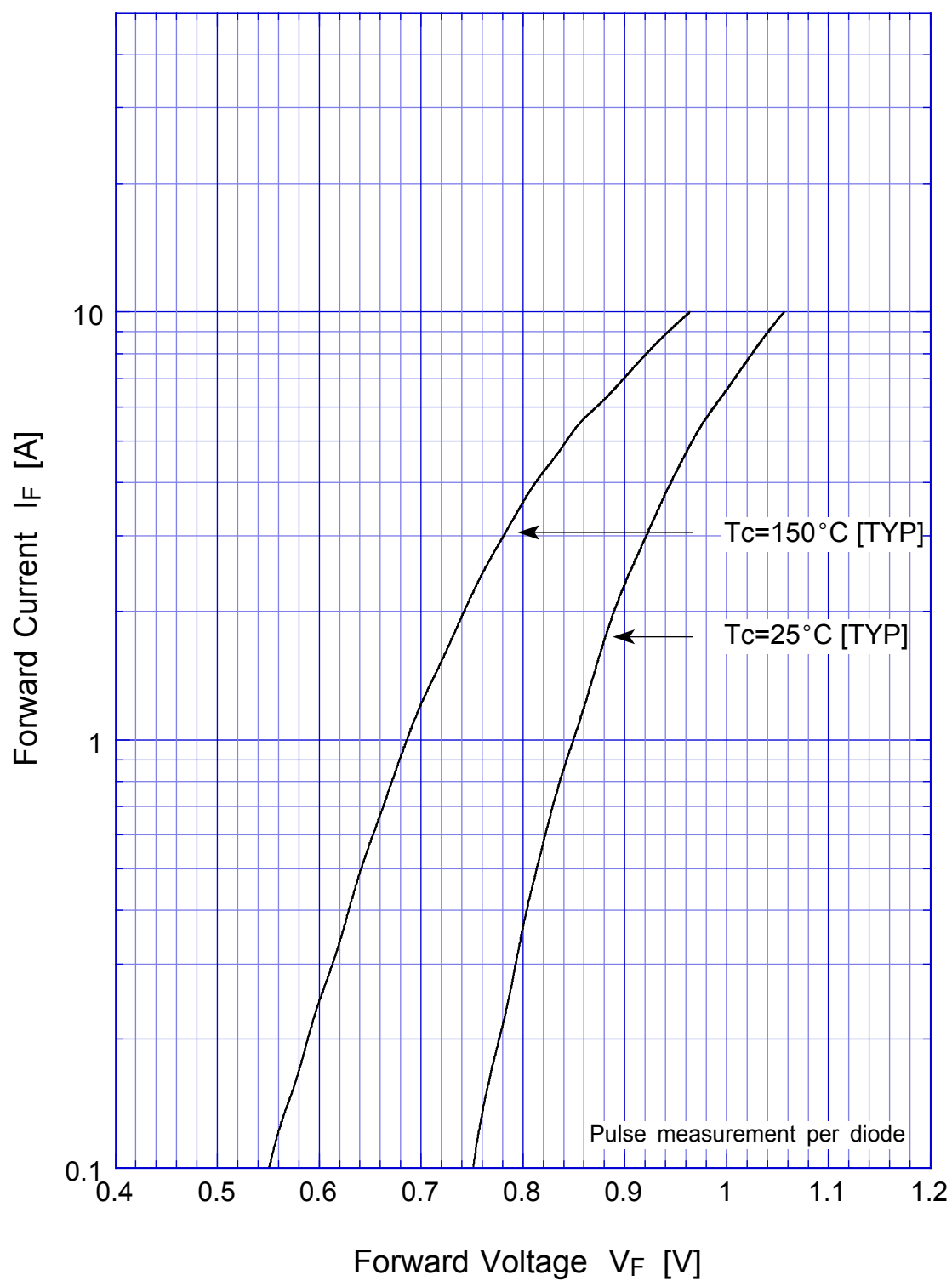
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T _{stg}		-40~150	°C
Operating Junction Temperature	T _j		150	°C
Maximum Reverse Voltage	V _{RM}		200	V
Average Rectified Forward Current	I _O	50Hz sine wave, R-load With heatsink T _c =108°C	4	A
		50Hz sine wave, R-load Without heatsink T _a =25°C	2.3	
Peak Surge Forward Current	I _{FSM}	50Hz sine wave, Non-repetitive 1cycle peak value, T _j =25°C	120	A
Current Squared Time	I ² t	1ms ≤ t < 10ms T _j =25°C	60	A ² s
Dielectric Strength	V _{dis}	Terminals to case, AC 1 minute	2	kV
Mounting Torque	TOR	(Recommended torque : 0.5N·m)	0.8	N·m

●Electrical Characteristics (If not specified T_c=25°C)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V _F	I _F =2A, 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	μA
Thermal Resistance	θ _{jc}	junction to case With heatsink	Max.5.5	°C/W
	θ _{jl}	junction to lead Without heatsink	Max.6	
	θ _{ja}	junction to ambient Without heatsink	Max.30	

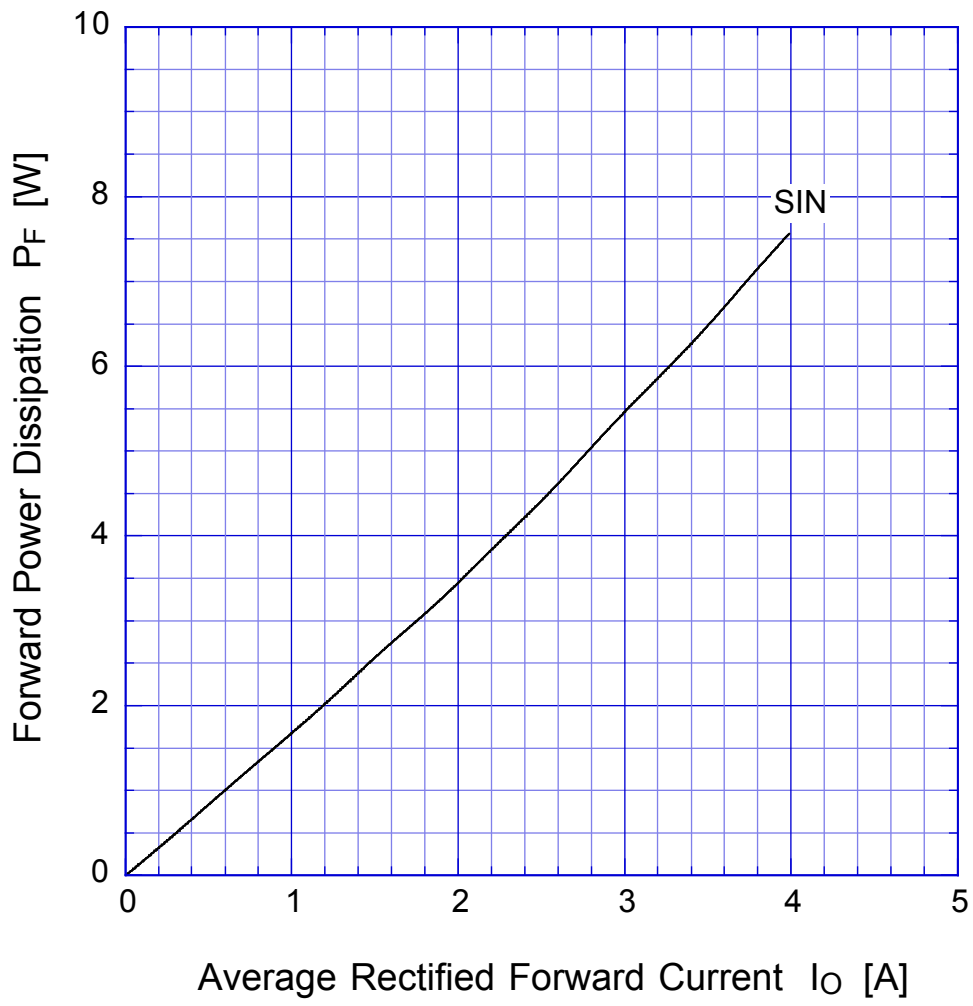
U4SBx

Forward Voltage



U4SBx

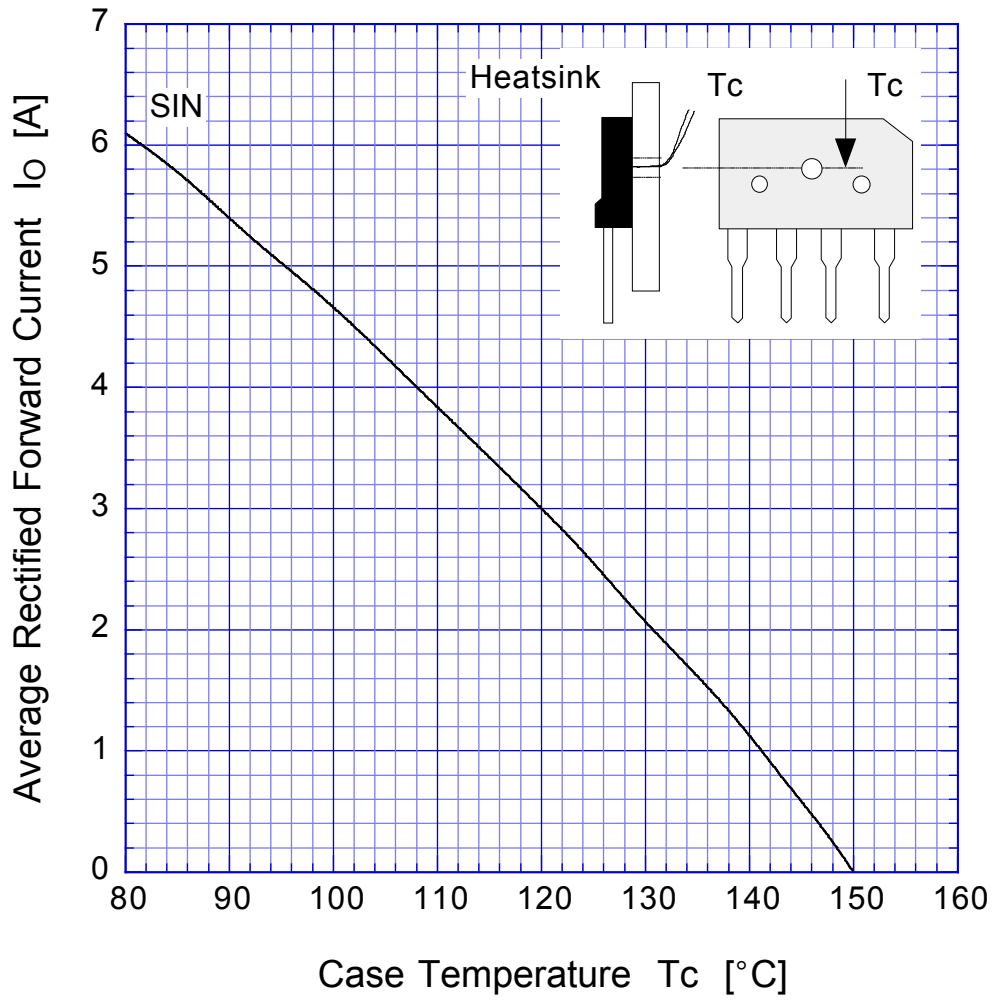
Forward Power Dissipation



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

U4SBx

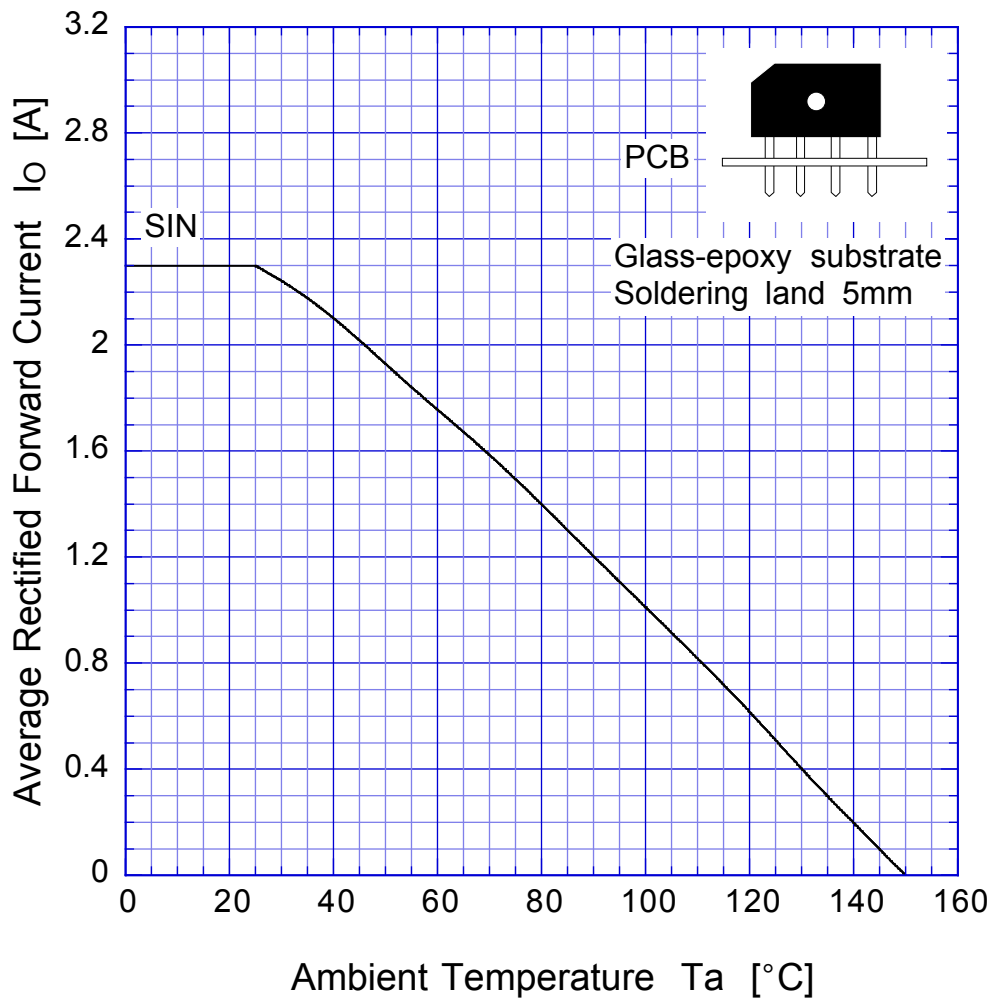
Derating Curve



Sine wave
R-load
with heatsink

U4SBx

Derating Curve



Sine wave
R-load
Free in air

U4SBx

Peak Surge Forward Capability

