

SHINDENGEN

General Purpose Rectifiers

SIL Bridges

D6SB80

800V 6A

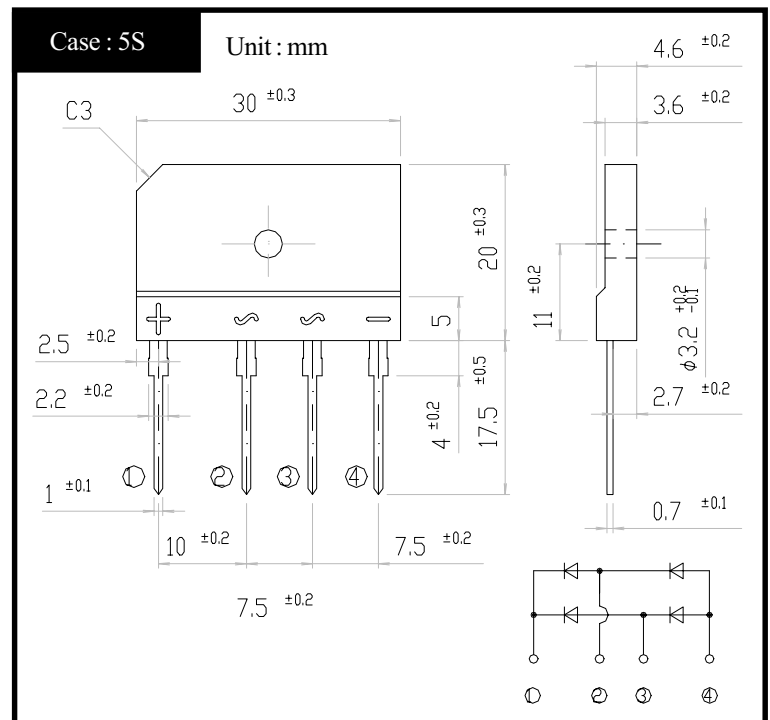
FEATURES

- Thin Single In-Line Package
- 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)

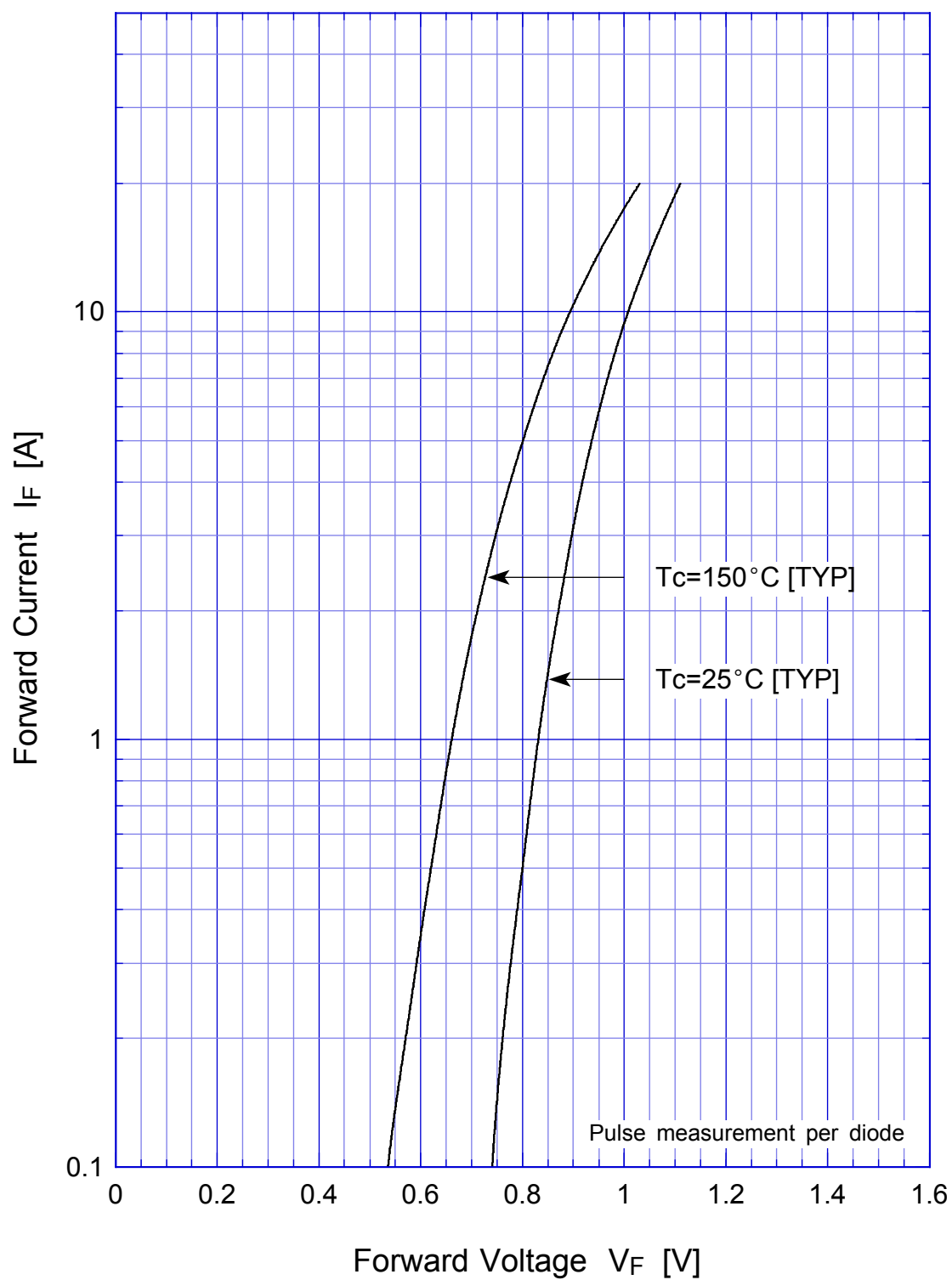
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T _{stg}		-40~150	°C
Operating Junction Temperature	T _j		150	°C
Maximum Reverse Voltage	V _{RM}		800	V
Average Rectified Forward Current	I _O	50Hz sine wave, R-load With heatsink T _c =110°C	6	A
		50Hz sine wave, R-load Without heatsink T _a =25°C	2.8	
Peak Surge Forward Current	I _{FSM}	50Hz sine wave, Non-repetitive 1cycle peak value, T _j =25°C	170	A
Current Squared Time	I ² t	2ms ≤ t < 10ms T _j =25°C	140	A ² s
Dielectric Strength	V _{dis}	Terminals to case, AC 1 minute	2.5	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 =3.0A, 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. 3.4	°C/W
	θ _{jl}	junction to lead Without heatsink	Max. 5	
	θ _{ja}	junction to ambient Without heatsink	Max. 26	
	θ _{cf}	case to heatsink, Mounting torque 0.5N·m	Max. 2	

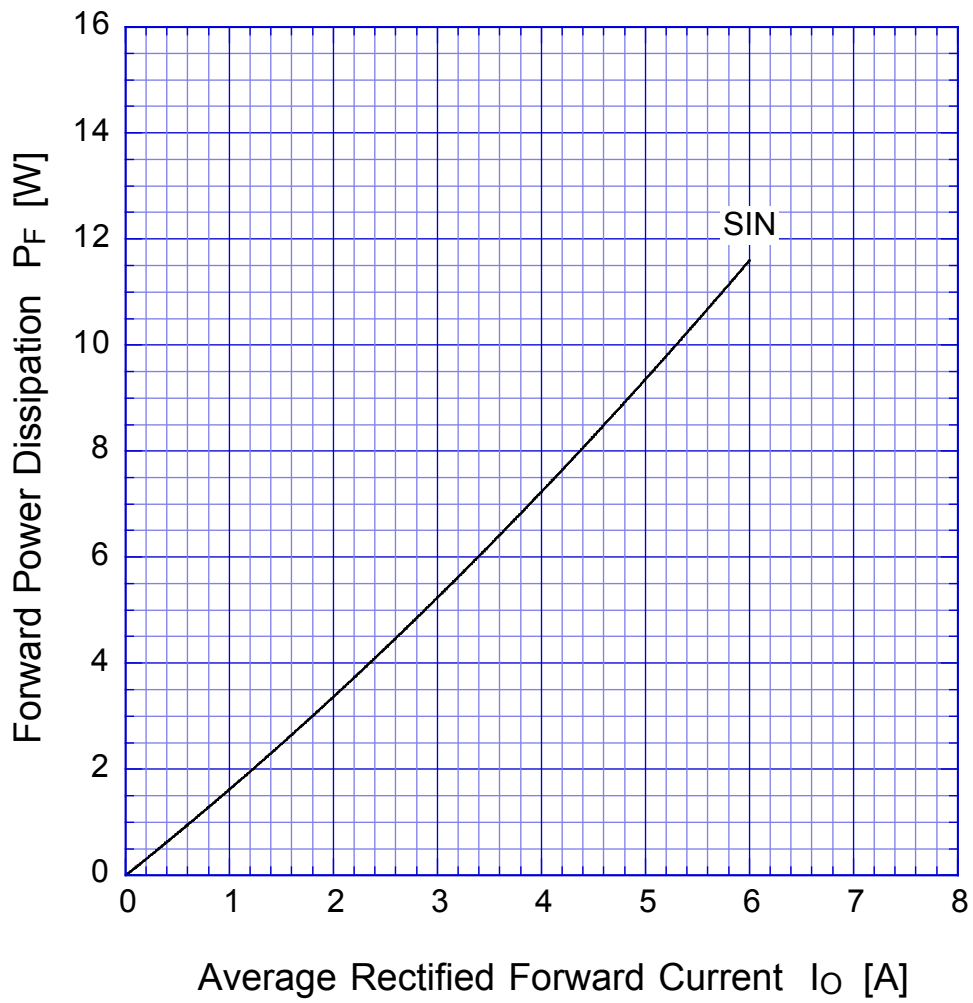
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Forward Voltage



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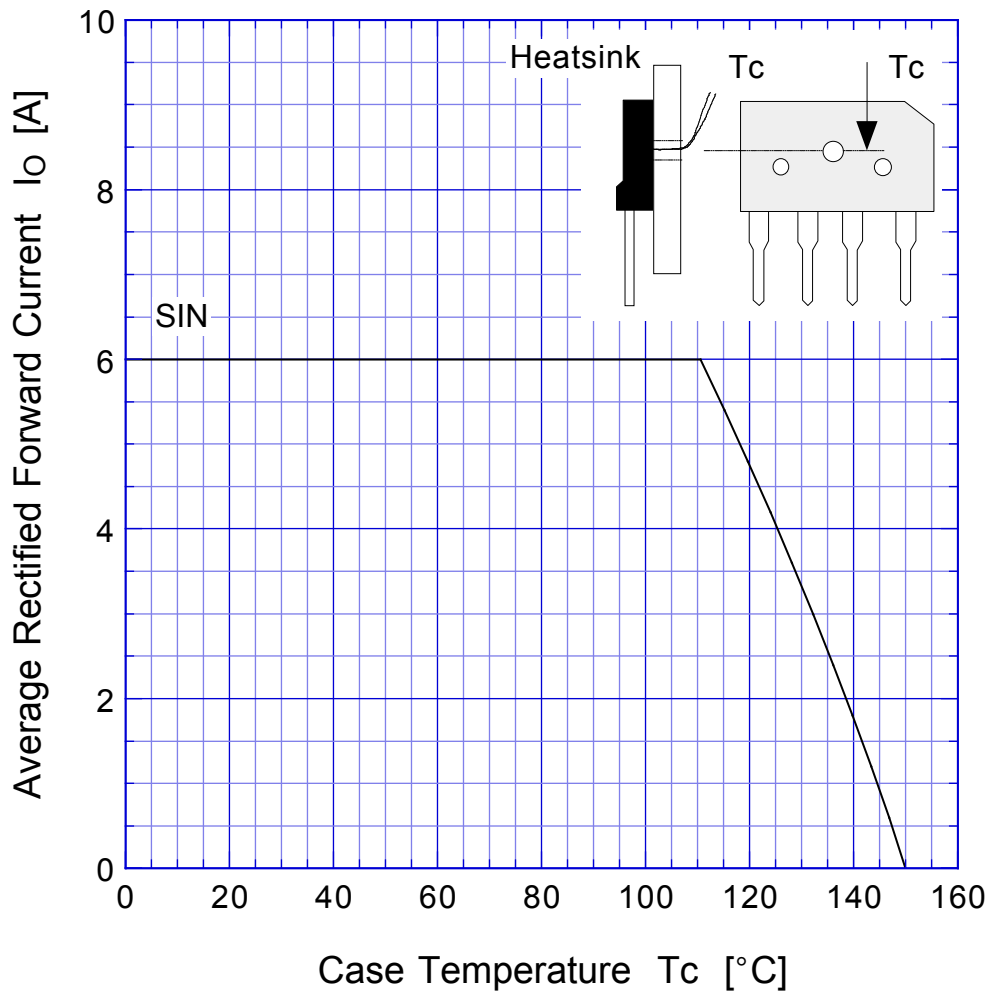
Forward Power Dissipation



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

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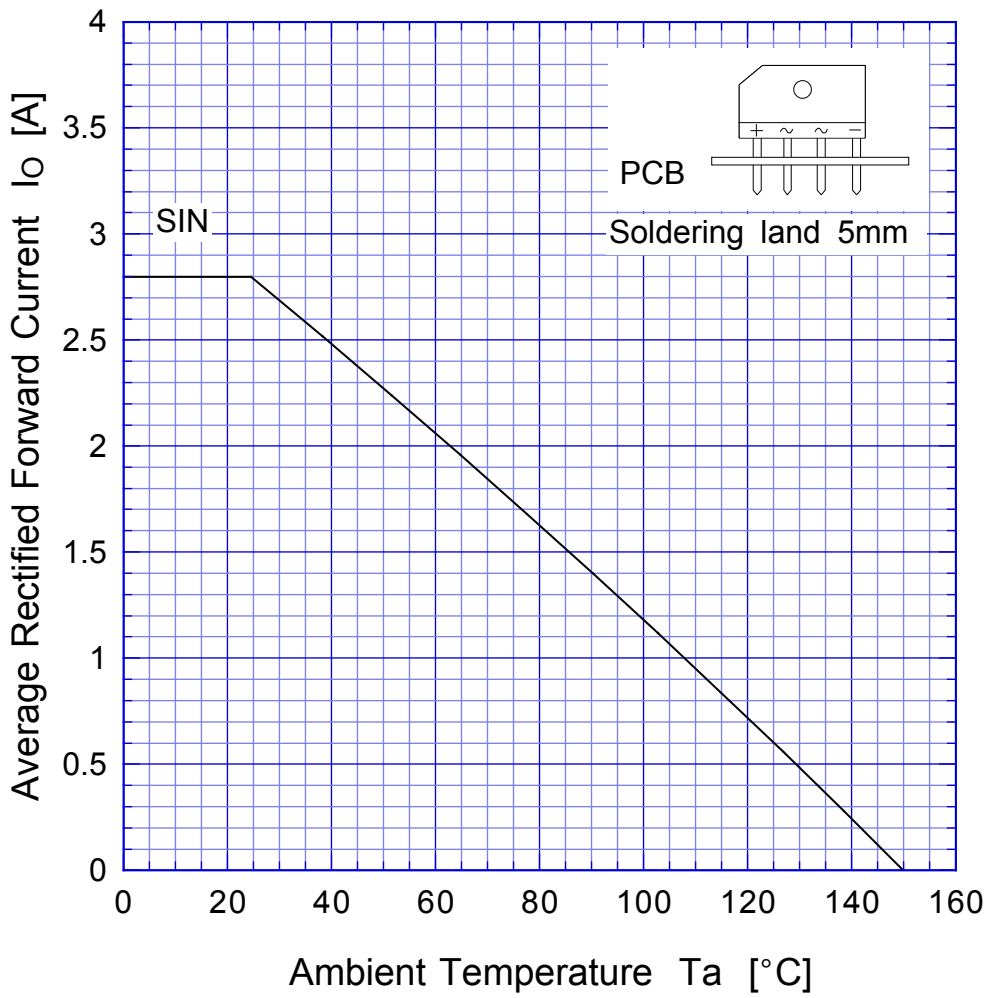
Derating Curve



Sine wave
R-load
with heatsink

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Derating Curve



$V_R = 600V$



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Peak Surge Forward Capability

