SHINDENGEN

General Purpose Rectifiers

SIL Bridges

D5SB80

800V 6A

FEATURES

- Thin Single In-Line Package
- High IFSM
- Applicable to Automatic Insertion

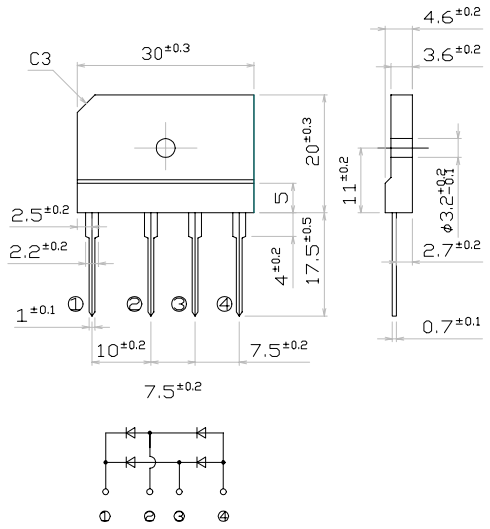
APPLICATION

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

OUTLINE DIMENSIONS

Case : 5S

Unit : mm



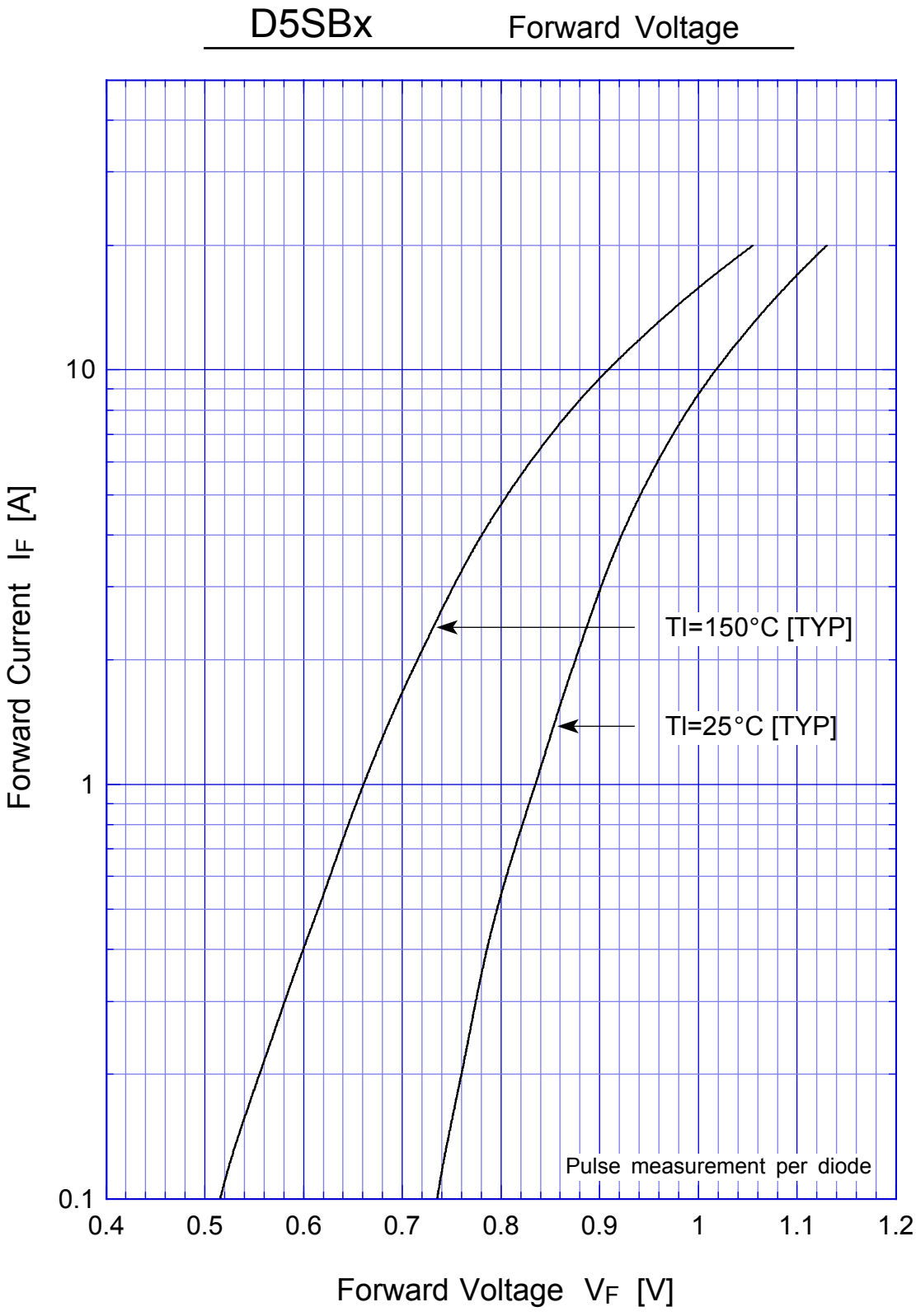
RATINGS

● Absolute Maximum Ratings (If not specified Tc=25℃)

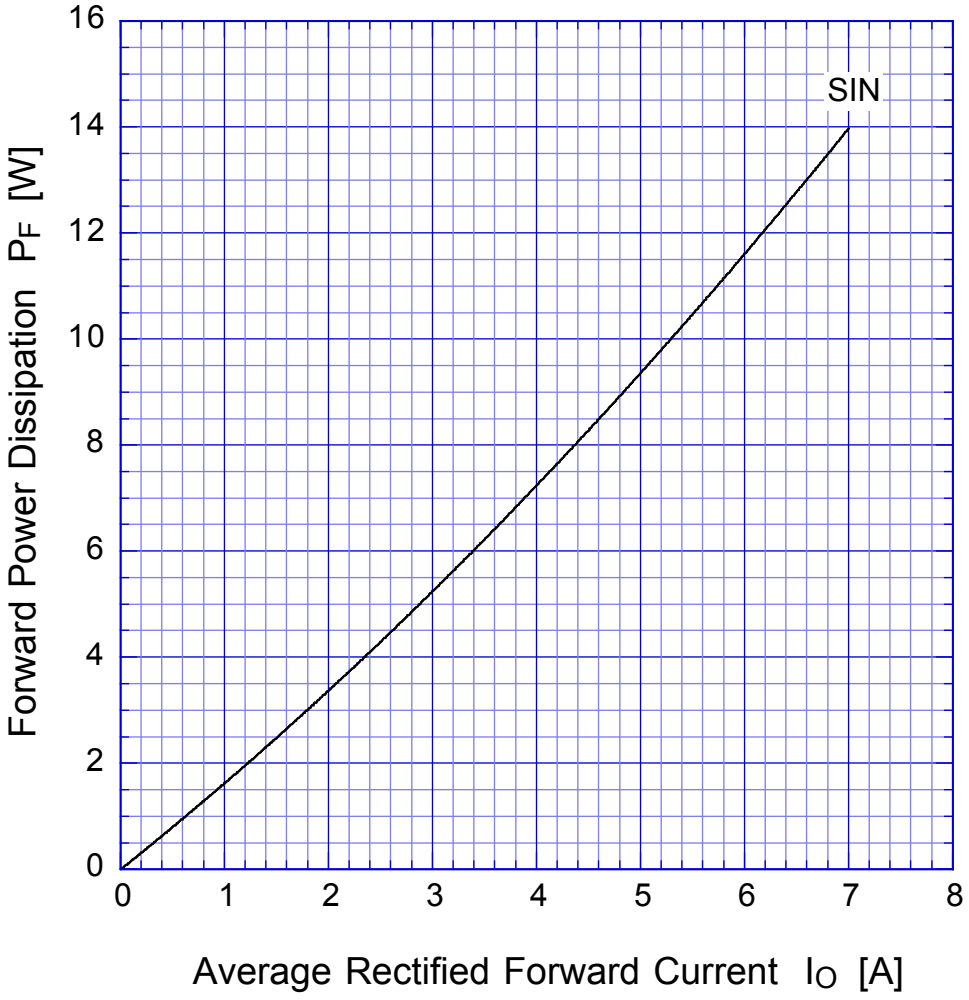
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		−40～150	℃
Operating Junction Temperature	Tj		150	℃
Maximum Reverse Voltage	V_{RM}		800	V
Average Rectified Forward Current	I_O	50Hz sine wave, R-load With heatsink Tc=111℃	6	A
		50Hz sine wave, R-load Without heatsink Ta=25℃	2.8	
Peak Surge Forward Current	I_{FSM}	50Hz sine wave, Non-repetitive 1cycle peak value, Tj=25℃	170	A
Current Squared Time	I^2t	2ms≦t＜10ms Tj=25℃	140	A^2s
Dielectric Strength	Vdis	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 Tc=25℃)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V_F	IF=3A, 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	℃/W
	θ jl	junction to lead Without heatsink	Max.5	
	θ ja	junction to ambient Without heatsink	Max.26	

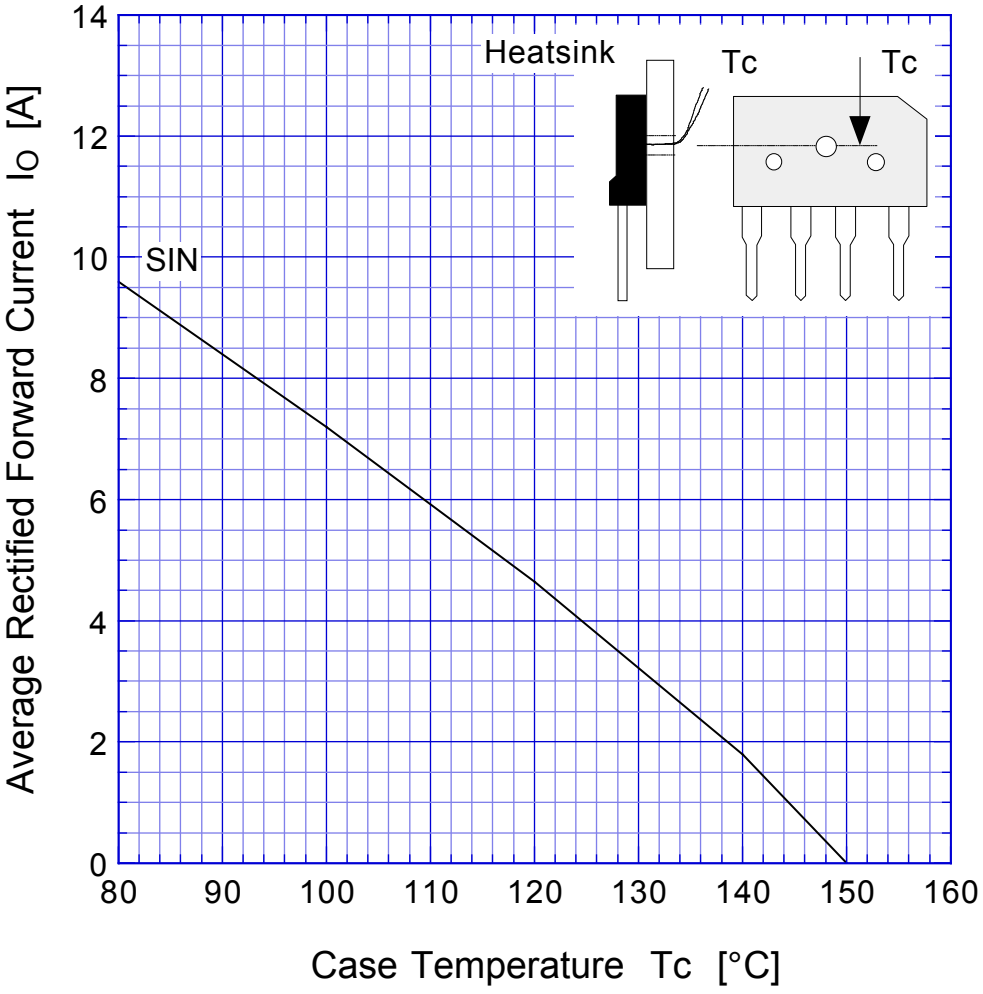

D5SBx
Forward Voltage
Forward Current IF [A]
10
1
0.1
0.4
0.5
0.6
0.7
0.8
0.9
1
1.1
1.2
Forward Voltage VF [V]
Tl=150°C [TYP]
Tl=25°C [TYP]
Pulse measurement per diode

D5SBx Forward Power Dissipation



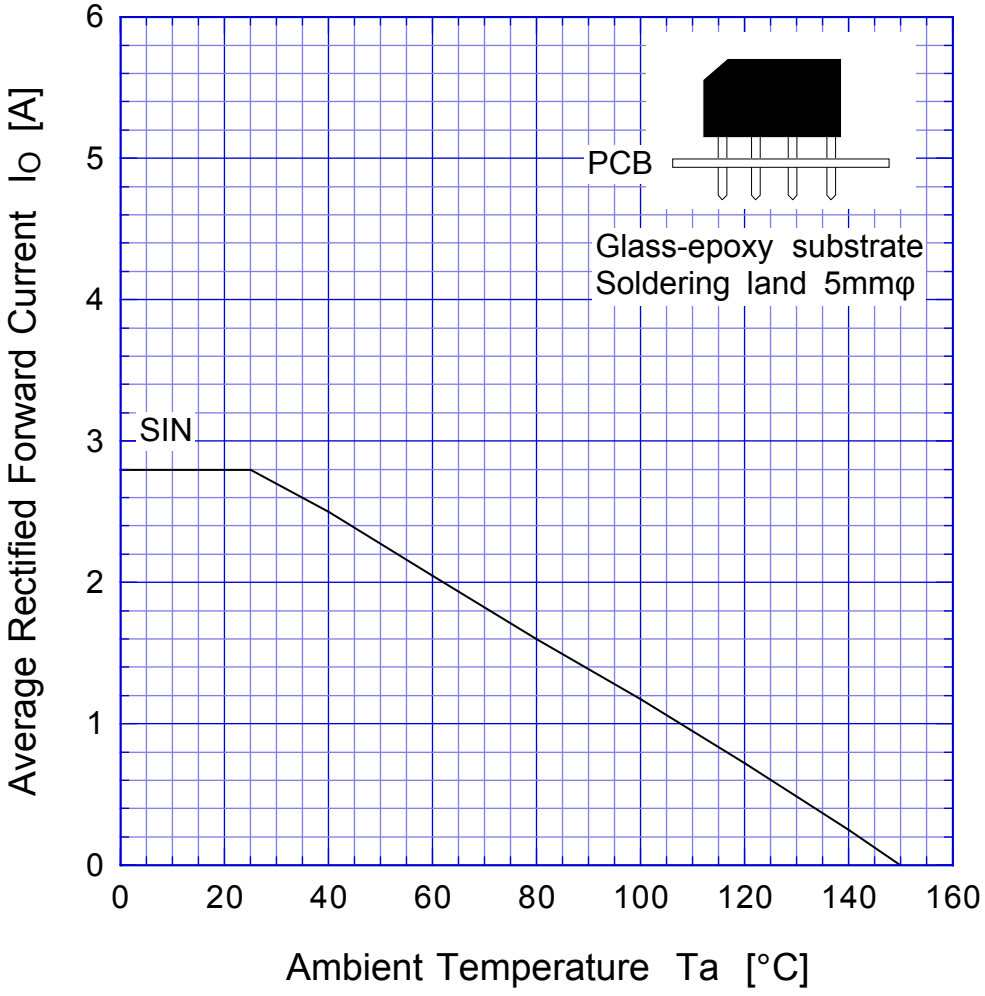
Tj = 150°C
Sine wave

D5SBx Derating Curve



Sine wave
R-load
with heatsink

D5SBx Derating Curve



Sine wave
R-load
Free in air

D5SBx Peak Surge Forward Capability