

SHINDENGEN

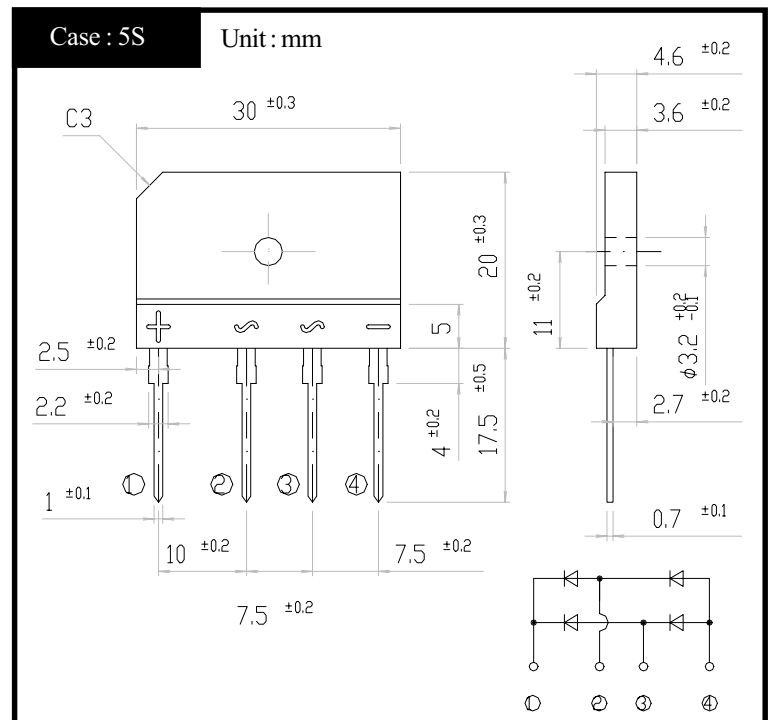
General Purpose Rectifiers

SIL Bridges

D6SB60L

600V 6A

OUTLINE DIMENSIONS



RATINGS

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

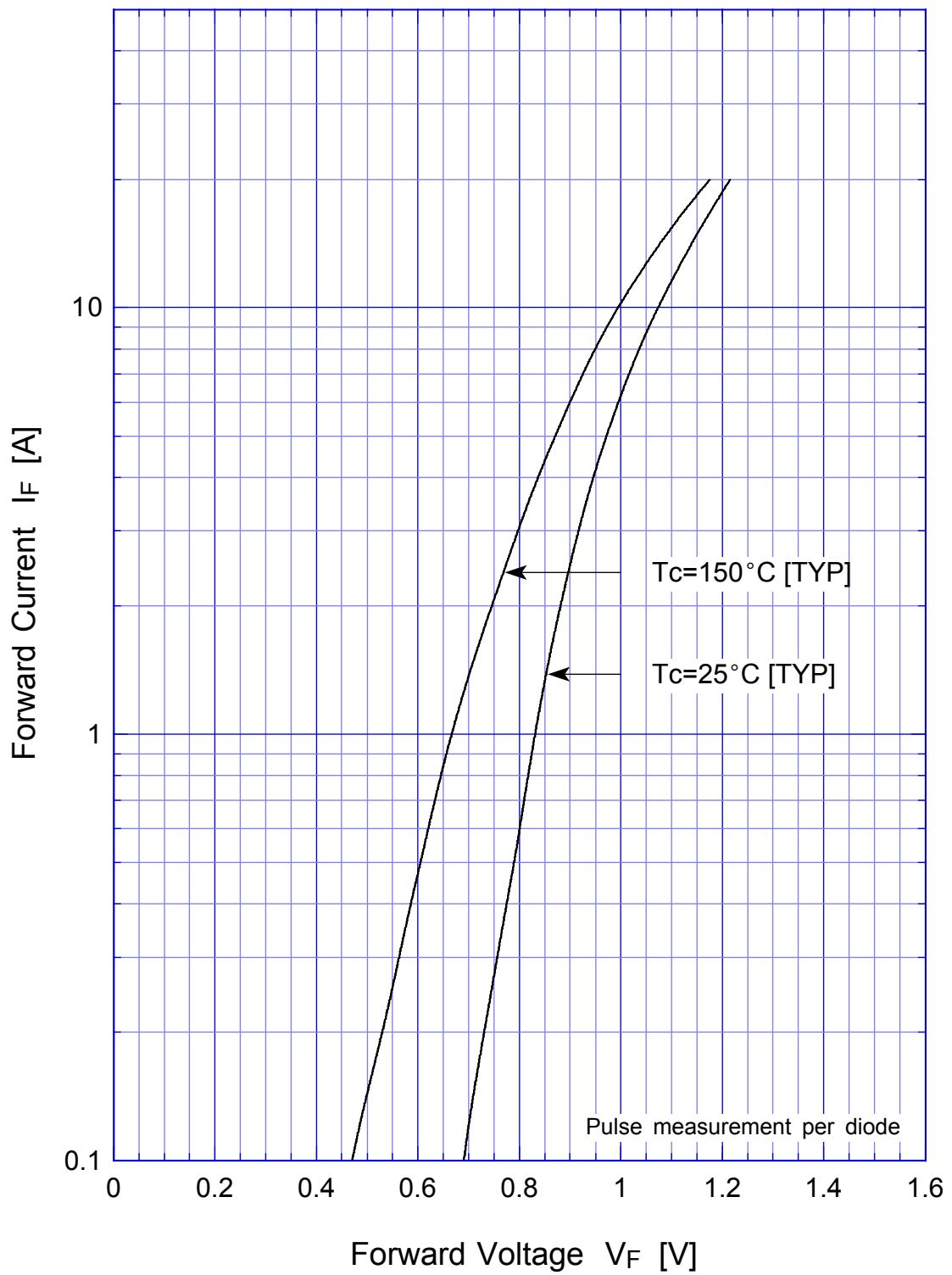
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T_{stg}		-40~150	$^{\circ}\text{C}$
Operating Junction Temperature	T_j		150	$^{\circ}\text{C}$
Maximum Reverse Voltage	V_{RM}		600	V
Average Rectified Forward Current	I_O	50Hz sine wave, R-load With heatsink $T_c=112^{\circ}\text{C}$	6	A
		50Hz sine wave, R-load Without heatsink $T_a=25^{\circ}\text{C}$	2.8	
Peak Surge Forward Current	I_{FSM}	50Hz sine wave, Non-repetitive 1cycle peak value, $T_I=25^{\circ}\text{C}$	170	A
Current Squared Time	I^2t	$2\text{ms} \leq t < 10\text{ms}$ $T_j = 25^{\circ}\text{C}$	90	A^2s
Dielectric Strength	V_{dis}	Terminals to case, AC 1 minute	2.5	kV
Mounting Torque	TOR	(Recommended torque : $0.5\text{N}\cdot\text{m}$)	0.8	$\text{N}\cdot\text{m}$

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

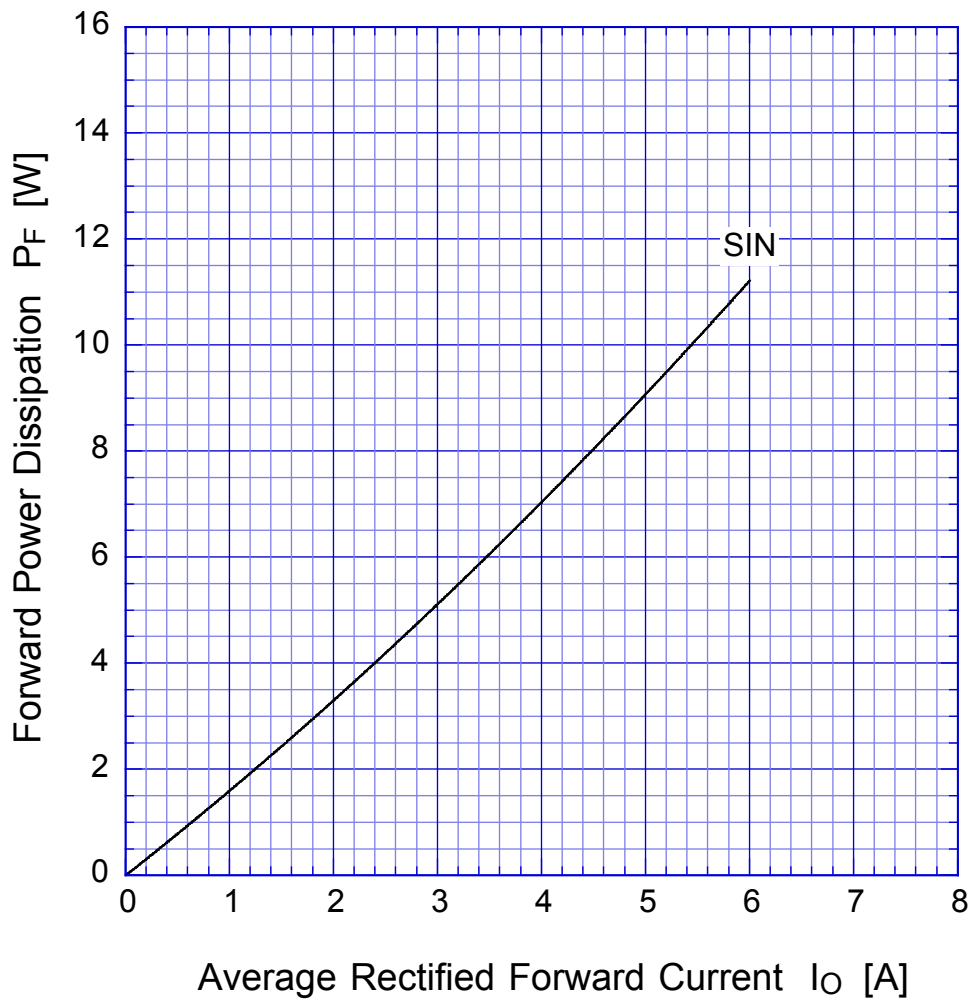
Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V_F	$I_F=3\text{A}$, Pulse measurement, Rating of per diode	Max.1.05	V
Reverse Current	I_R	$V_R=V_{RM}$, Pulse measurement, Rating of per diode	Max.10	μA
Reverse Recovery Time	t_{rr}	$I_F=0.1\text{A}$, $I_R=0.1\text{A}$ Rating of per diode	Max.10	μs
Thermal Resistance	θ_{jc}	junction to case With heatsink	Max.3.4	$^{\circ}\text{C}/\text{W}$
	θ_{jl}	junction to lead Without heatsink	Max.5	
	θ_{ja}	junction to ambient Without heatsink	Max.26	

D6SB60L

Forward Voltage



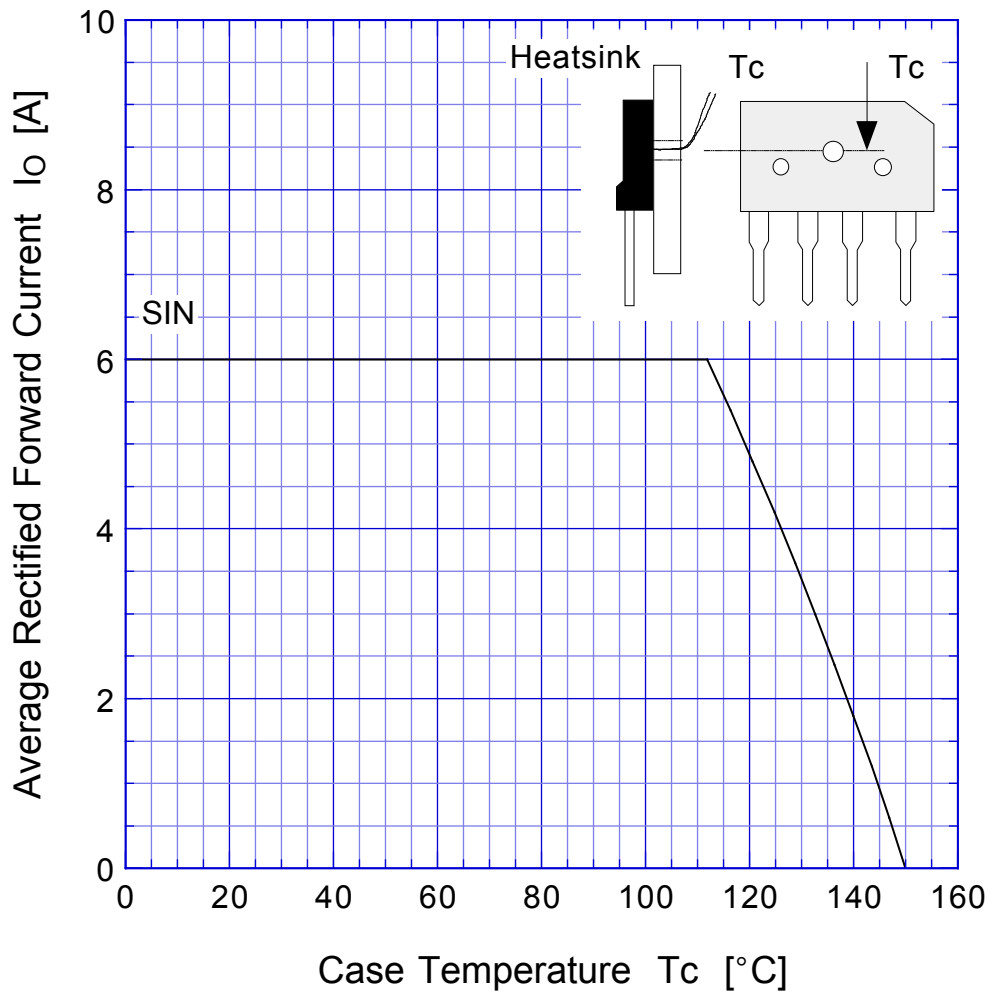
D6SB60L Forward Power Dissipation



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

D6SB60L

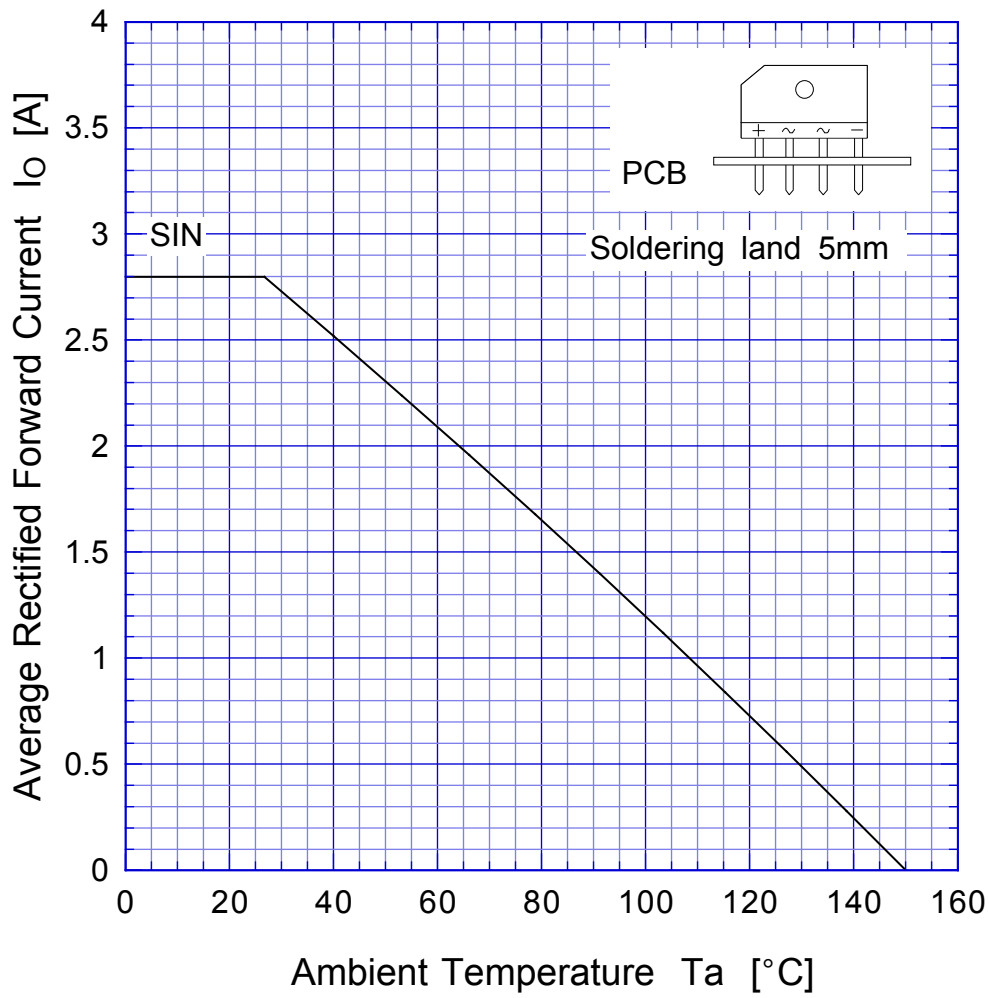
Derating Curve



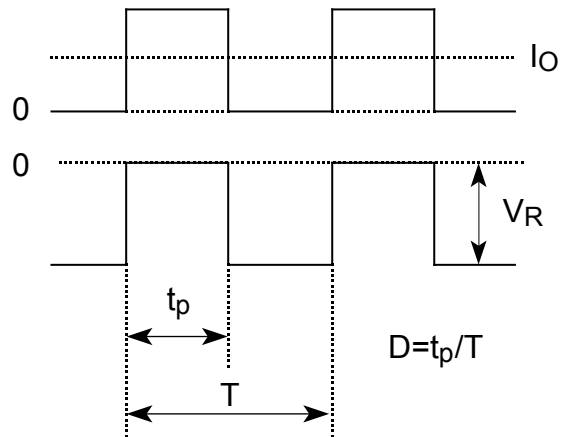
Sine wave
R-load
with heatsink

D6SB60L

Derating Curve



$V_R = 600V$



D6SB60L

Peak Surge Forward Capability

