

SHINDENGEN

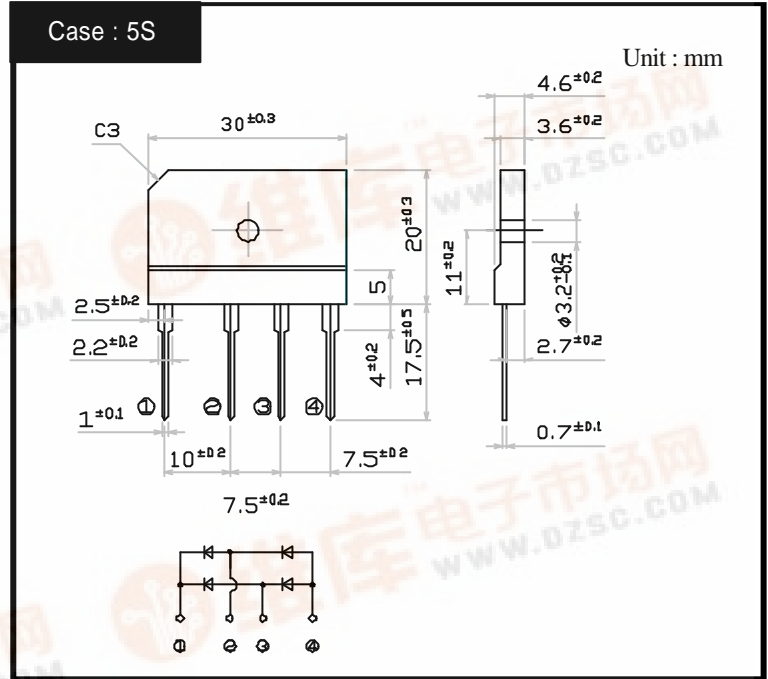
General Purpose Rectifiers

SIL Bridges

D6SB60L

600V 6A

OUTLINE DIMENSIONS



RATINGS

Absolute Maximum Ratings (If not specified $T_I=25$)

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T_{stg}		-40 ~ 150	
Operating Junction Temperature	T_j		150	
Maximum Reverse Voltage	V_{RM}		600	V
Average Rectified Forward Current	I_O	50Hz sine wave, R-load With heatsink $T_c=112$ 50Hz sine wave, R-load Without heatsink $T_a=25$	6	A
Peak Surge Forward Current	I_{FSM}	50Hz sine wave, Non-repetitive 1cycle peak value, $T_j=25$	170	A
Current Squared Time	I^2t	2ms $t < 10ms$ $T_j = 25$	90	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

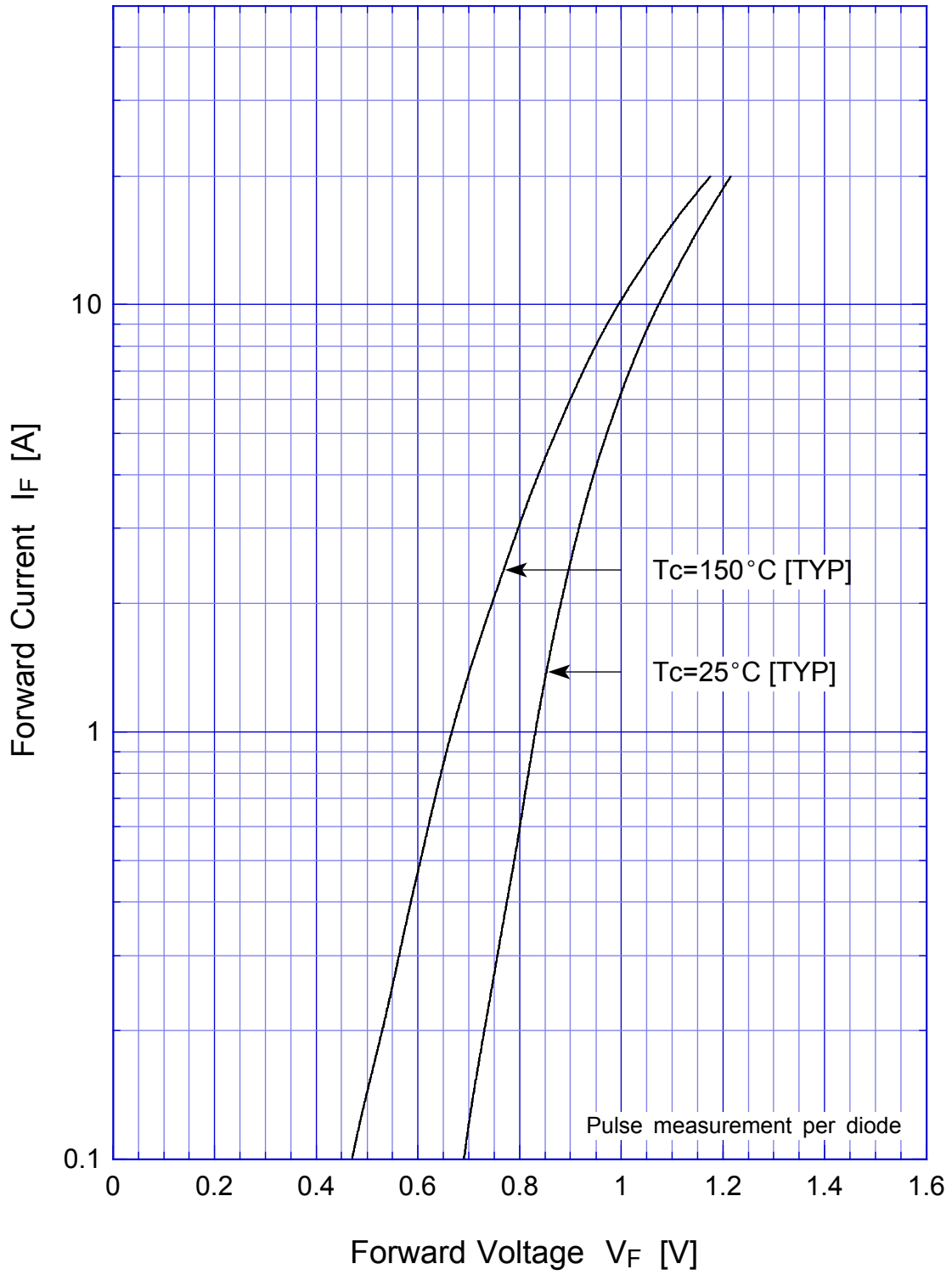
Electrical Characteristics (If not specified $T_I=25$)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V_F	$I_F=3A$, 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
Reverse Recovery Time	t_{rr}	$I_F=0.1A$, $I_R=0.1A$ Rating of per diode	Max.10	μs
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	

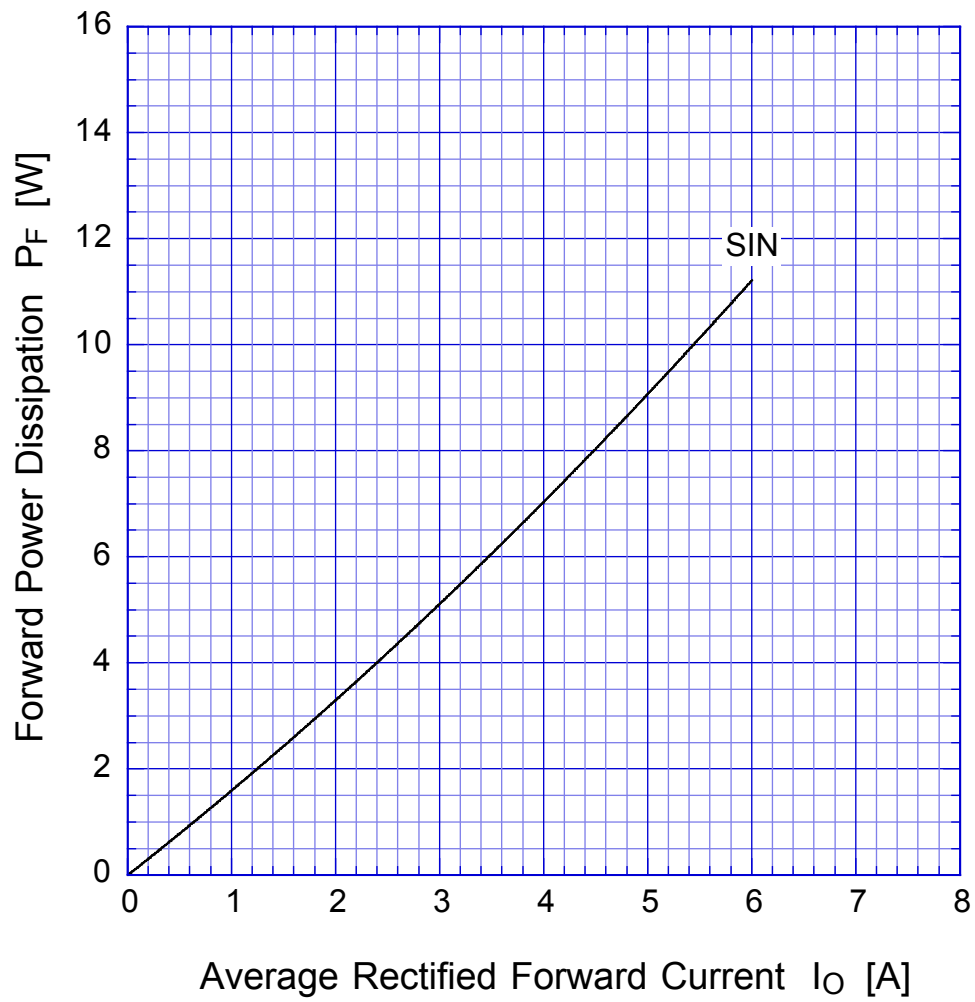


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Forward Voltage



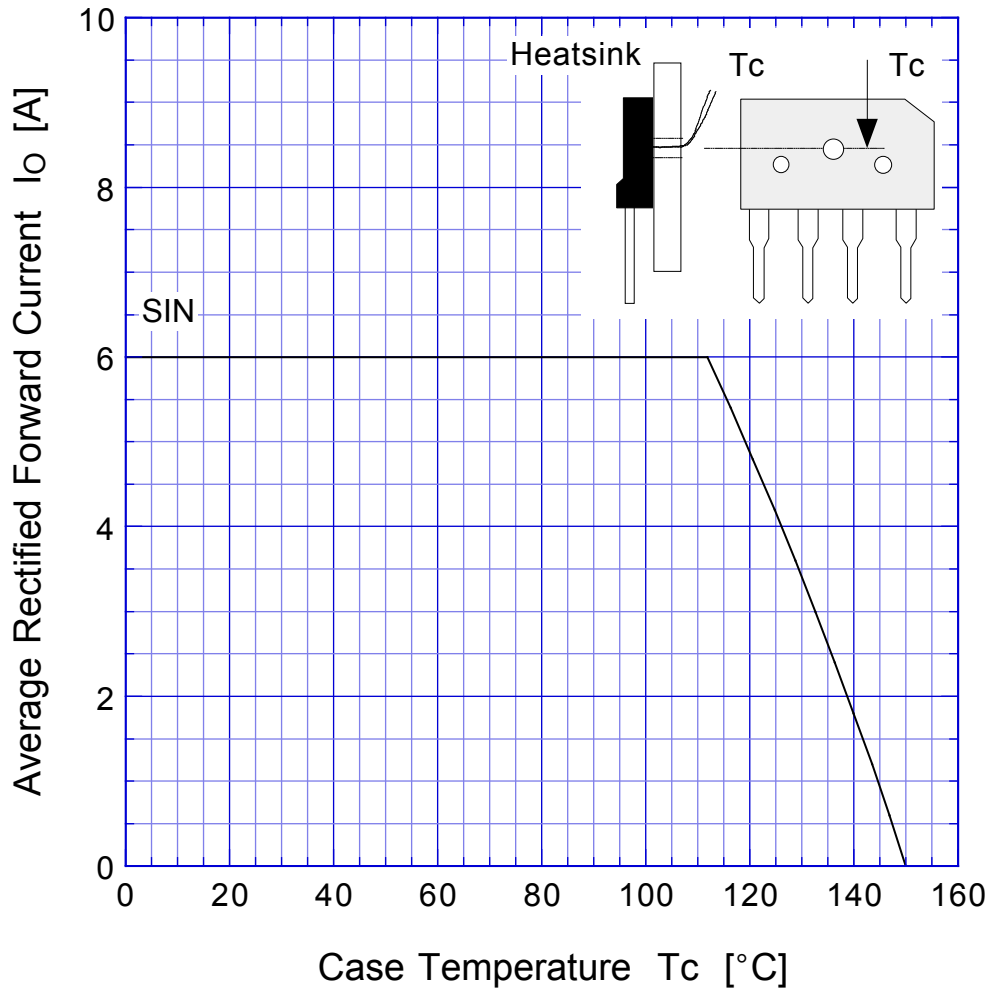
D6SB60L Forward Power Dissipation



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

D6SB60L

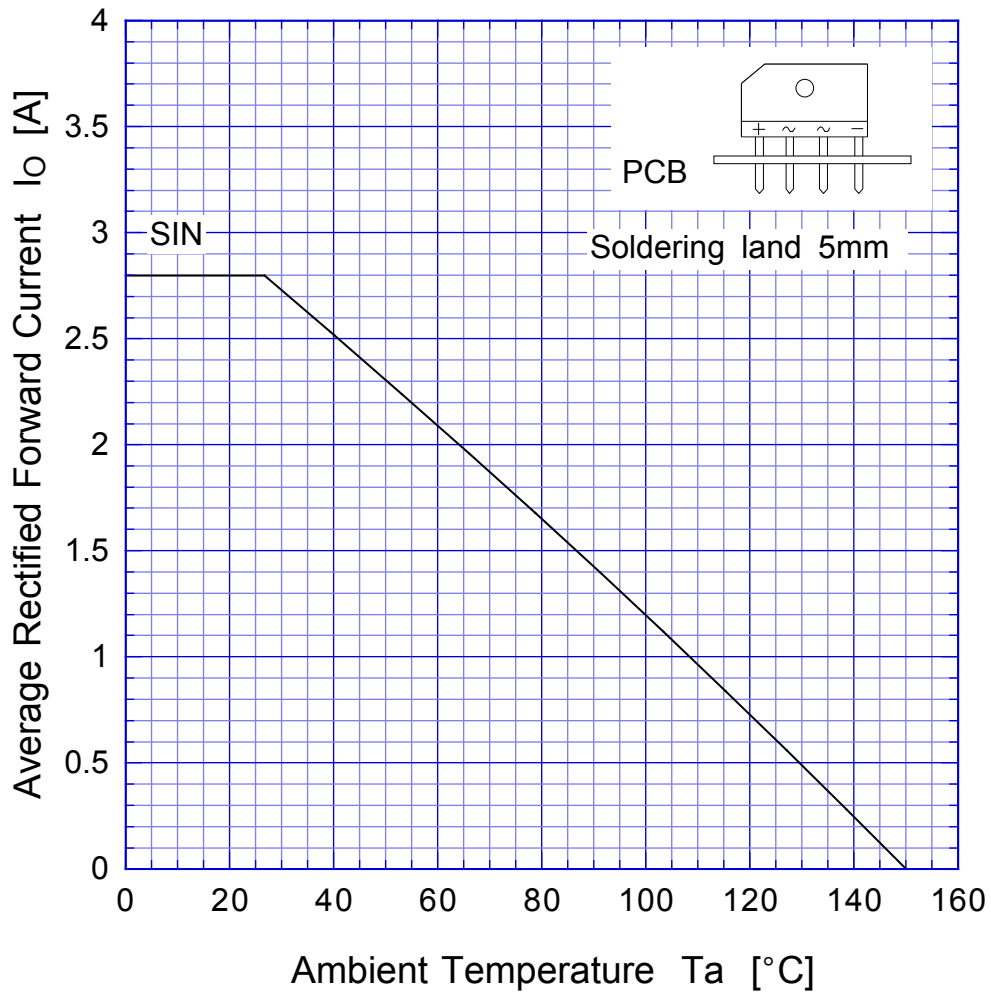
Derating Curve



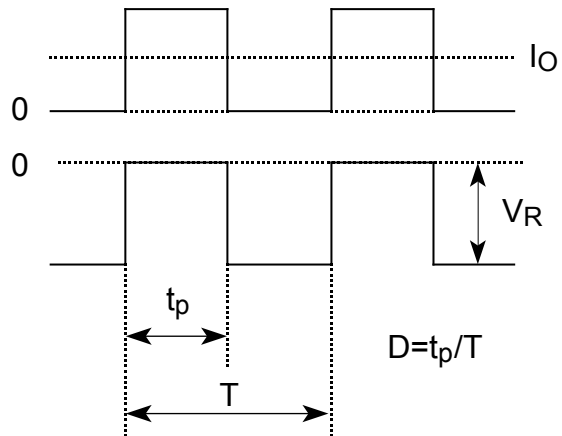
Sine wave
R-load
with heatsink

D6SB60L

Derating Curve



$V_R = 600V$



D6SB60L

Peak Surge Forward Capability

