

SHINDENGEN

Bridge Diode

Square In-line Package

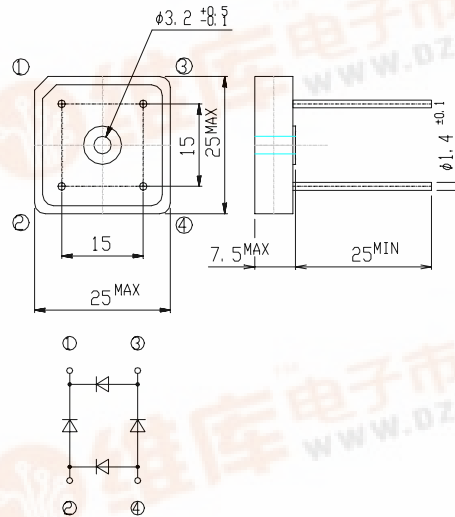
S5VB60

600V 6A

OUTLINE DIMENSIONS

Case : S5VB

Unit : mm



RATINGS

● Absolute Maximum Ratings

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T_{stg}		-40~150	°C
Operating Junction Temperature	T_j		150	°C
Maximum Reverse Voltage	V_{RM}		600	V
Average Rectified Forward Current	I_O	50Hz sine wave, R-load, $T_a=40^\circ\text{C}$ With heatsink $\theta_{fa}=6.4^\circ\text{C/W}$	6	A
		50Hz sine wave, R-load, $T_a=40^\circ\text{C}$ Without heatsink	3.5	
Peak Surge Forward Current	I_{FSM}	50Hz sine wave, Non-repetitive 1cycle peak value, $T_j=25^\circ\text{C}$	200	A
Current Squared Time	I^2t	$2\text{ms} \leq t < 10\text{ms}$ $T_c=25^\circ\text{C}$	150	A^2s
Mounting Torque	TOR	(Recommended torque : 0.5N·m)	0.8	N·m

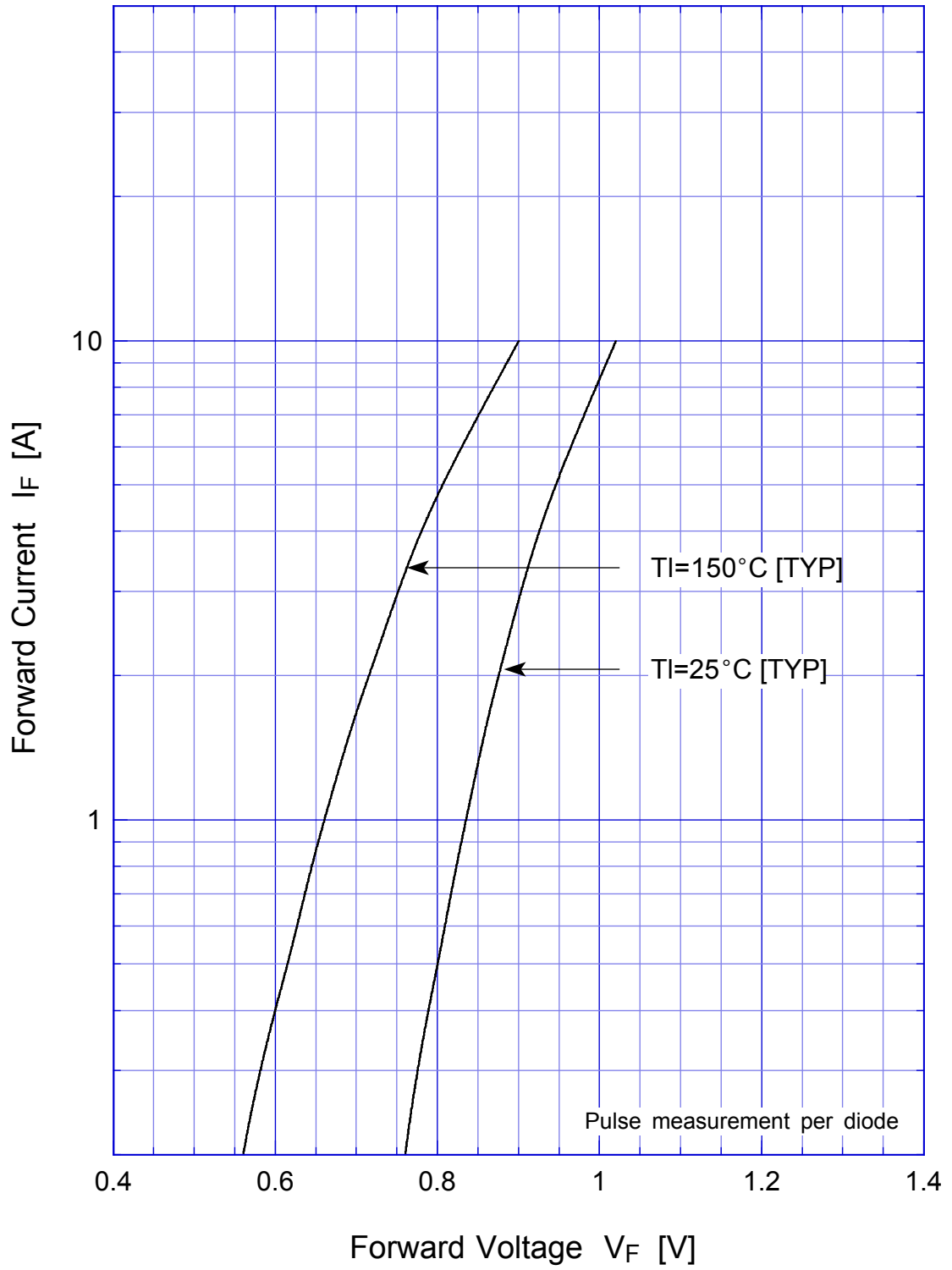
● Electrical Characteristics (Tl=25°C)

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
Thermal Resistance	θ_{jl}	junction to lead	Max.3	°C/W



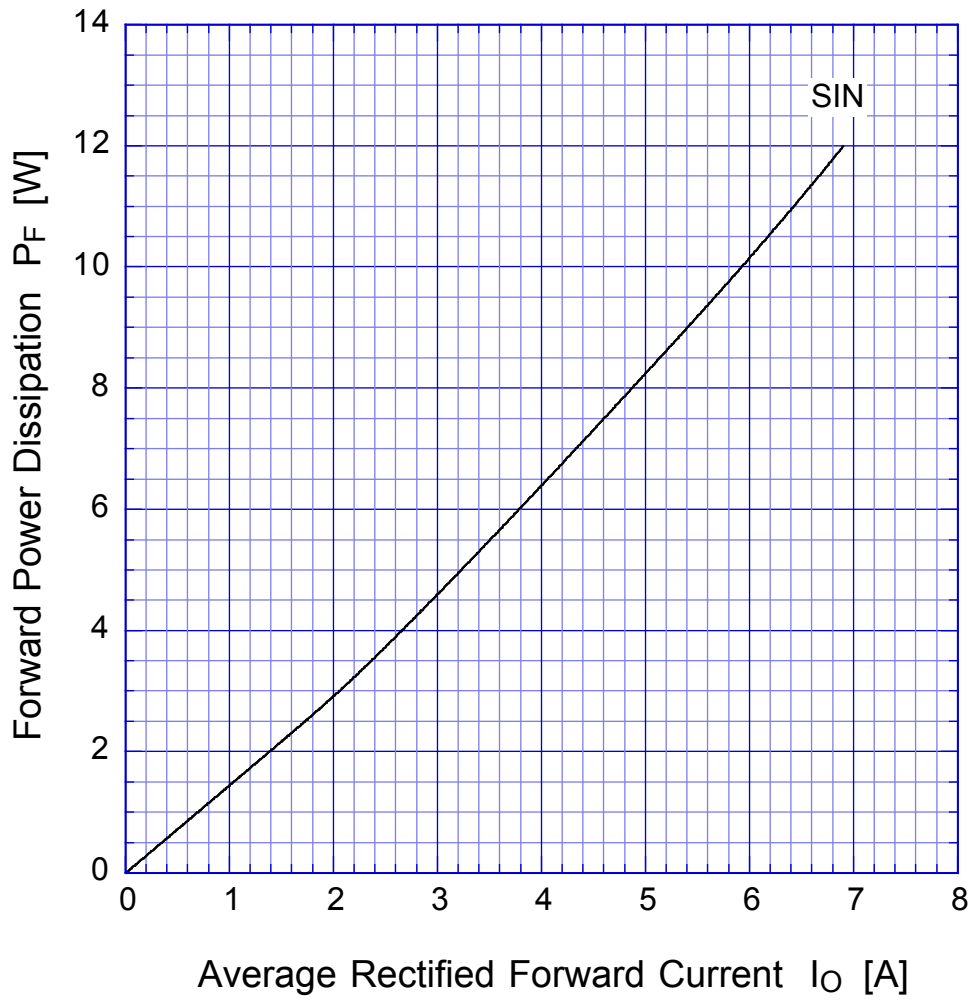
S5VBx

Forward Voltage



S5VBx

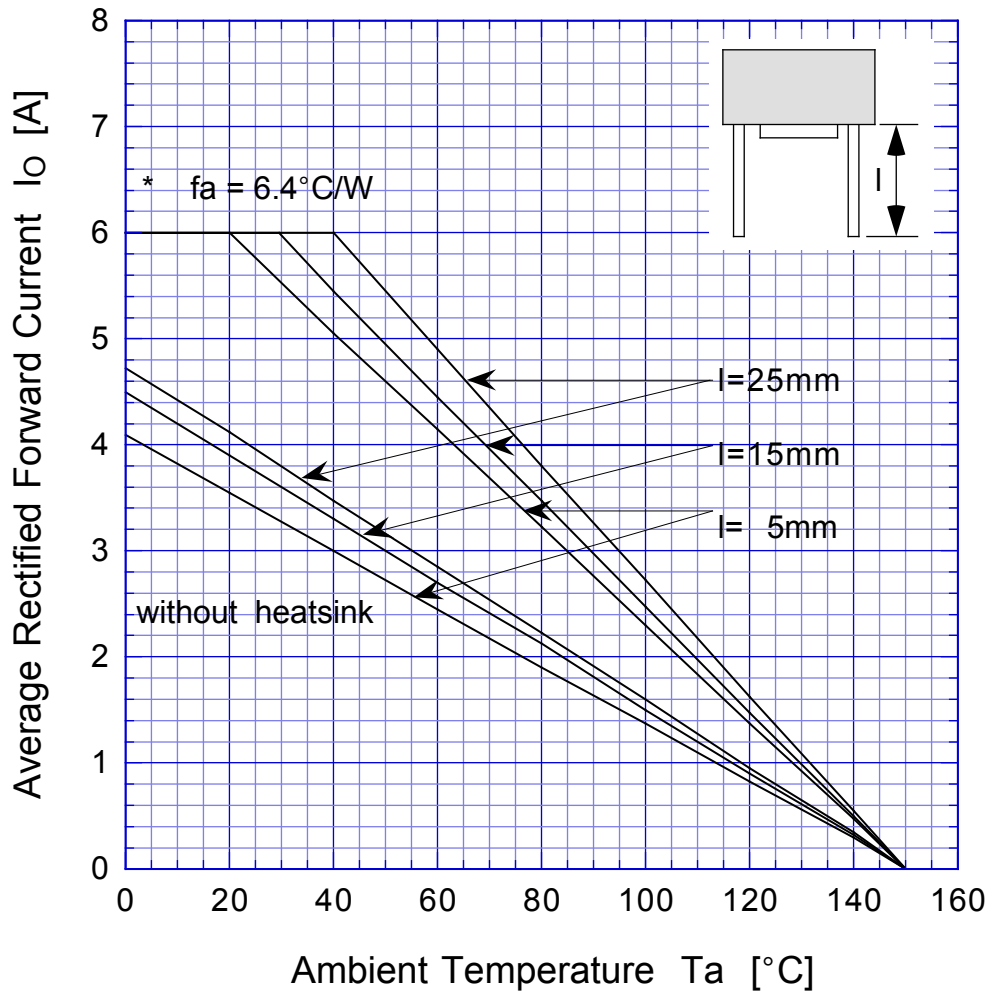
Forward Power Dissipation



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

S5VBx

Derating Curve



Sine wave

R-load

Free in air

* with thermal compound, TOR=5kg-cm

S5VBx

Peak Surge Forward Capability

