

SHINDENGEN

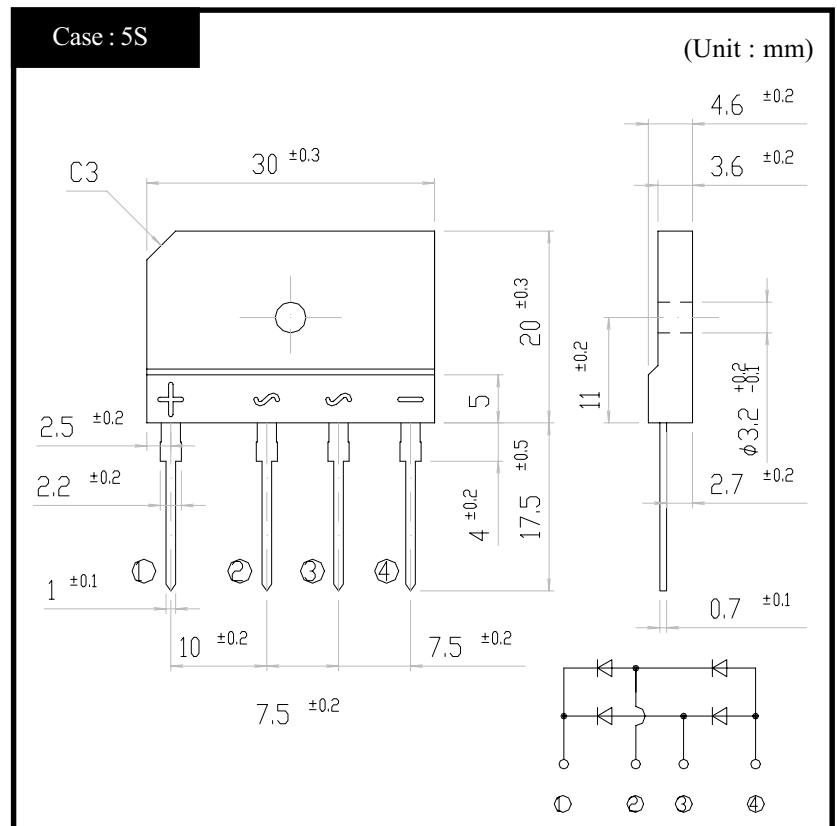
General Purpose Rectifiers

Low Noise Bridges

LN25XB60

600V 25A

OUTLINE DIMENSIONS



RATINGS

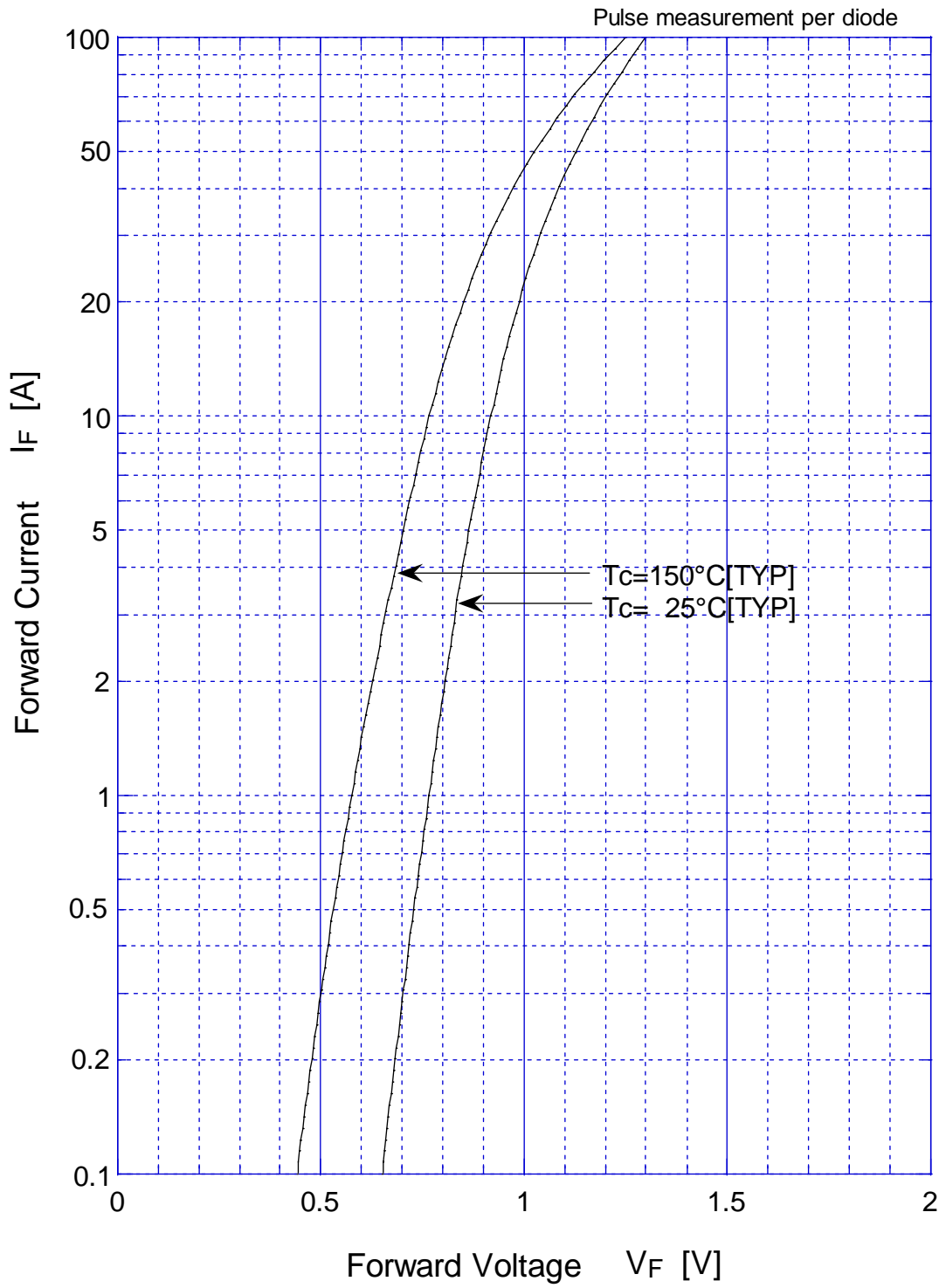
Absolute Maximum Ratings (Unless otherwise specified, $T_c=25^\circ\text{C}$)

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T_{stg}		-55~150	$^\circ\text{C}$
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, $T_c=85^\circ\text{C}$	25	A
	I_O	50Hz sine wave, R-load, Without heatsink, $T_a=25^\circ\text{C}$	3.4	A
Peak Surge Forward Current	I_{FSM}	50Hz sine wave, Non-repetitive 1cycle peak value, $T_j=25^\circ\text{C}$	350	A
Current Squared Time	I^2t	$1\text{ms} \leq t < 10\text{ms}$, per diode, $T_j=25^\circ\text{C}$	300	A^2s
Dielectric Strength	V_{dis}	Terminals to case, AC 1 minute	2.5	kV
Mounting Torque	TOR	(Recommended torque : 0.5 N.m)	0.8	N.m

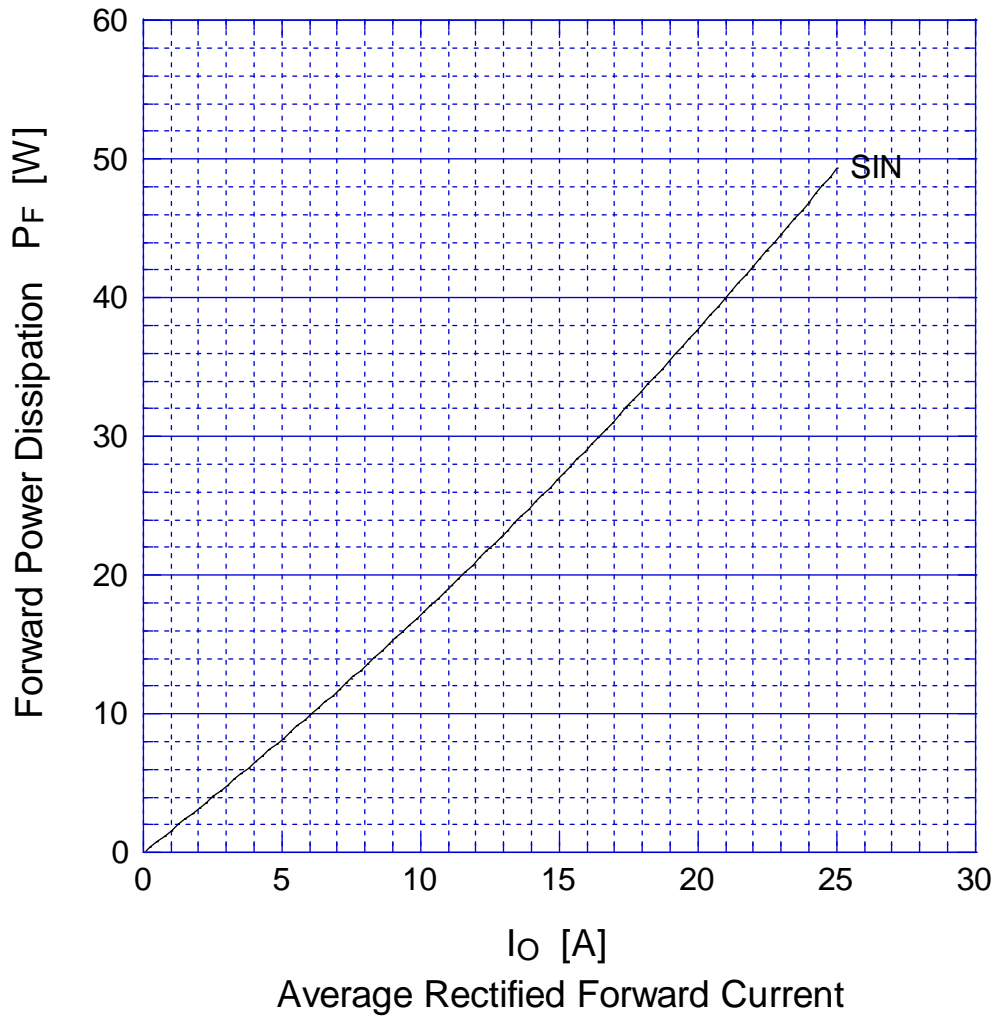
Electrical Characteristics (Unless otherwise specified, $T_c=25^\circ\text{C}$)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V_F	$I_F=12.5\text{A}$, 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 5	μs
Thermal Resistance	θ_{jc}	Junction to case, With heatsink	Max 1.3	$^\circ\text{C}/\text{W}$
	θ_{jl}	junction to lead, Without heatsink	Max 5	
	θ_{ja}	junction to ambient, Without heatsink	Max 23	

LN25XB60 Forward Voltage

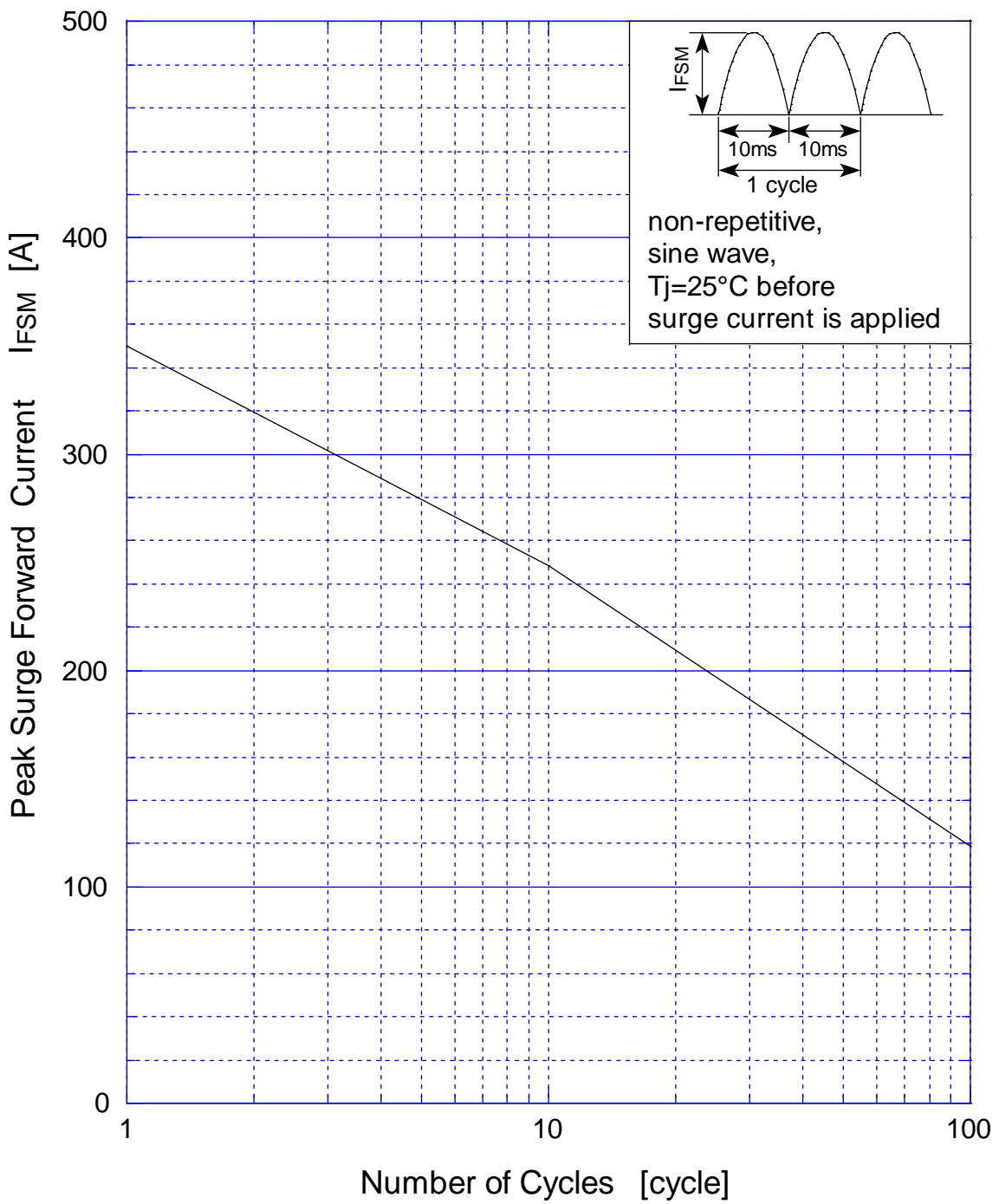


LN25XB60 Forward Power Dissipation



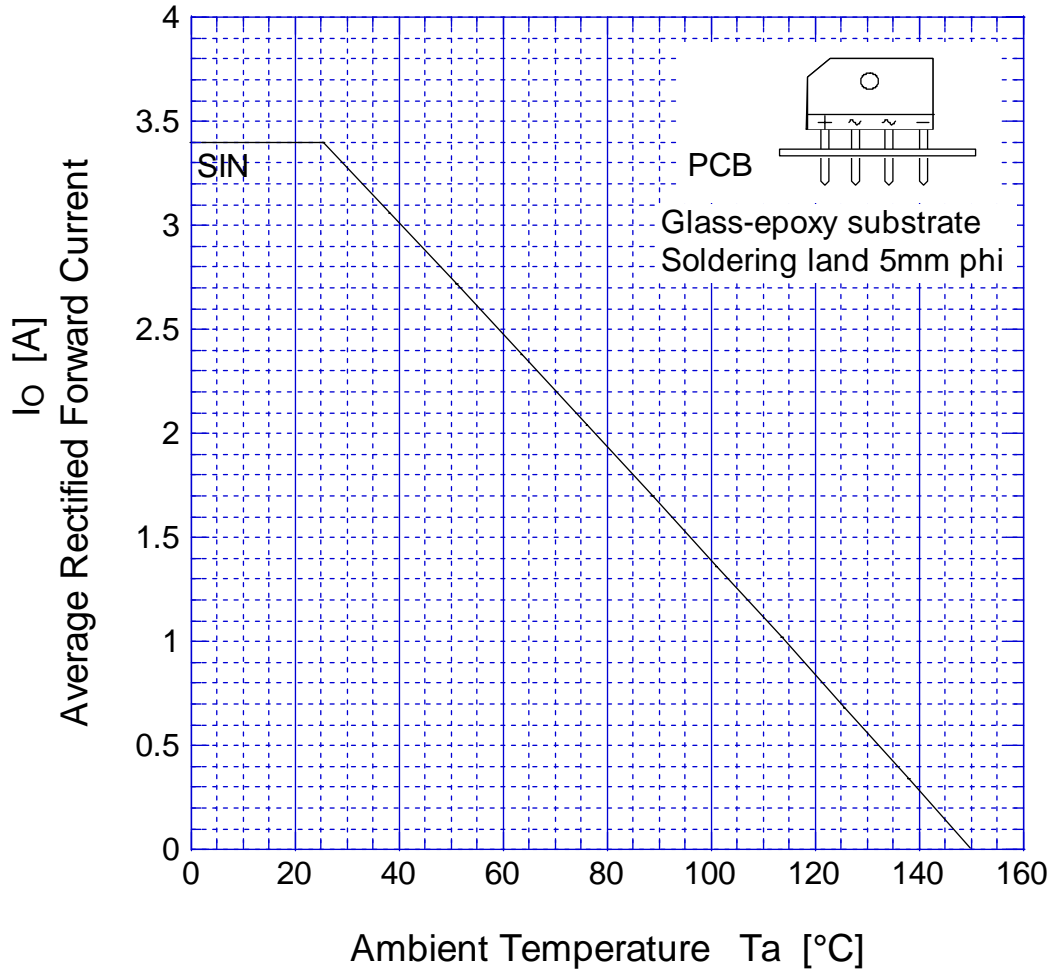
$T_j = 150^\circ\text{C}$

LN25XB60 Peak Surge Forward Capability



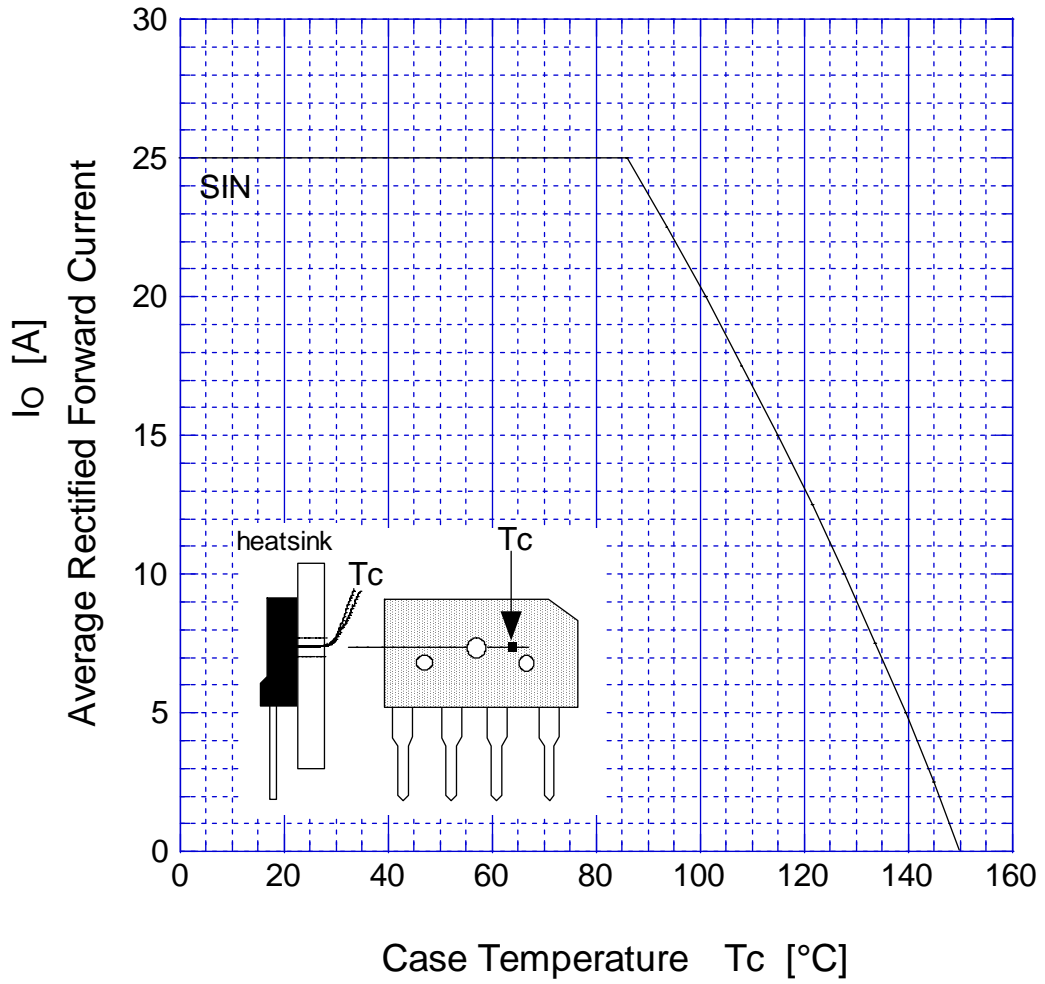
LN25XB60

Derating Curve



$$V_R = V_{RM}$$

LN25XB60 Derating Curve



$$V_R = V_{RM}$$