

SHINDENGEN

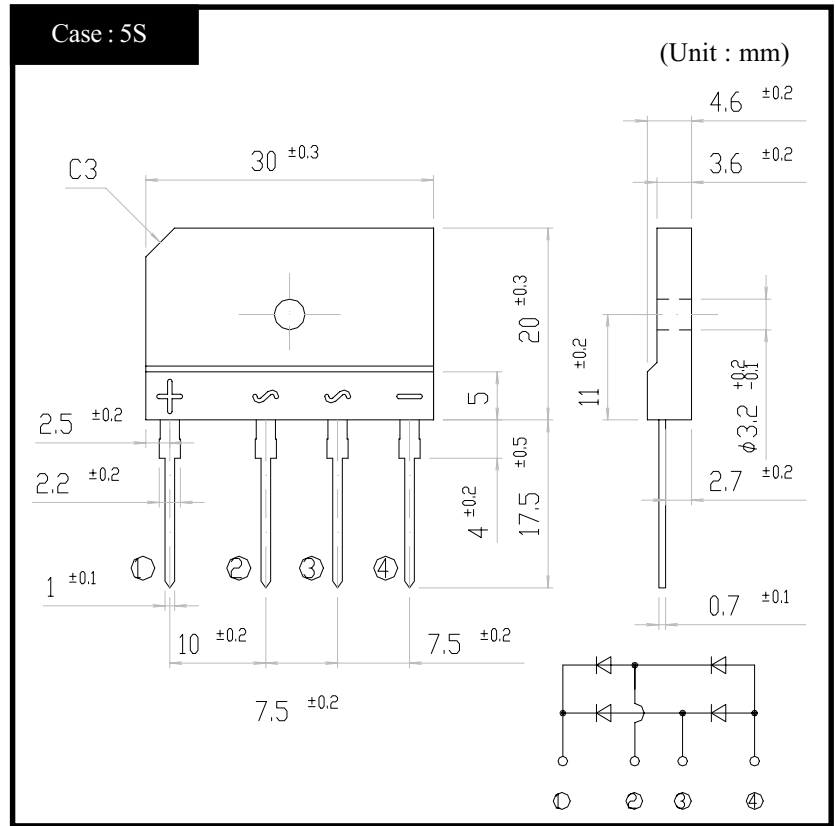
General Purpose Rectifiers

Low Noise Bridges

LN15XB60

600V 15A

OUTLINE DIMENSIONS



RATINGS

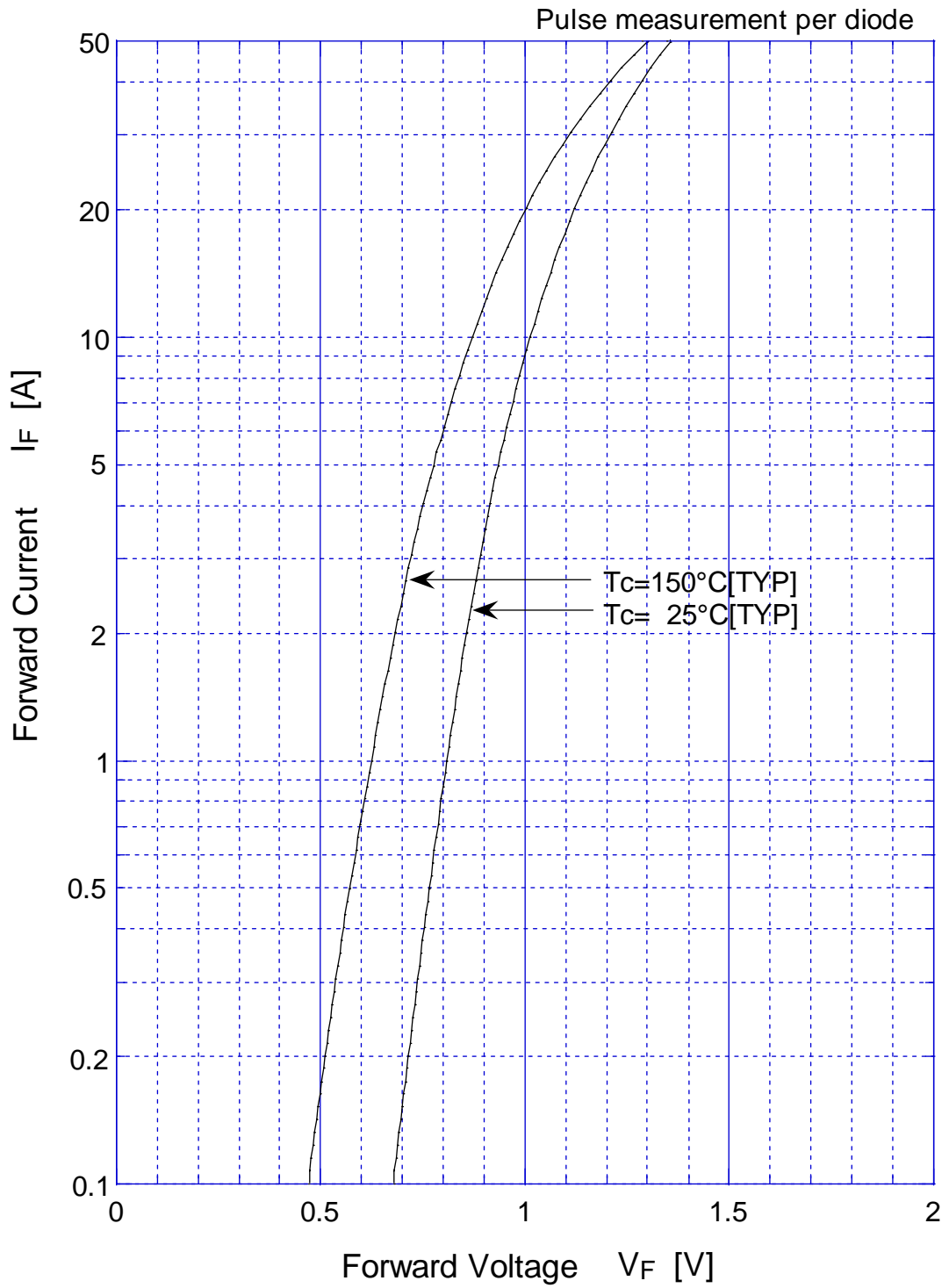
Absolute Maximum Ratings (Unless otherwise specified, Tc=25°C)

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-55 ~ 150	°C
Operating Junction Temperature	Tj		150	°C
Maximum Reverse Voltage	VRM		600	V
Average Rectified Forward Current	IO	50Hz sine wave, R-load, With heatsink, Tc=100°C	15	A
	IO	50Hz sine wave, R-load, Without heatsink, Ta=25°C	3.0	A
Peak Surge Forward Current	IFSM	50Hz sine wave, Non-repetitive 1cycle peak value, Tj=25°C	200	A
Current Squared Time	I ² t	1ms ≤ t < 10ms, per diode, Tj=25°C	90	A ² s
Dielectric Strength	Vdis	Terminals to case, AC 1 minute	2.5	kV
Mounting Torque	TOR	(Recommended torque : 0.5 N.m)	0.8	N.m

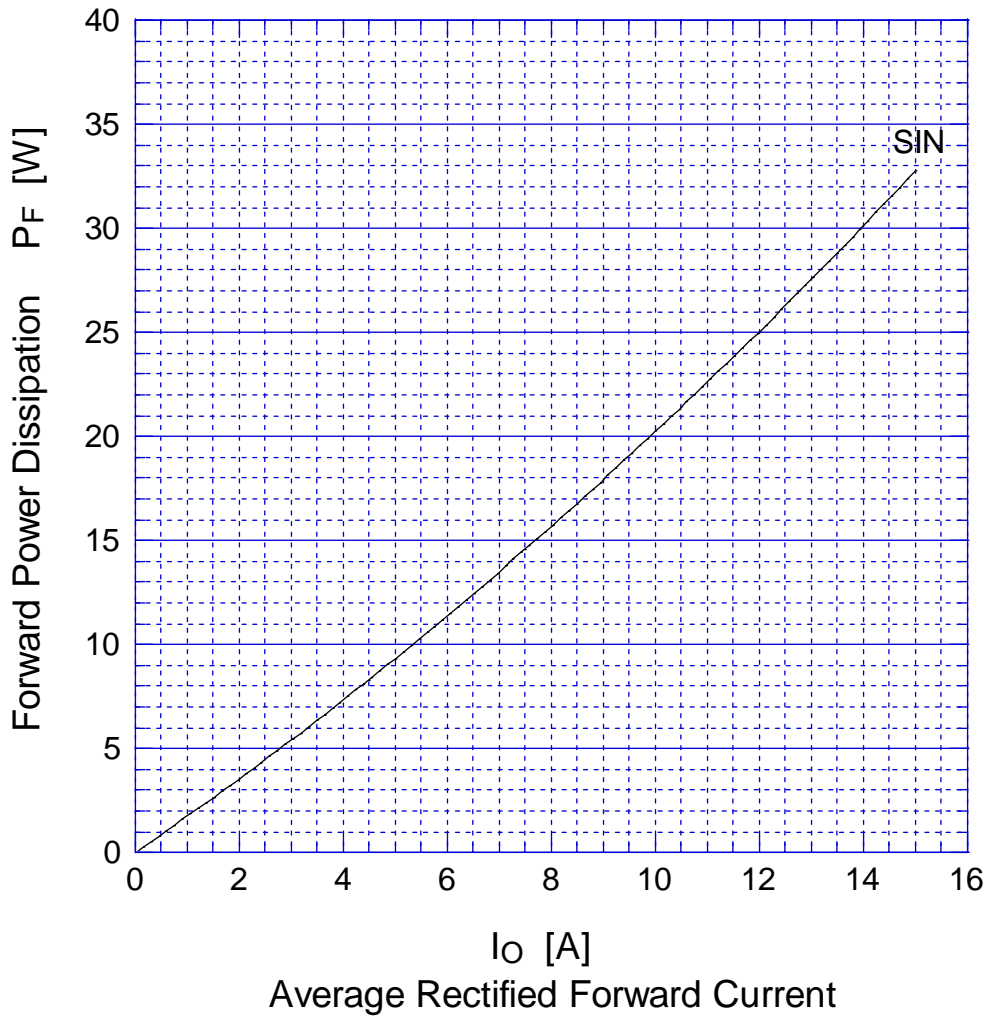
Electrical Characteristics (Unless otherwise specified, Tc=25°C)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	VF	IF=7.5A, Pulse measurement, Rating of per diode	Max 1.1	V
Reverse Current	IR	VR=VRM, Pulse measurement, Rating of per diode	Max 10	μA
Reverse Recovery Time	trr	IF=0.1A, IR=0.1A, Rating of per diode	Max 5	μs
Thermal Resistance	θjc	Junction to case, With heatsink	Max 1.5	°C/W
	θjl	junction to lead, Without heatsink	Max 5	
	θja	junction to ambient, Without heatsink	Max 23	

LN15XB60 Forward Voltage

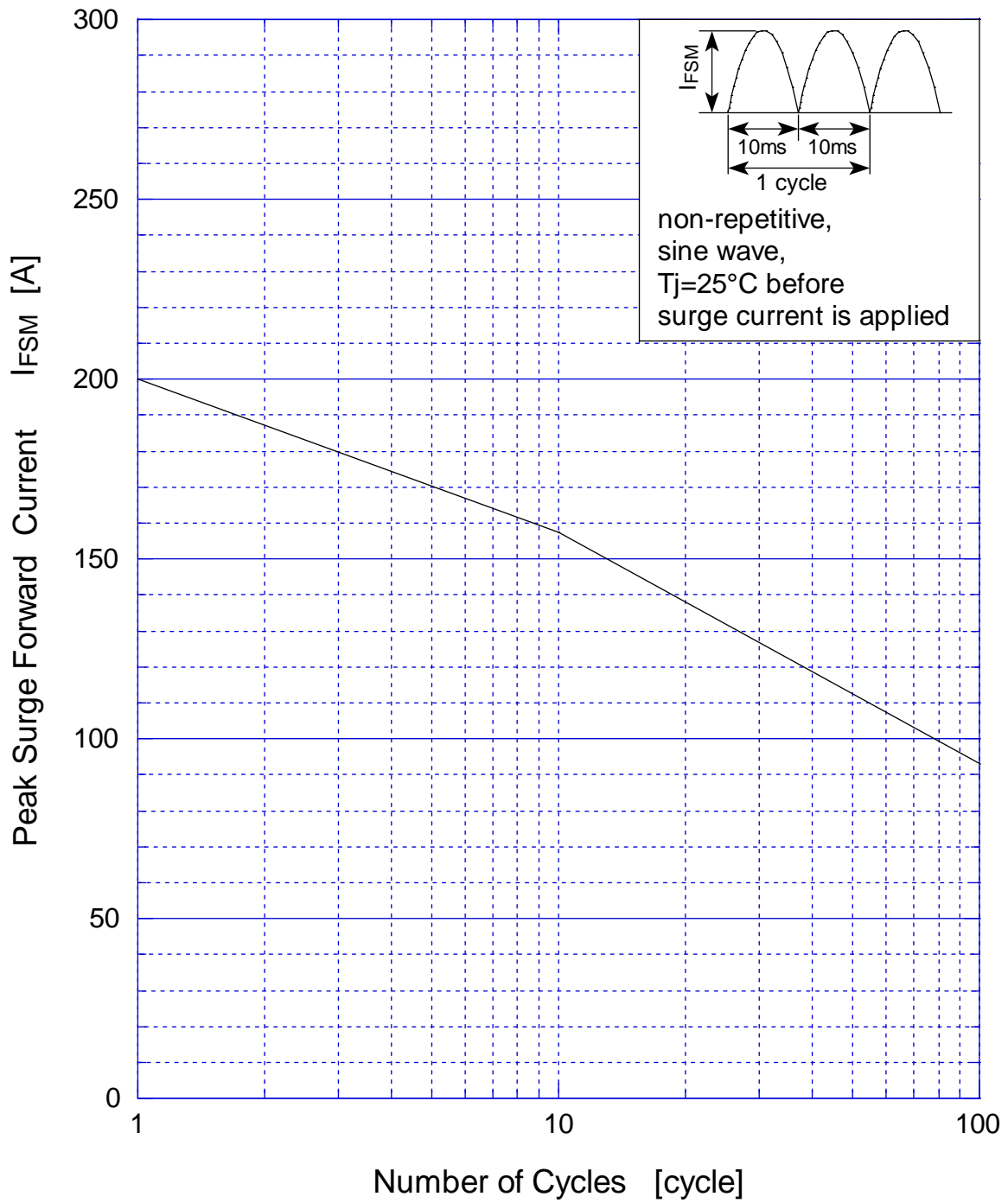


LN15XB60 Forward Power Dissipation



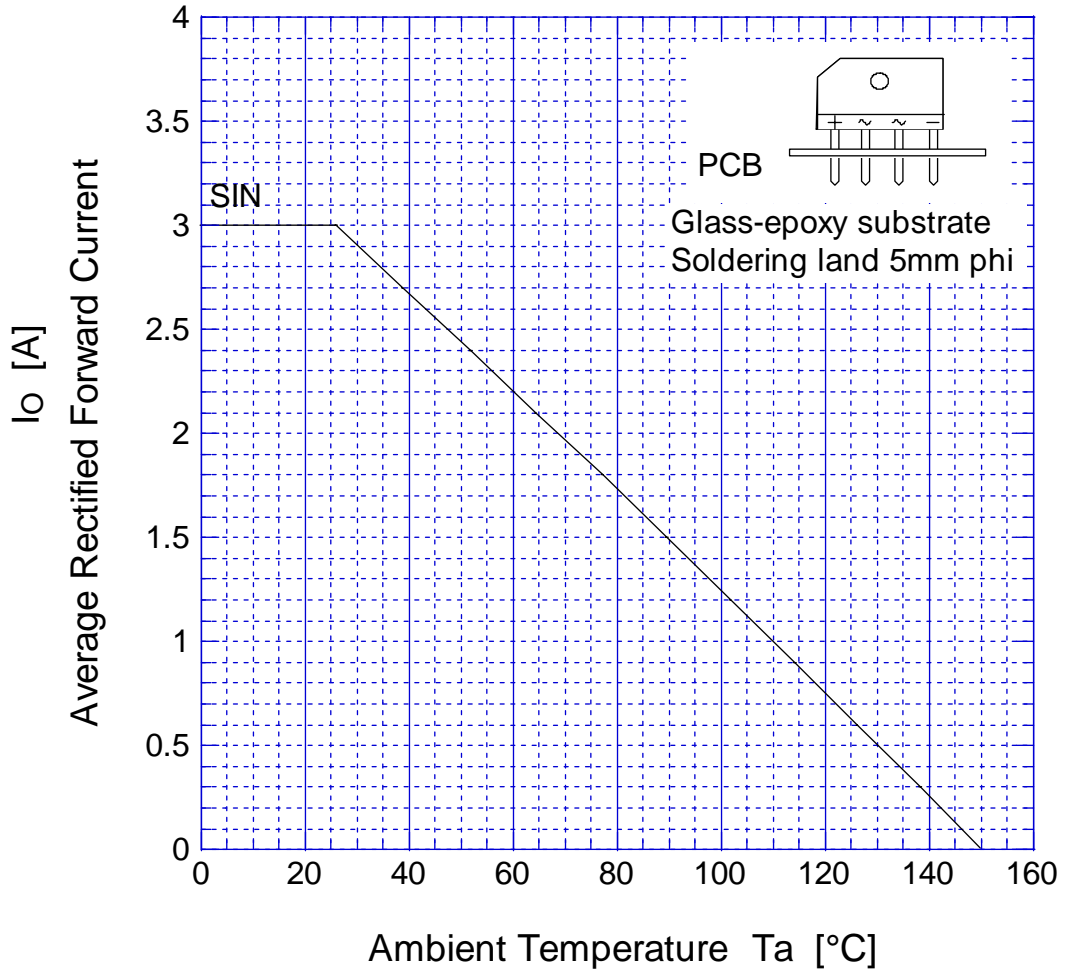
$T_j = 150^\circ\text{C}$

LN15XB60 Peak Surge Forward Capability



LN15XB60

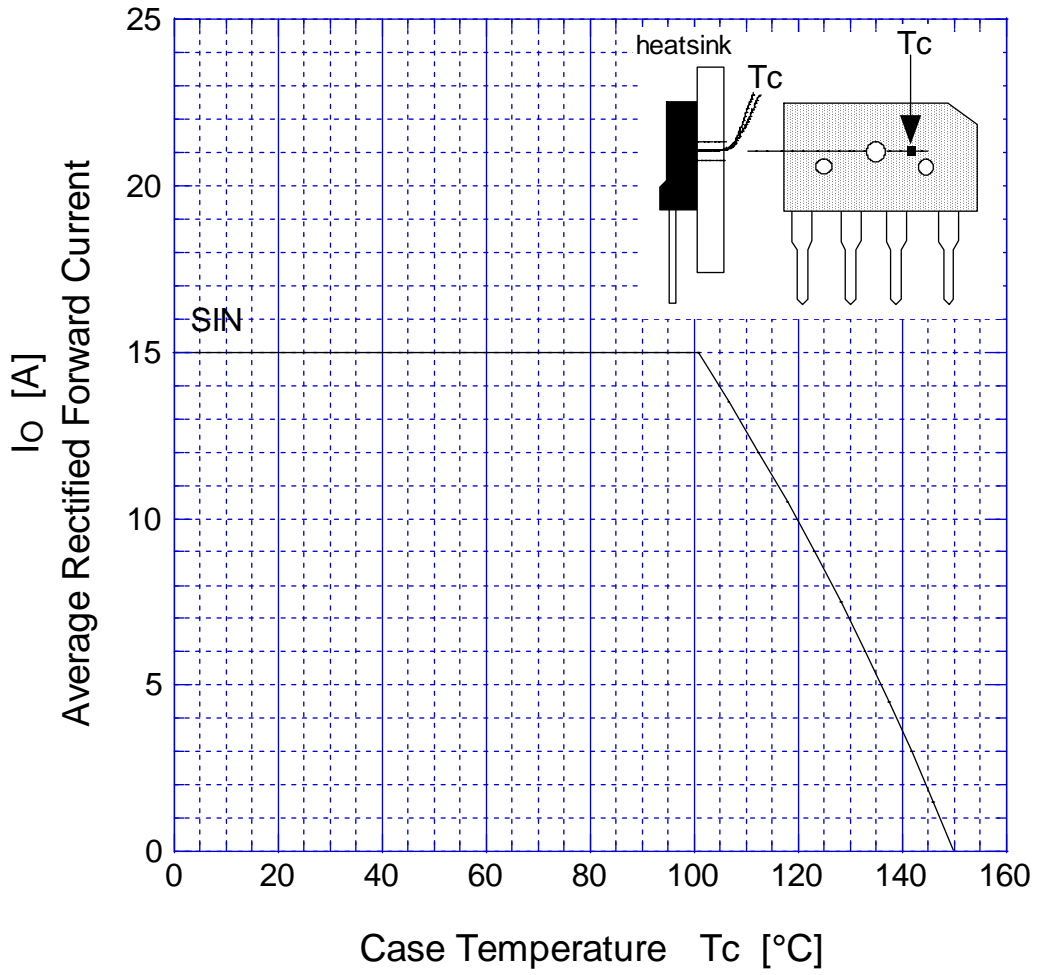
Derating Curve



$$V_R = V_{RM}$$

LN15XB60

Derating Curve



$$V_R = V_{RM}$$