

SHINDENGEN

General Purpose Rectifiers

SIL Bridges

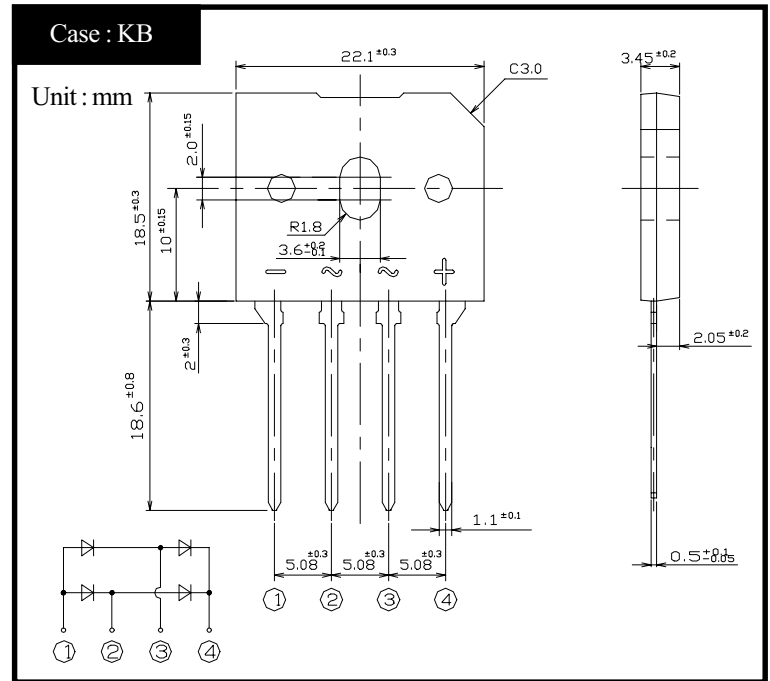
U8KBA80R

800V 8A

APPLICATION

- Monitor
- TV
- Audio equipment
- Printer
- SMPS
- Adapter for notebook PC
- Power supply for desktop PC

OUTLINE DIMENSIONS



RATINGS

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

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T_{stg}		-55 to 150	$^\circ\text{C}$
Operating Junction Temperature	T_j		150	$^\circ\text{C}$
Maximum Reverse Voltage	V_{RM}		800	V
Average Rectified Forward Current	I_O	50Hz sine wave, R-load, On glass-epoxy substrate $T_a=26^\circ\text{C}$	3.4	A
		50Hz sine wave, R-load, With heatsink $T_c=82^\circ\text{C}$	8	
Peak Surge Forward Current	I_{FSM}	60Hz sine wave, Non-repetitive 1cycle peak value, Rating of per diode, $T_j = 25^\circ\text{C}$	200	A
Current Squared Time	I^2t	$1\text{ms} \leq t < 10\text{ms}$ $T_j=25^\circ\text{C}$, Rating of per diode	110	A^2s
Dielectric Strength	V_{dis}	Terminals to case, AC 1 minute	2.0	kV
Mounting Torque	TOR	(Recommended torque: $0.5\text{N}\cdot\text{m}$)	0.8	$\text{N}\cdot\text{m}$

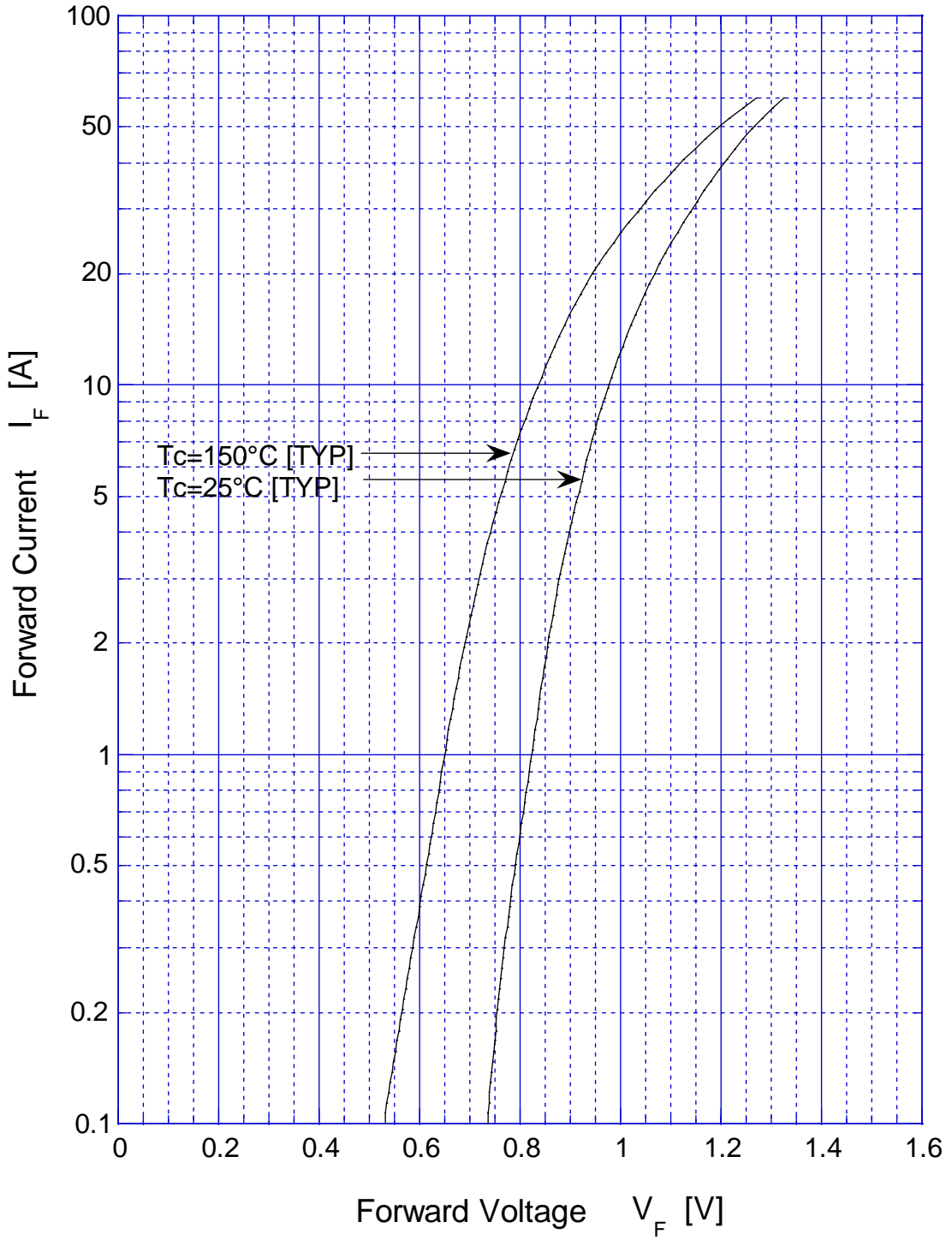
Electrical Characteristics (If not specified, $T_c=25^\circ\text{C}$)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V_F	$I_F=8\text{A}$, Pulse measurement, Rating of per diode	Max 1.0	V
Reverse Current	I_R	$V_R=800\text{V}$, Pulse measurement, Rating of per diode	Max 10	μA
Thermal Resistance	θ_{jl}	junction to lead, On glass-epoxy substrate	Max 4.2	$^\circ\text{C}/\text{W}$
	θ_{ja}	junction to ambient, On glass-epoxy substrate	Max 23	
	θ_{jc}	junction to case	Max 5.0	

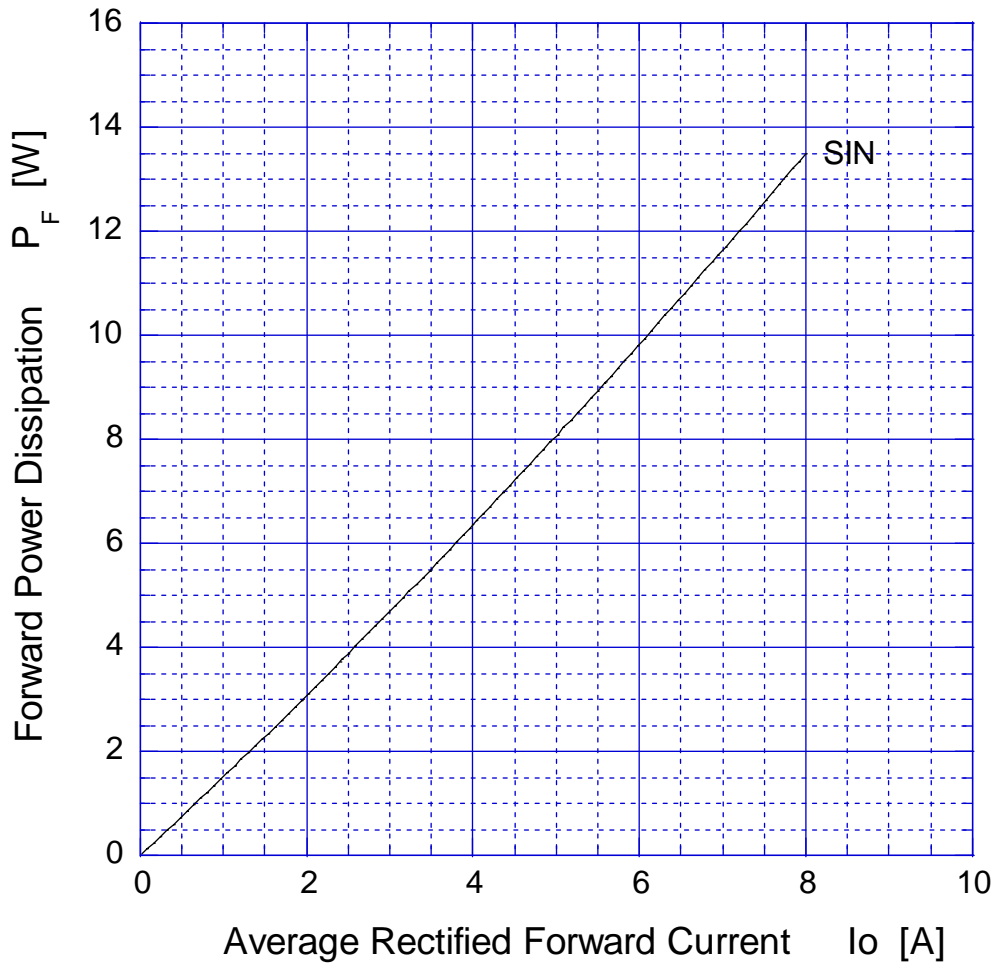
U8KBA80R

Forward Voltage

Pulse measurement per diode



U8KBA80R Forward Power Dissipation

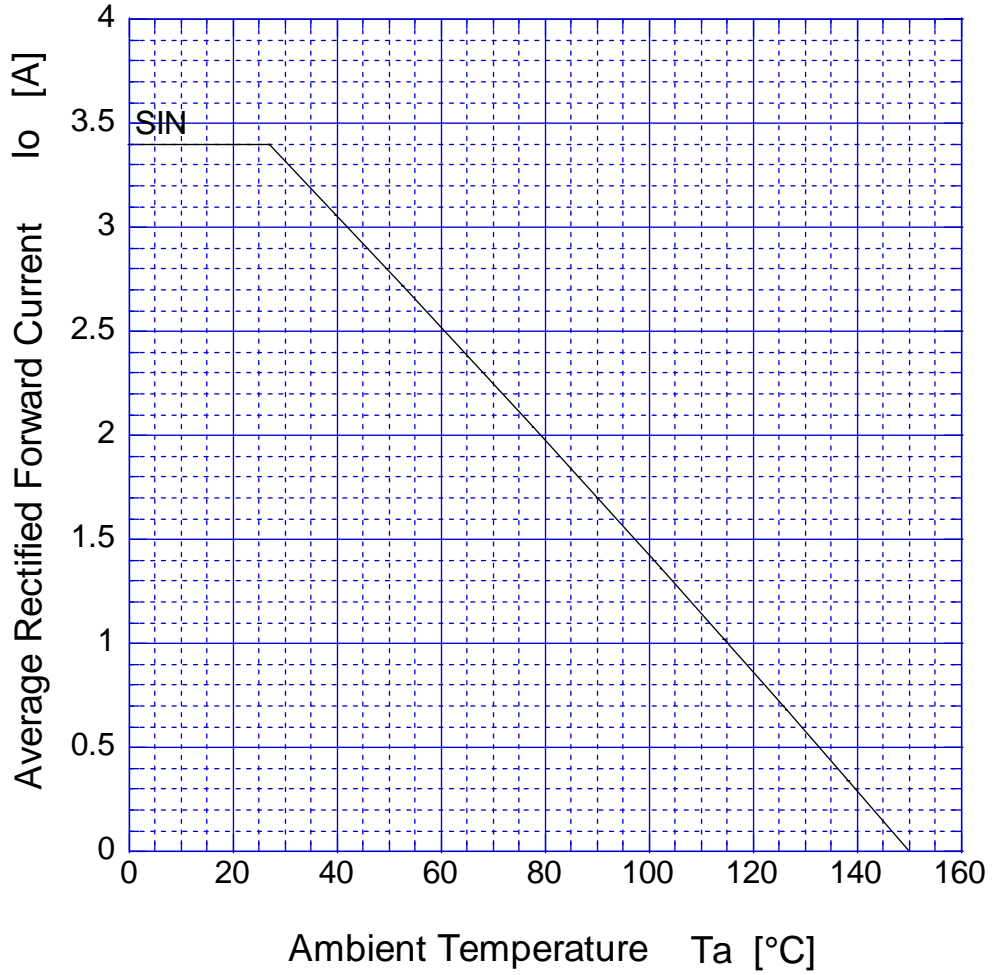


$T_j = 150^\circ\text{C}$

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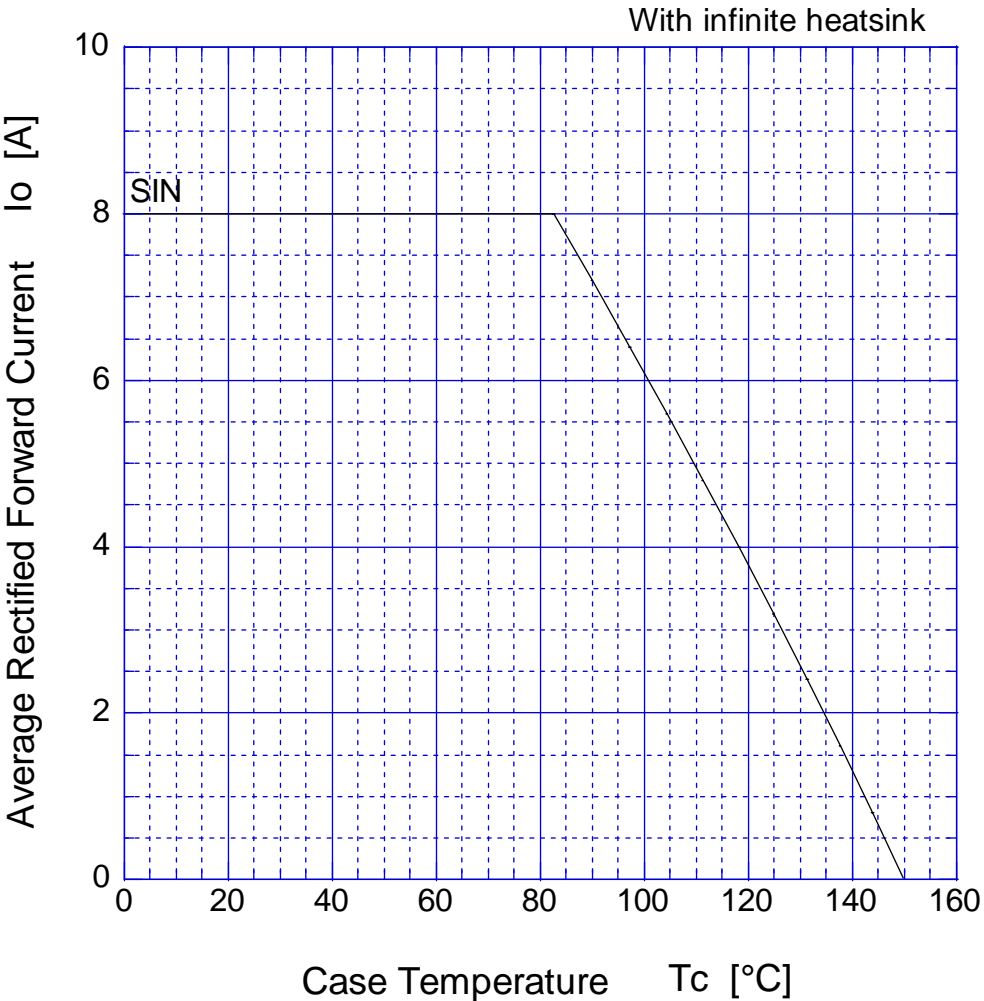
Derating Curve

Conductor Area 172.6cm²



U8KBA80R

Derating Curve



U8KBA80R Peak Surge Forward Capability

