

D10XB80

800V 10A

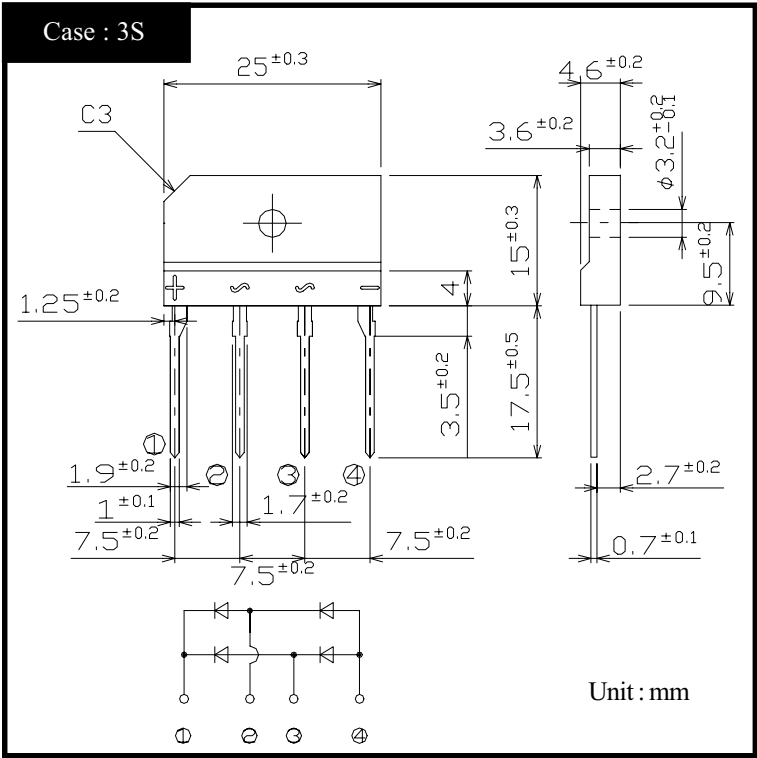
FEATURES

- Thin Single In-Line Package
- High current capacity with Small Package
- High IFSM
- Superior Thermal Conductivity

APPLICATION

- Switching power supply
- Home Appliances, Office Equipment
- Factory Automation, Inverter

OUTLINE DIMENSIONS



RATINGS

● Absolute Maximum Ratings (If not specified Tc=25°C)

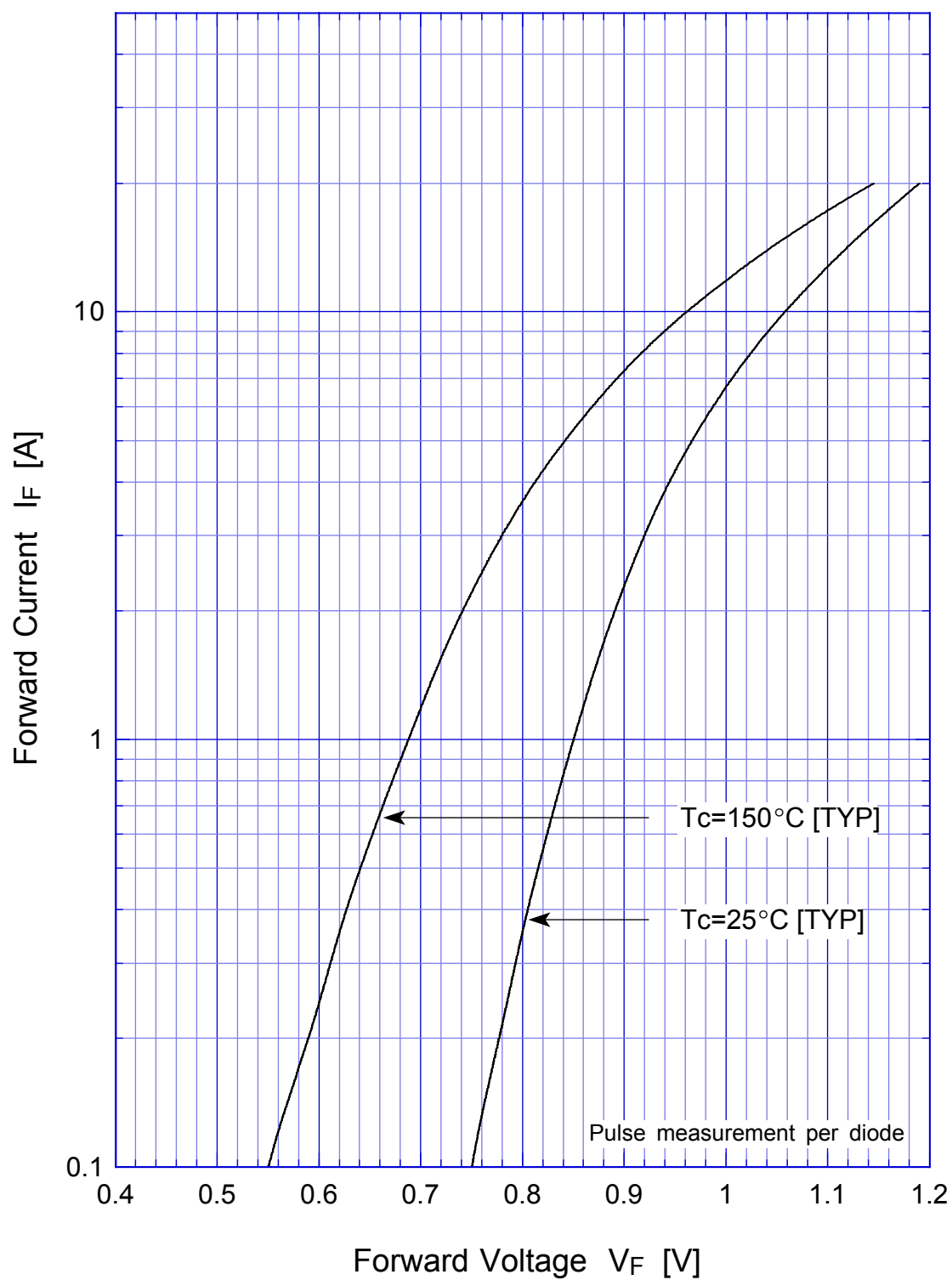
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-40~150	°C
Operating Junction Temperature	Tj		150	°C
Maximum Reverse Voltage	V _{RM}		800	V
Average Rectified Forward Current	I _O	50Hz sine wave, R-load With heatsink Tc=100°C	10	A
		50Hz sine wave, R-load Without heatsink Ta=25°C	2.7	
Peak Surge Forward Current	I _{FSM}	50Hz sine wave, Non-repetitive 1cycle peak value, Tj=25°C	120	A
Current Squared Time	I ² t	1ms≤t<10ms Tj=25°C	60	A ² s
Dielectric Strength	Vdis	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 Tc=25°C)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V _F	I _F =5A, Pulse measurement, Rating of per diode	Max.1.1	V
Reverse Current	I _R	V _R =V _{RM} , Pulse measurement, Rating of per diode	Max.10	μA
Thermal Resistance	θ _{jc}	junction to case With heatsink	Max.2.3	°C/W
	θ _{jl}	junction to lead Without heatsink	Max.6	
	θ _{ja}	junction to ambient Without heatsink	Max.26	

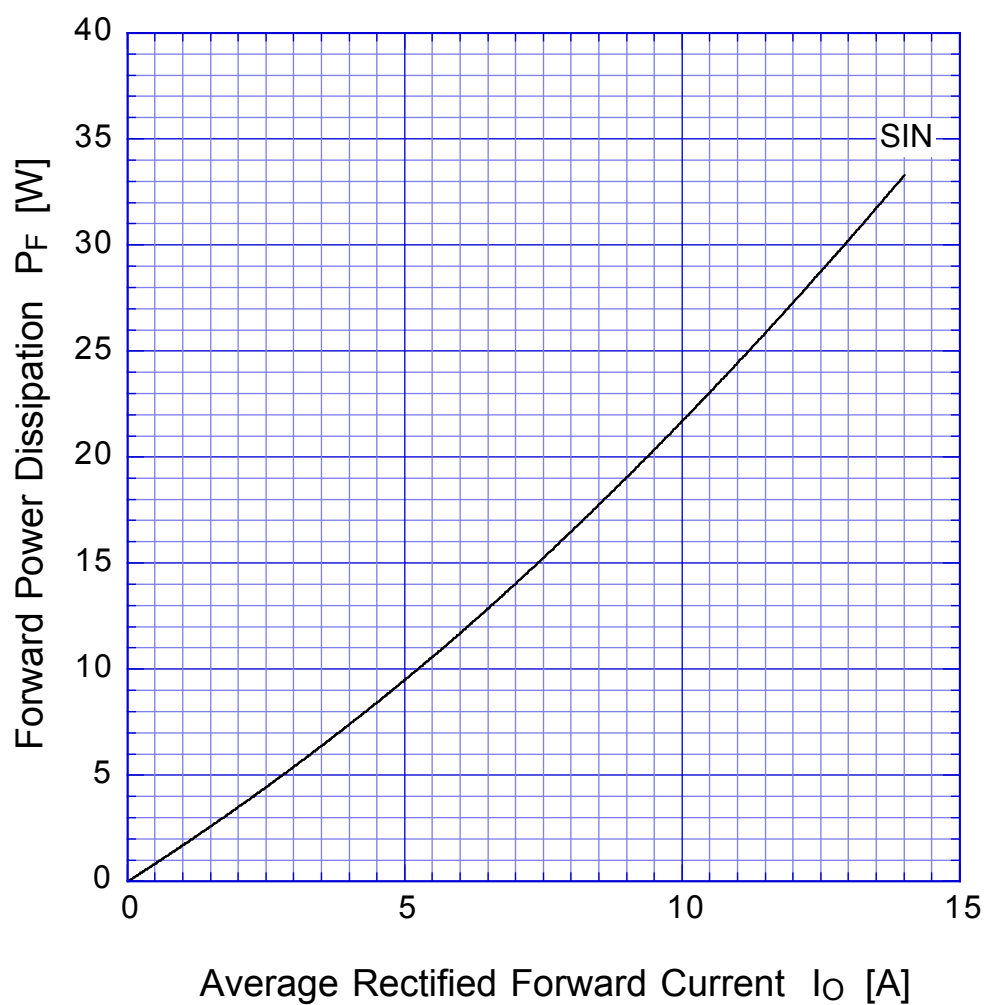
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Forward Voltage



D10XBx

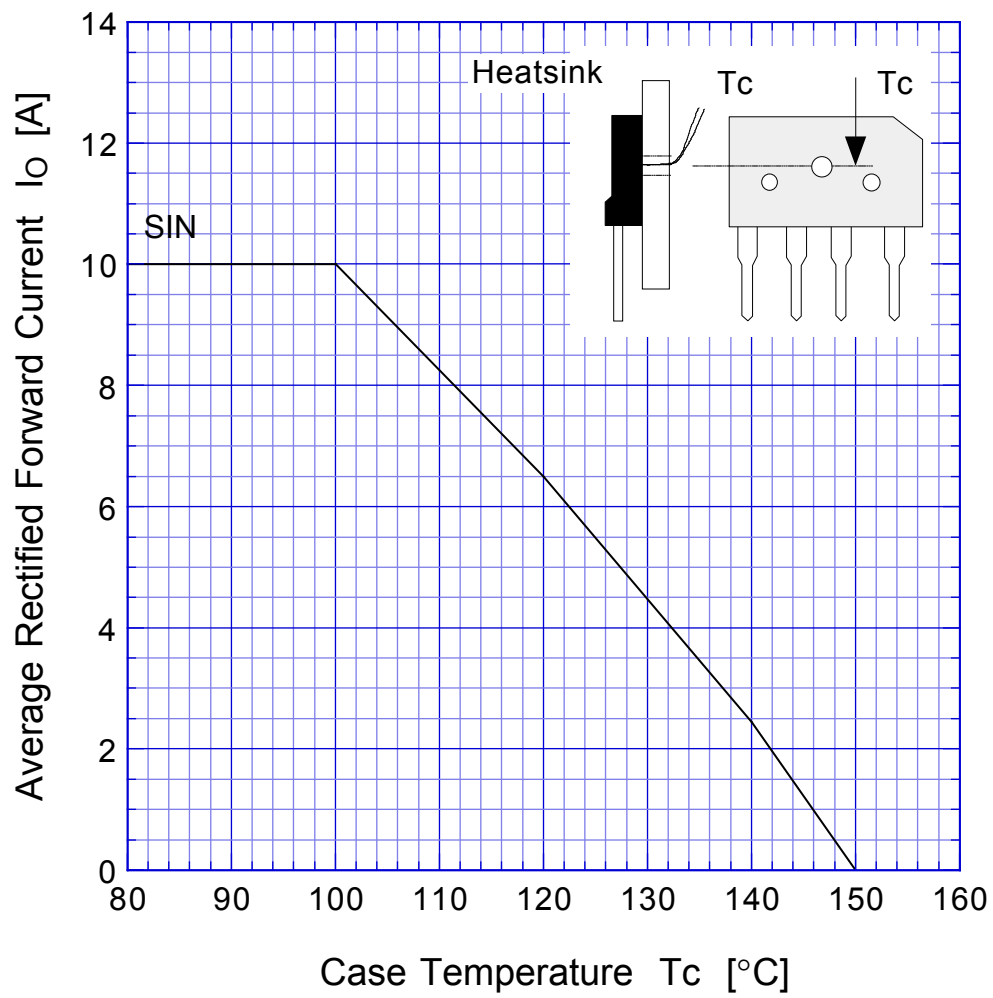
Forward Power Dissipation



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

D10XBx

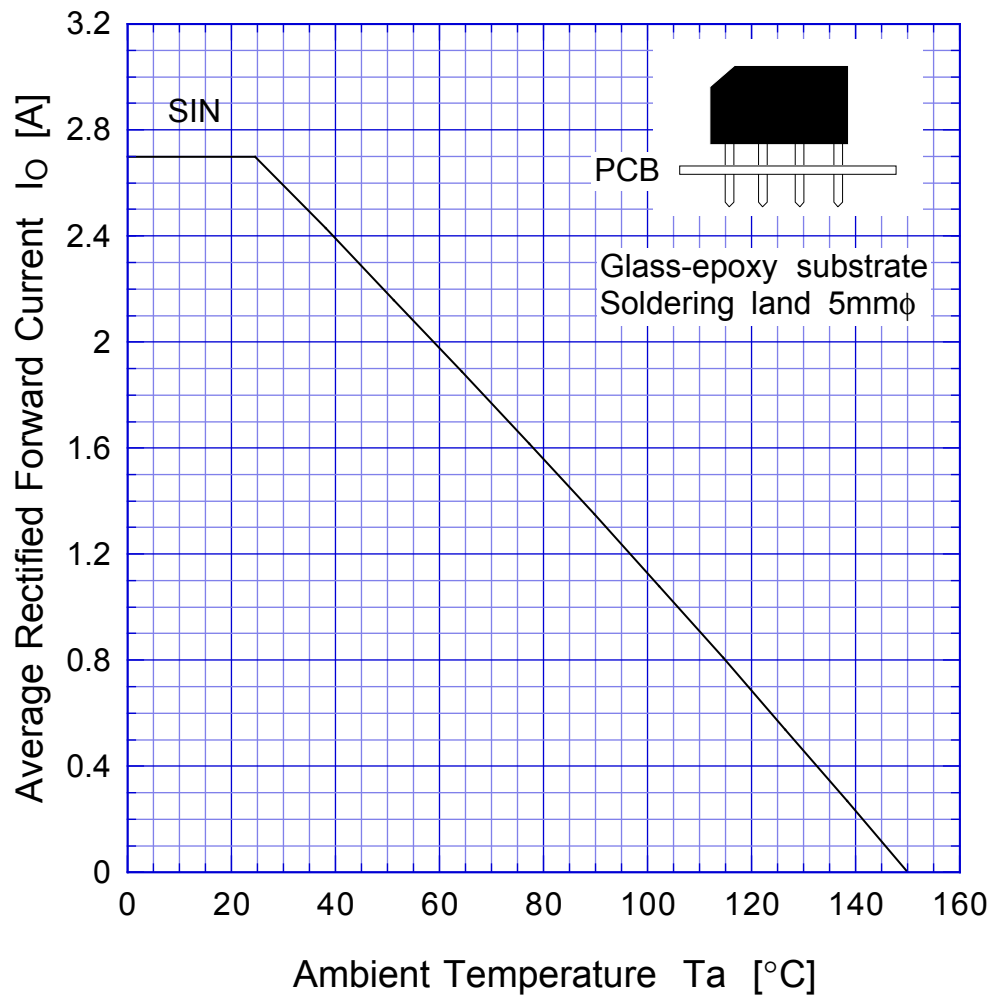
Derating Curve



Sine wave
R-load
with heatsink

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Derating Curve



D10XBx

Peak Surge Forward Capability

