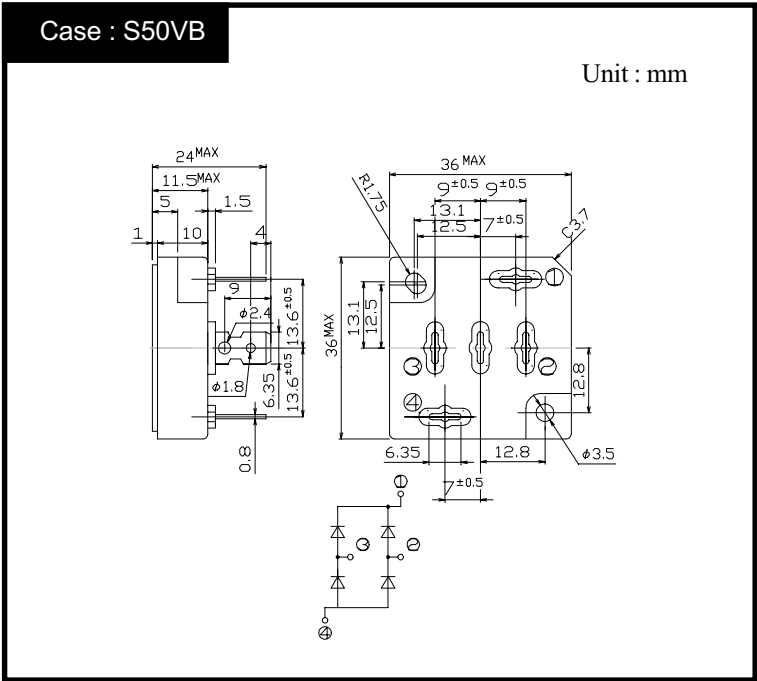


S50VB80

800V 50A

OUTLINE DIMENSIONS



RATINGS

● Absolute Maximum Ratings

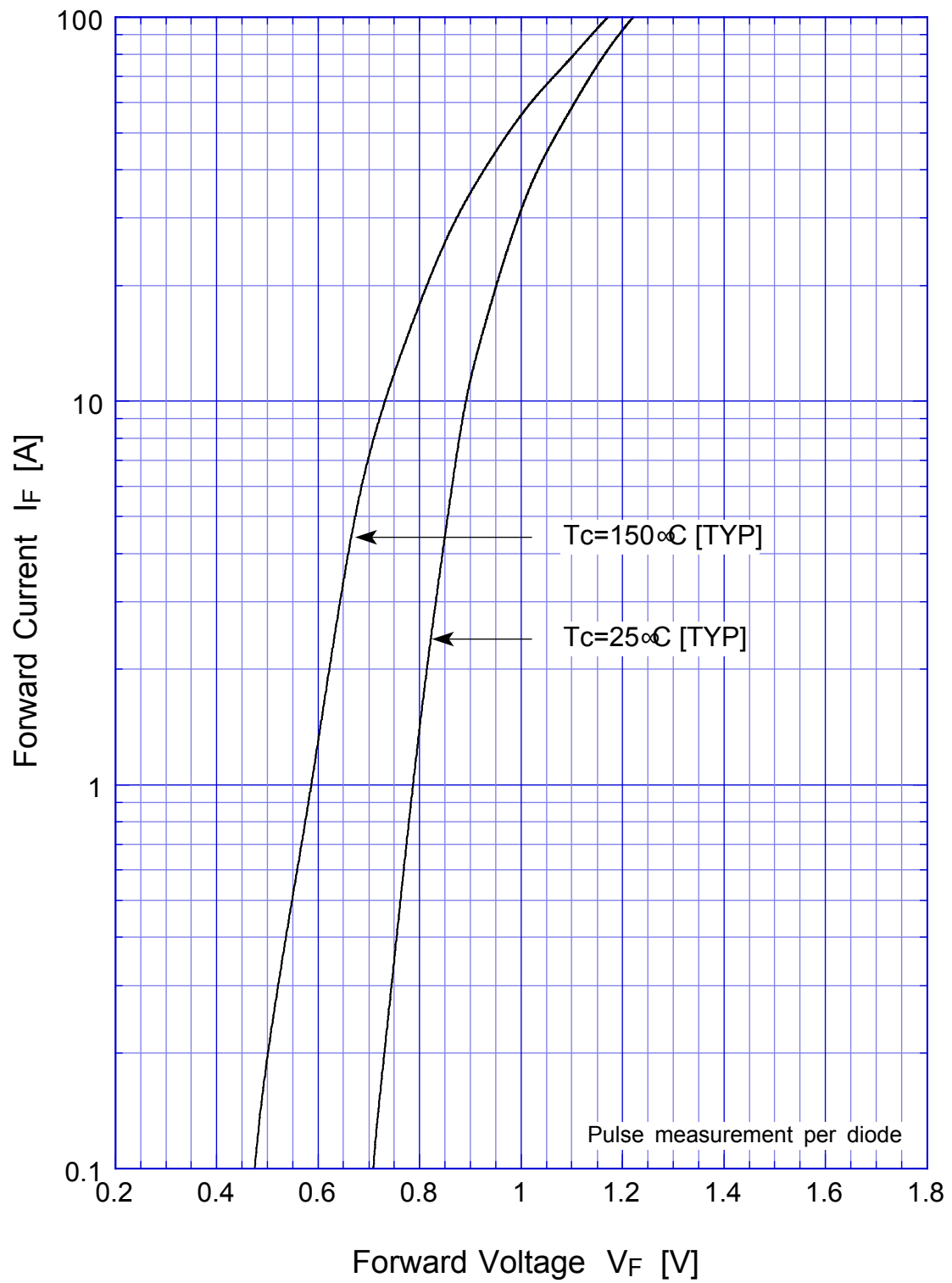
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-40~150	℃
Operating Junction Temperature	Tj		150	℃
Maximum Reverse Voltage	V _{RM}		800	V
Average Rectified Forward Current	I _O	50Hz sine wave, R-load, With heatsink, Tc=95℃	50	A
Peak Surge Forward Current	I _{FSM}	50Hz sine wave, Non-repetitive 1cycle peak value, Tj=25℃	500	A
Current Squared Time	I ² t	1ms≤t<10ms Tj=25℃	800	A ² s
Dielectric Strength	Vdis	Terminals to case, AC 1 minute	2	kV
Mounting Torque	TOR	(Recommended torque : 0.6N·m)	0.8	N·m

● Electrical Characteristics (Tc=25℃)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V _F	I _F =25A, 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 _{jc}	junction to case	Max.0.5	℃/W

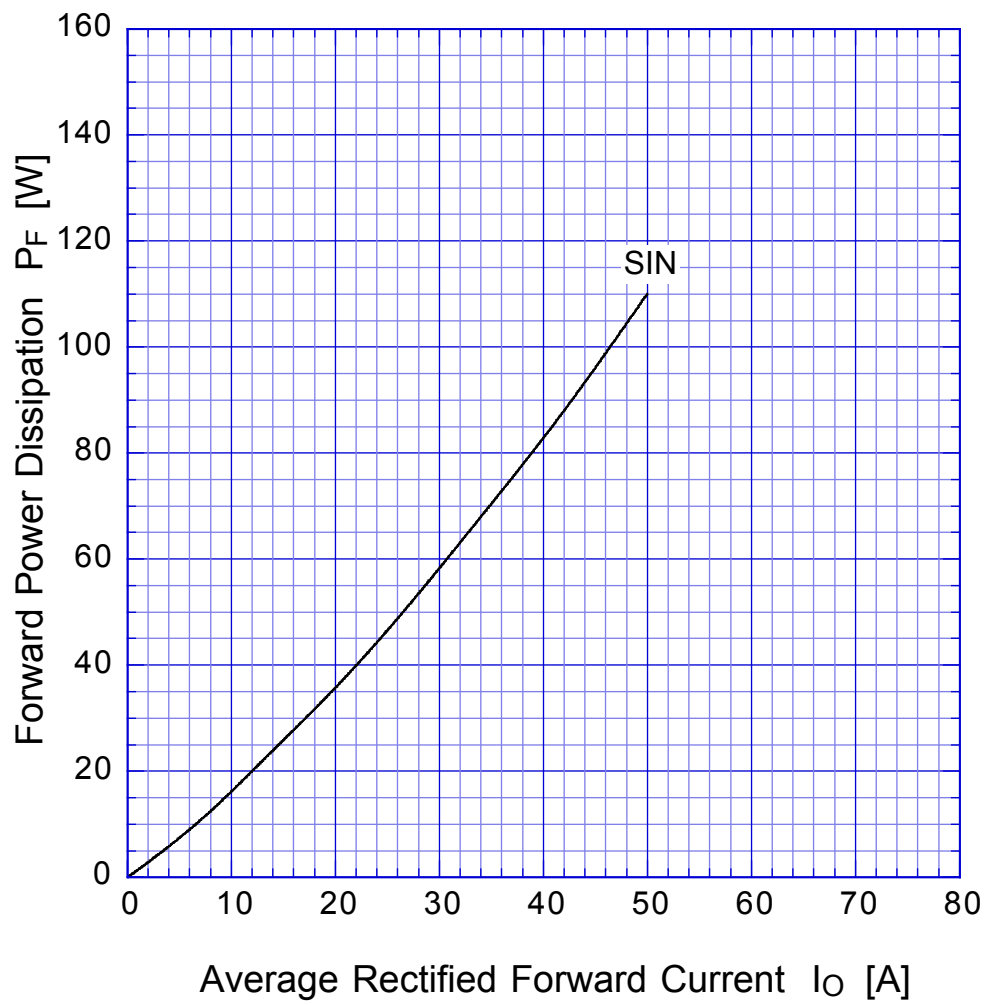
S50VBx

Forward Voltage



S50VBx

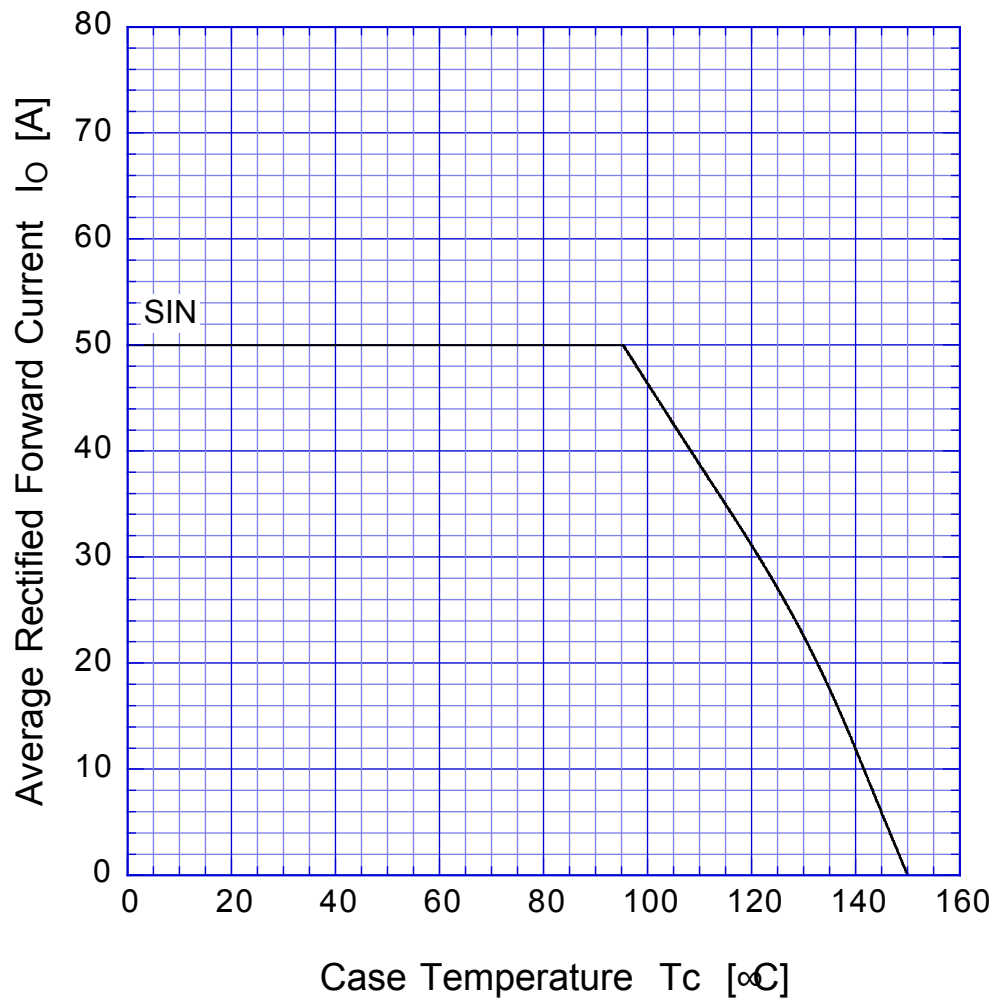
Forward Power Dissipation



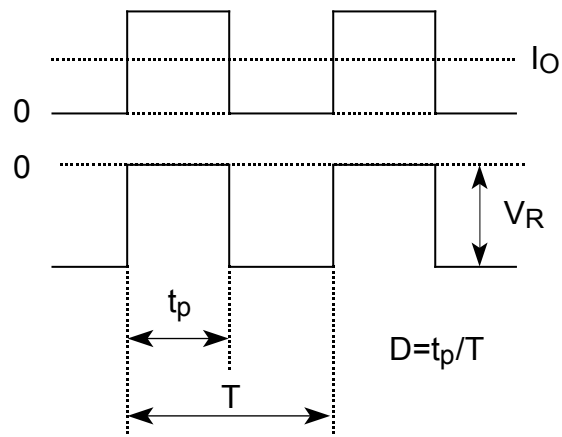
$T_j = T_{jmax}$

S50VBx

Derating Curve



$$V_R = V_{RM}$$



S50VBx

Peak Surge Forward Capability

