

DF40SC4

40V 40A

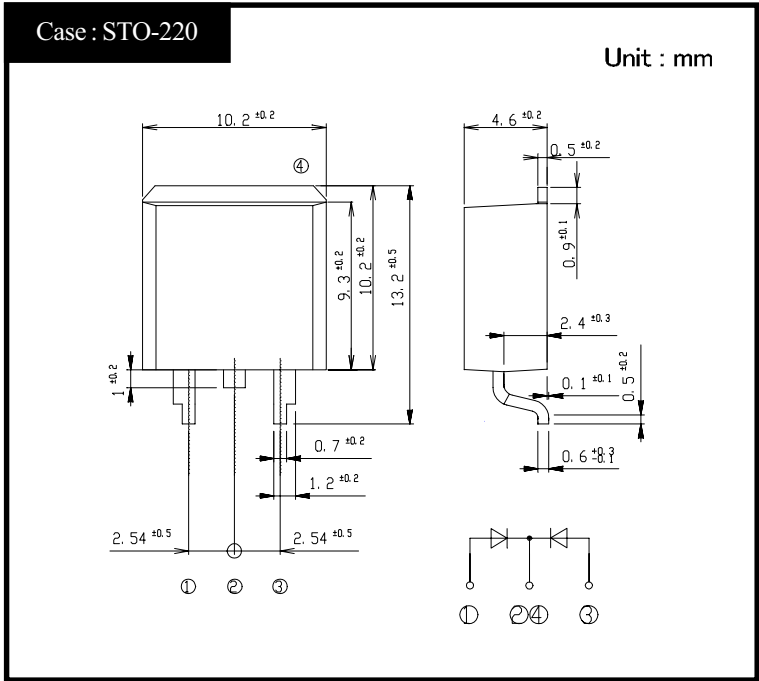
FEATURE

- SMT
- Tj150℃
- PRRSM avalanche guarantee
- High current capacity with Small Package

APPLICATION

- Switching power supply
- DC/DC converter
- Home Appliances, Office Equipment
- Telecommunication

OUTLINE DIMENSIONS



RATINGS

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

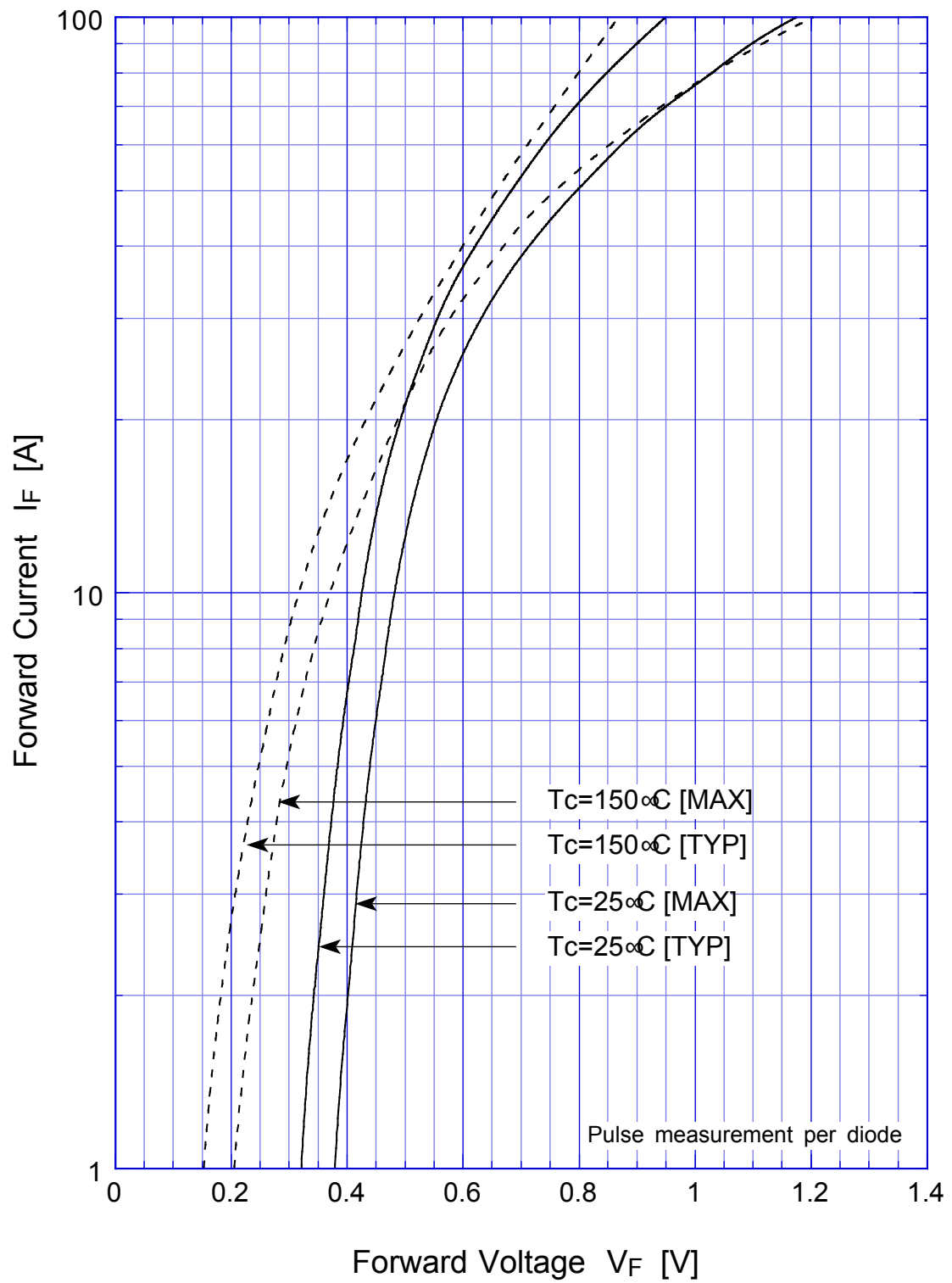
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-55~150	℃
Operating Junction Temperature	Tj		150	℃
Maximum Reverse Voltage	VRM		40	V
Repetitive Peak Surge Reverse Voltage	VRRSM	Pulse width 0.5ms, duty 1/40	45	V
Average Rectified Forward Current	IO	50Hz sine wave, R-load, Rating for each diode IO/2, Tc=106℃	40	A
Peak Surge Forward Current	IFSM	50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=25℃	350	A
Repetitive Peak Surge Reverse Power	PRRSM	Pulse width 10 μ s, Rating of per diode, Tj=25℃	1000	W

●Electrical Characteristics (If not specified Tc=25℃)

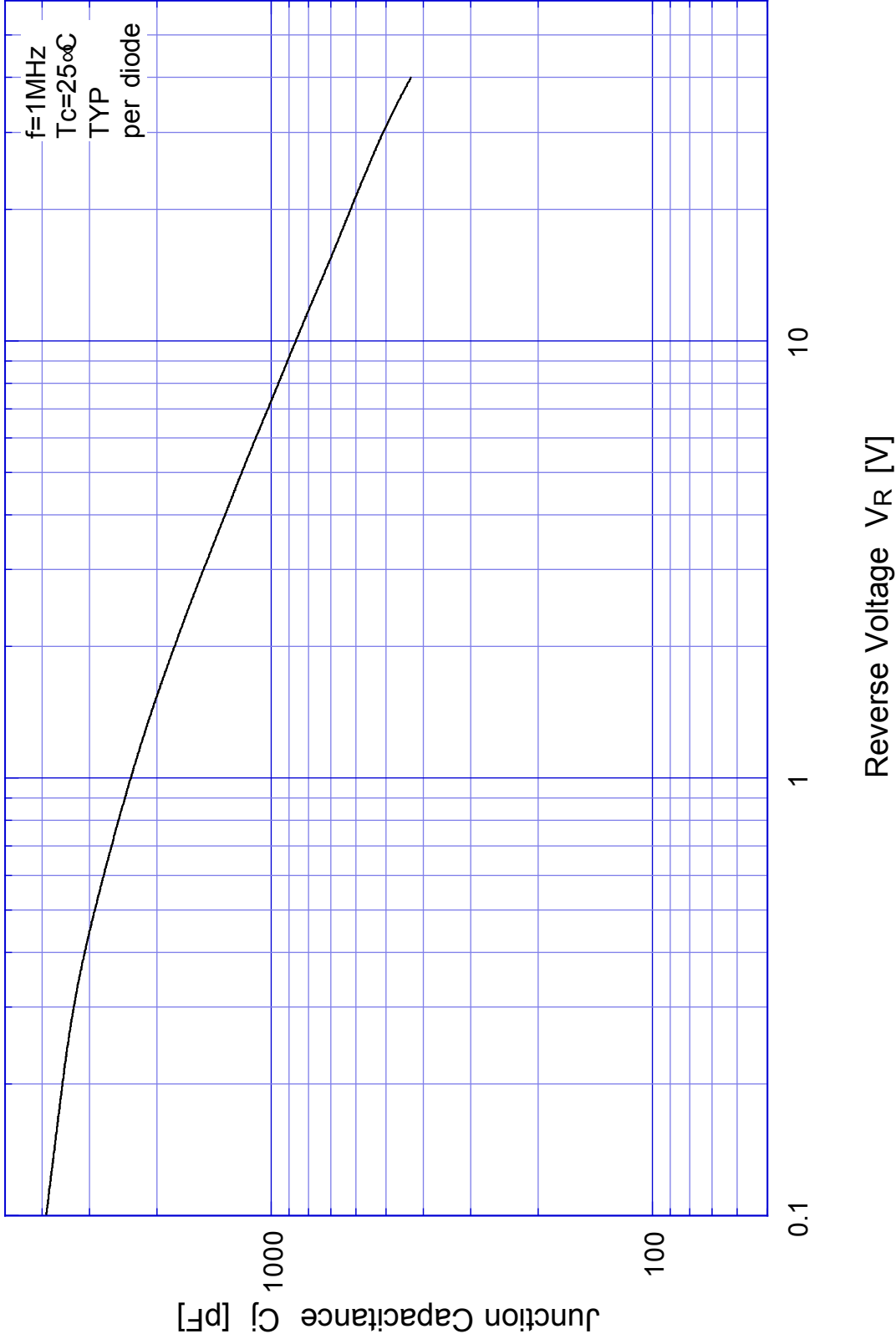
Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	VF	IF=20A, Pulse measurement, Rating of per diode	Max.0.55	V
Reverse Current	IR	VR=VRM, Pulse measurement, Rating of per diode	Max.14	mA
Junction Capacitance	Cj	f=1MHz, VR=10V, Rating of per diode	Typ.860	pF
Thermal Resistance	θjc	junction to case	Max.1.5	℃/W

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Forward Voltage

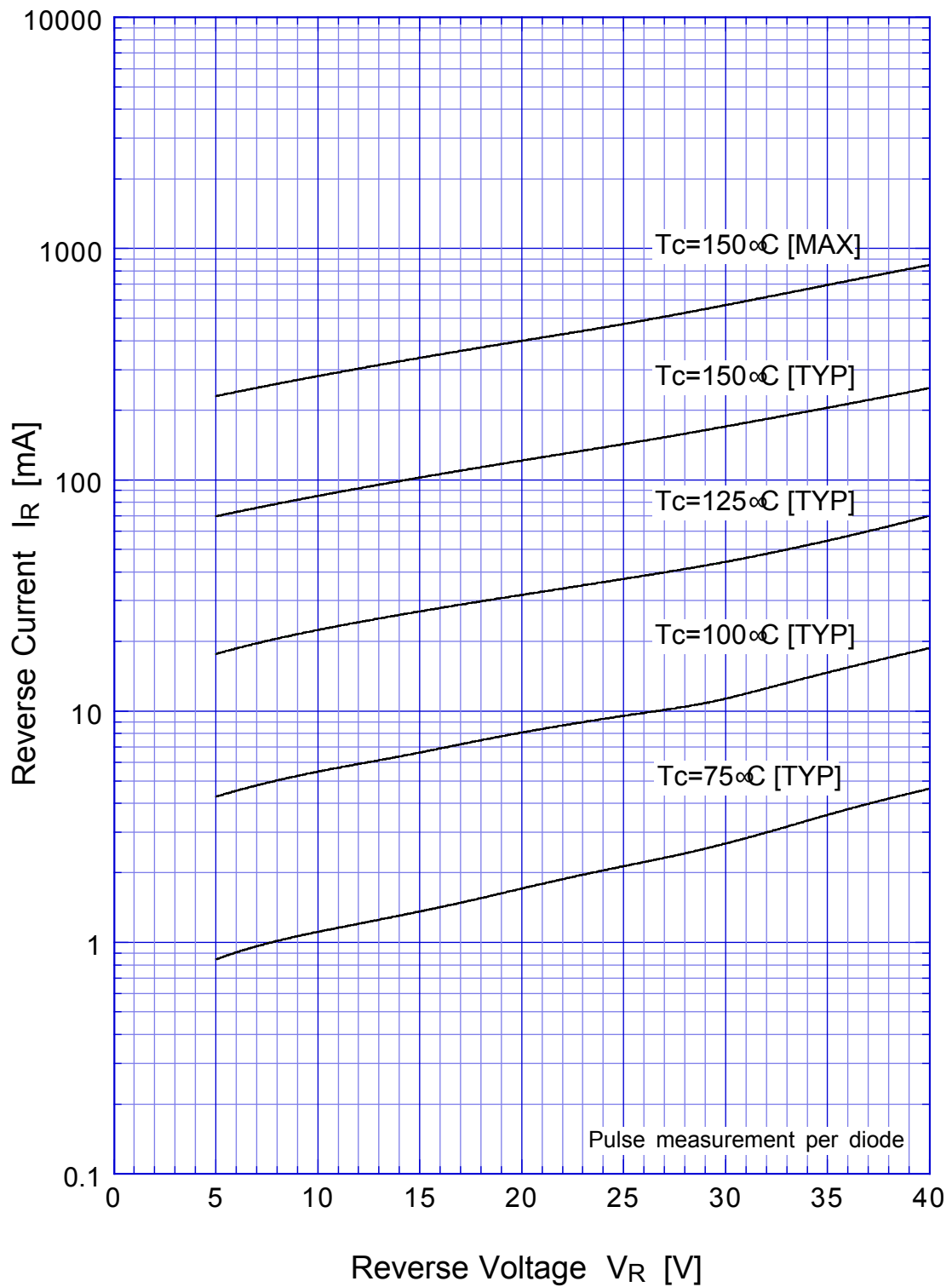


DF40SC4 Junction Capacitance

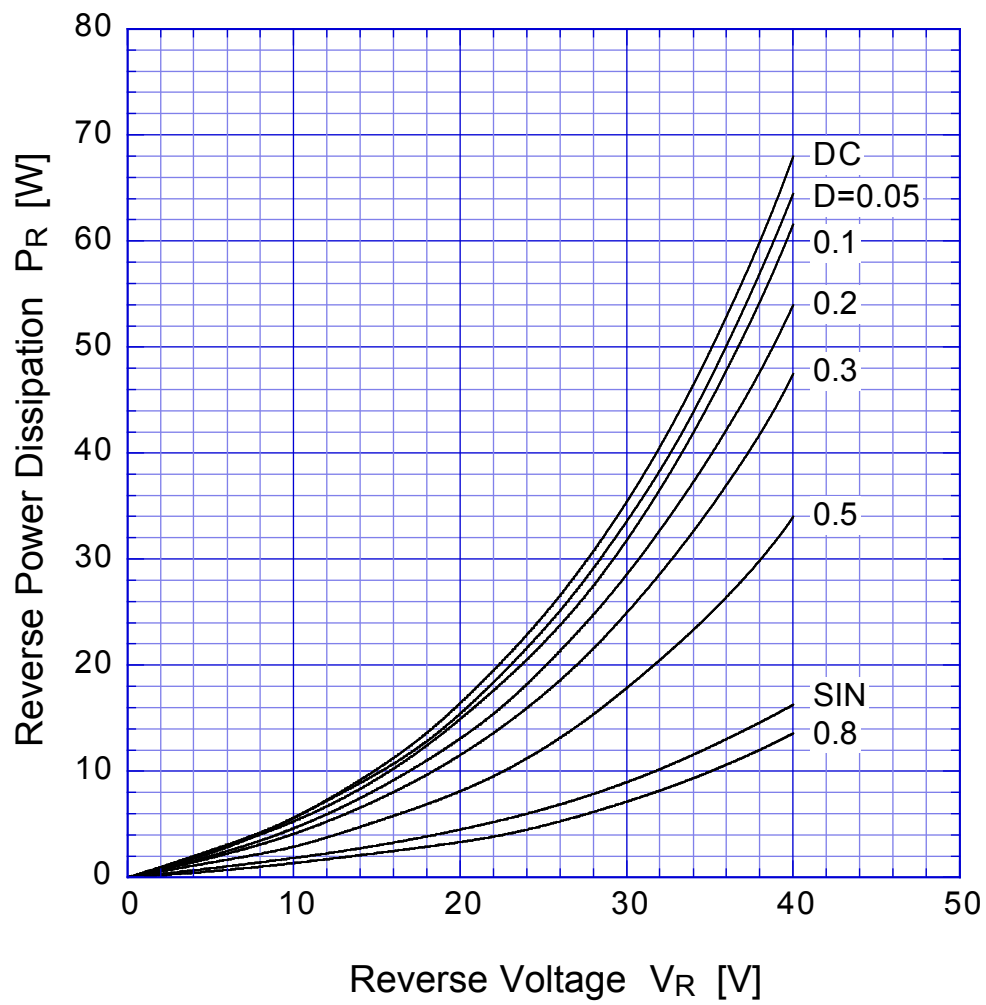


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Reverse Current



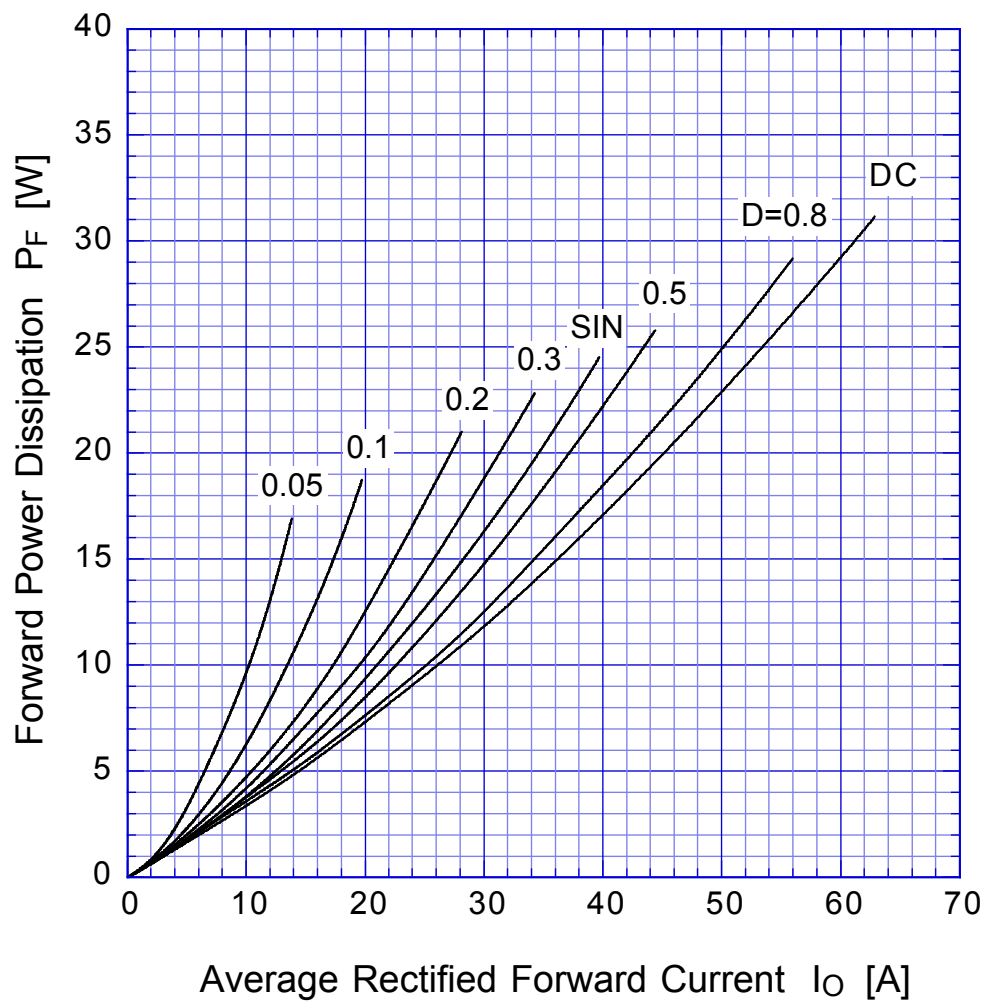
DF40SC4 Reverse Power Dissipation



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



DF40SC4 Forward Power Dissipation

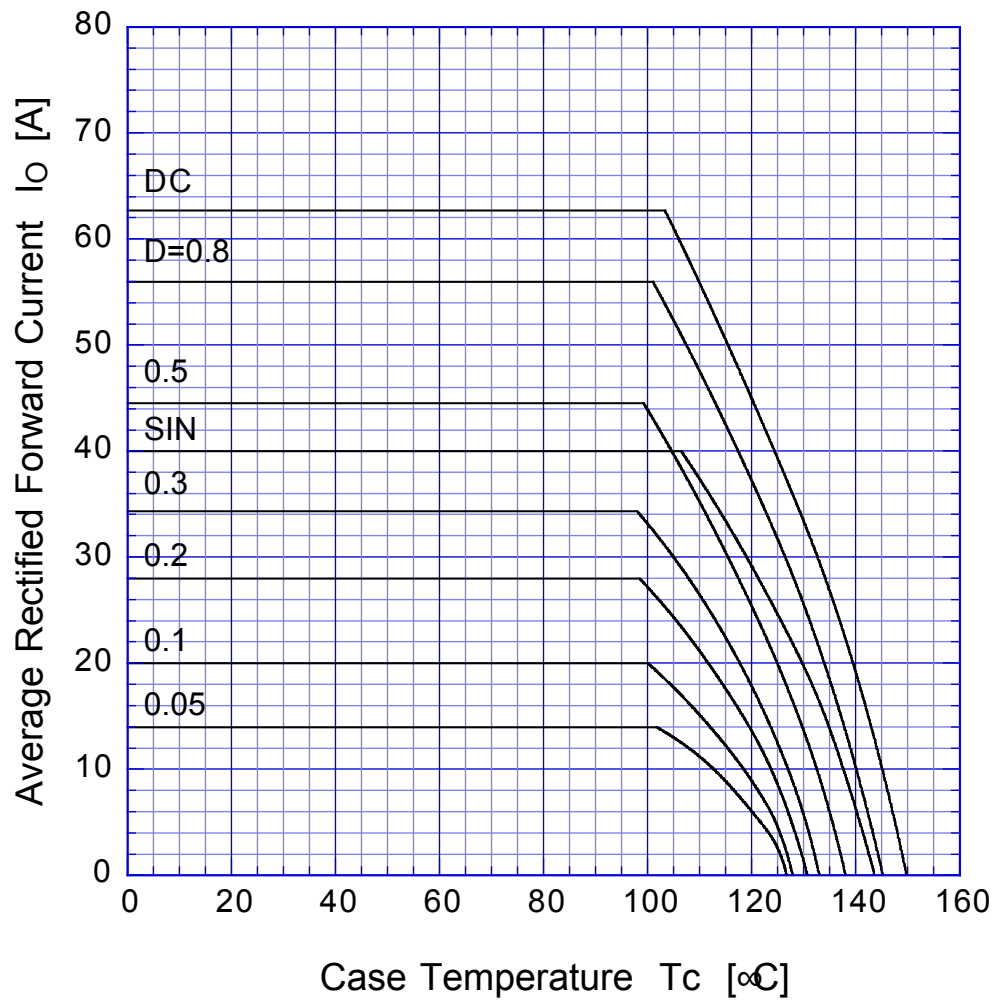


$T_j = 150^\circ\text{C}$

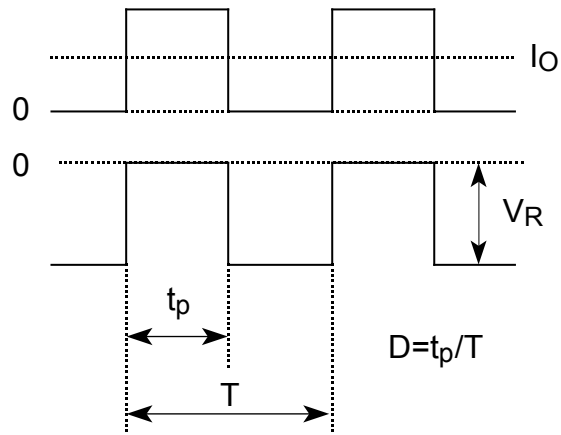


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Derating Curve

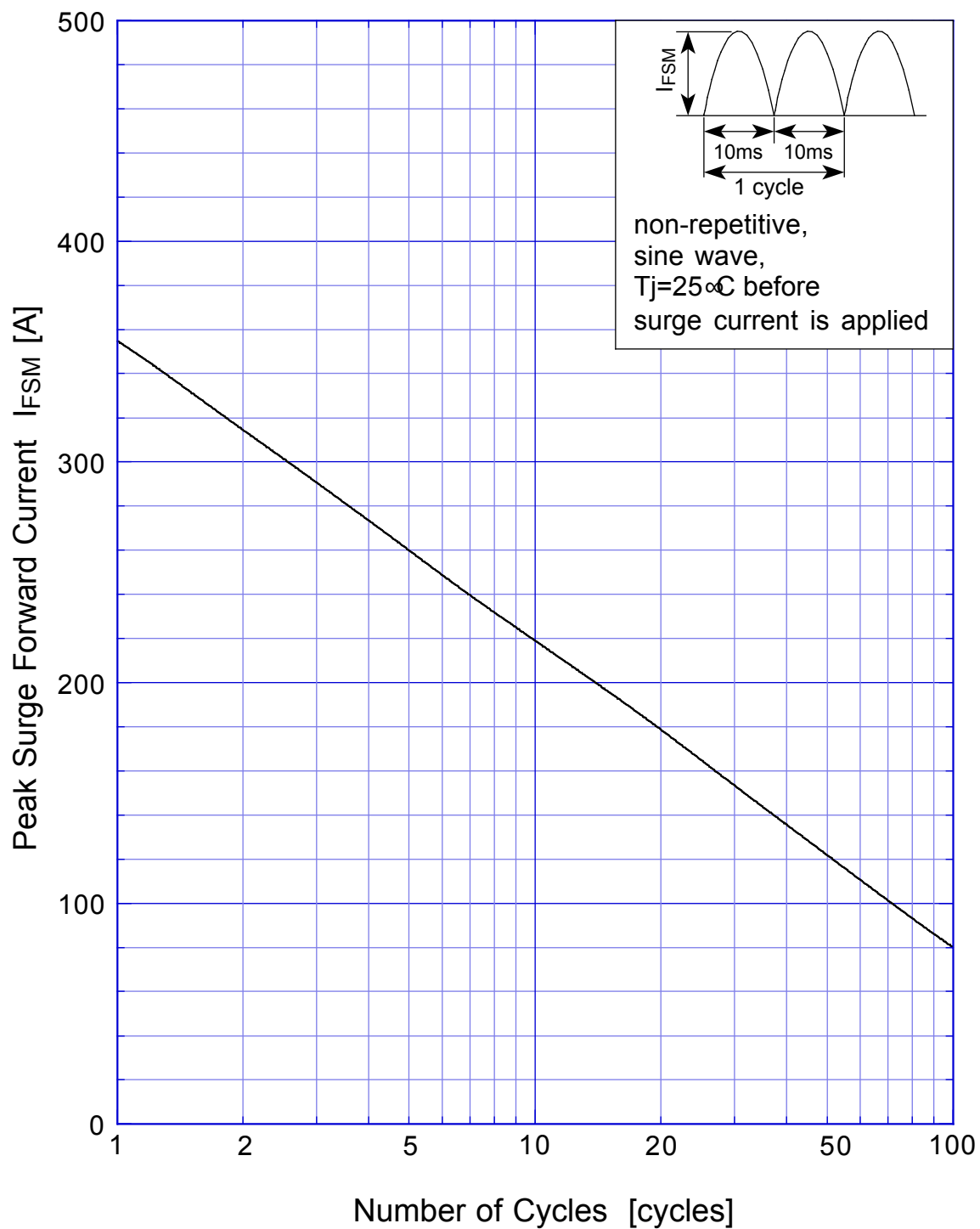


$V_R = 20V$



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Peak Surge Forward Capability



SBD Repetitive Surge Reverse Power Derating Curve



