

DF30SC4M

40V 30A

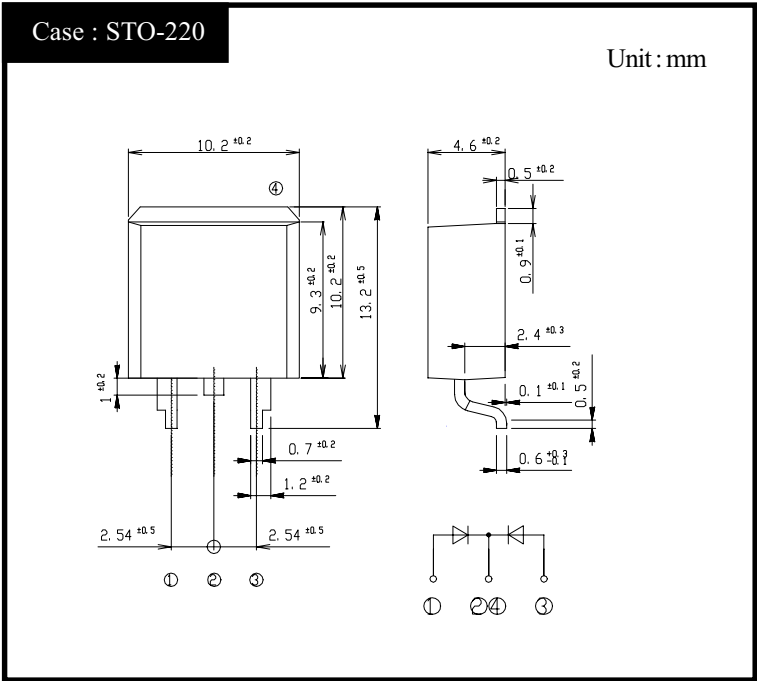
FEATURES

- SMT
- Tj150°C
- PRRSM avalanche guaranteed
- High current capacity with Small Package

APPLICATION

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

OUTLINE DIMENSIONS



RATINGS

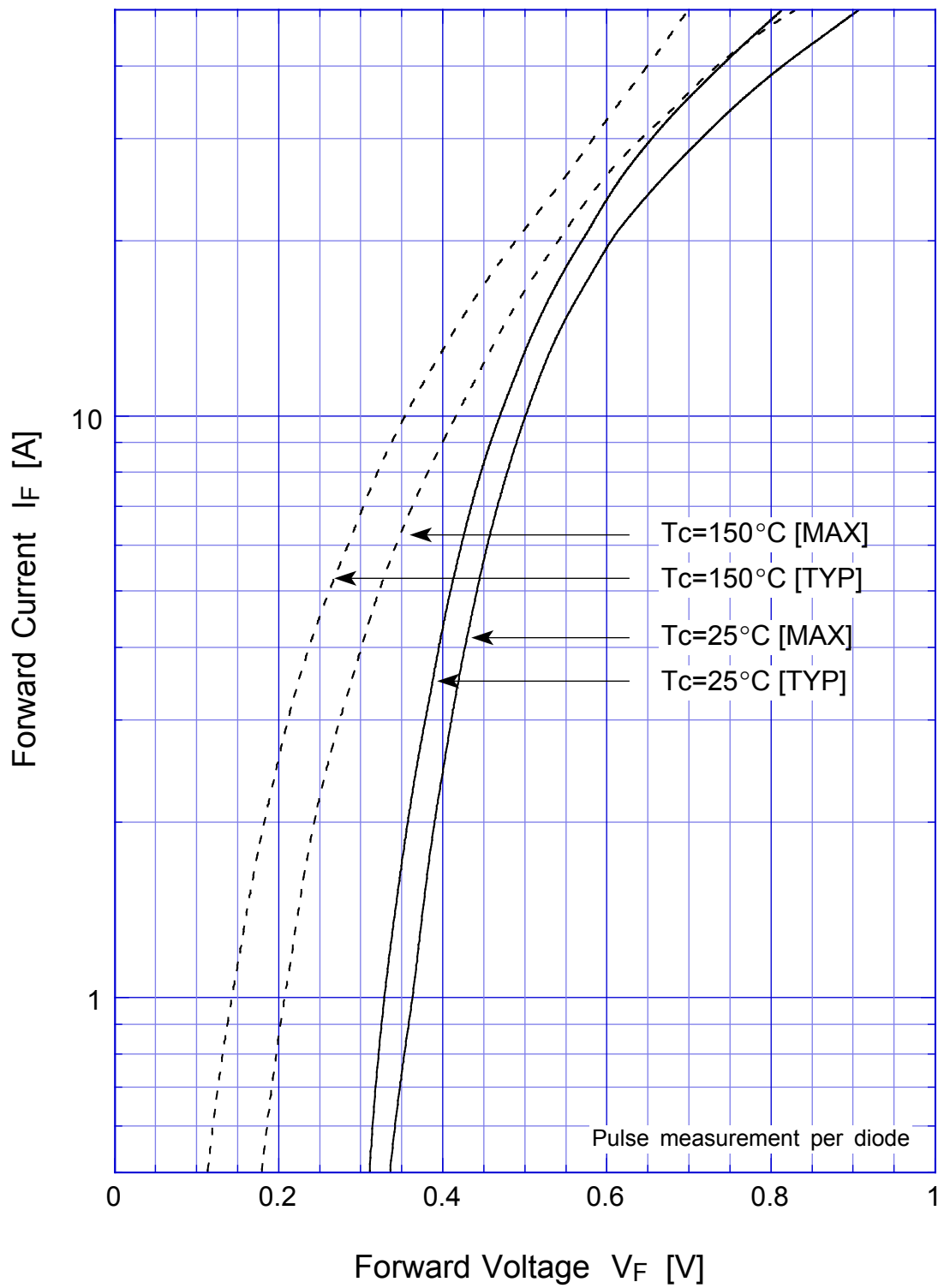
● Absolute Maximum Ratings (If not specified Tc=25°C)

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-40~150	°C
Operating Junction Temperature	Tj		150	°C
Maximum Reverse Voltage	VRM		40	V
Repetitive Peak Surge Reverse Voltage	VRSM	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=112°C	30	A
Peak Surge Forward Current	IFSM	50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=25°C	360	A
Repetitive Peak Surge Reverse Power	PRSM	Pulse width 10 μs, Rating of per diode, Tj= 25°C	1000	W

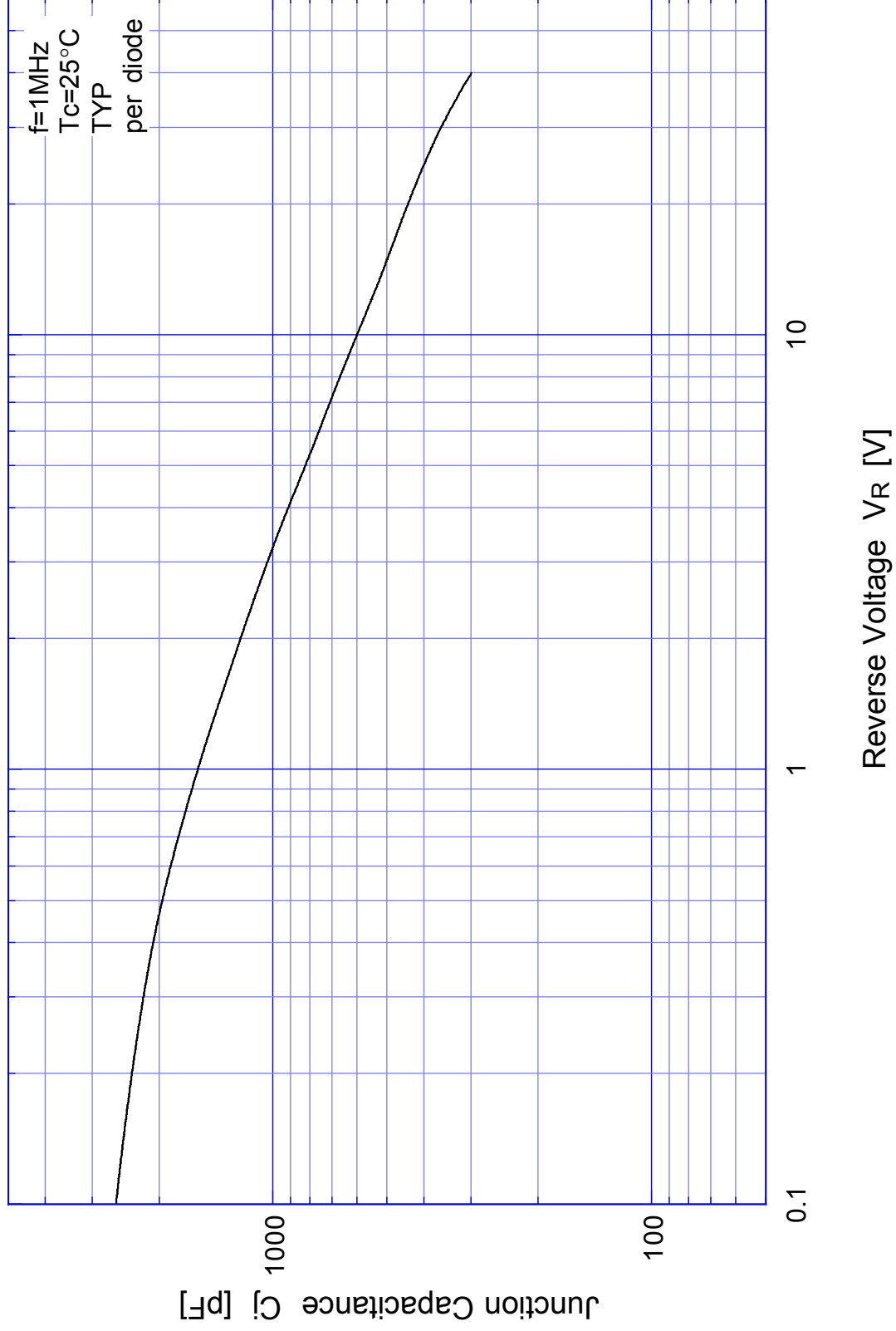
● Electrical Characteristics (If not specified Tc=25°C)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	VF	IF=15A, Pulse measurement, Rating of per diode	Max.0.55	V
Reverse Current	IR	VR=VRM, Pulse measurement, Rating of per diode	Max.10	mA
Junction Capacitance	Cj	f=1MHz, VR=10V, Rating of per diode	Typ.590	pF
Thermal Resistance	θjc	junction to case	Max.1.6	°C/W

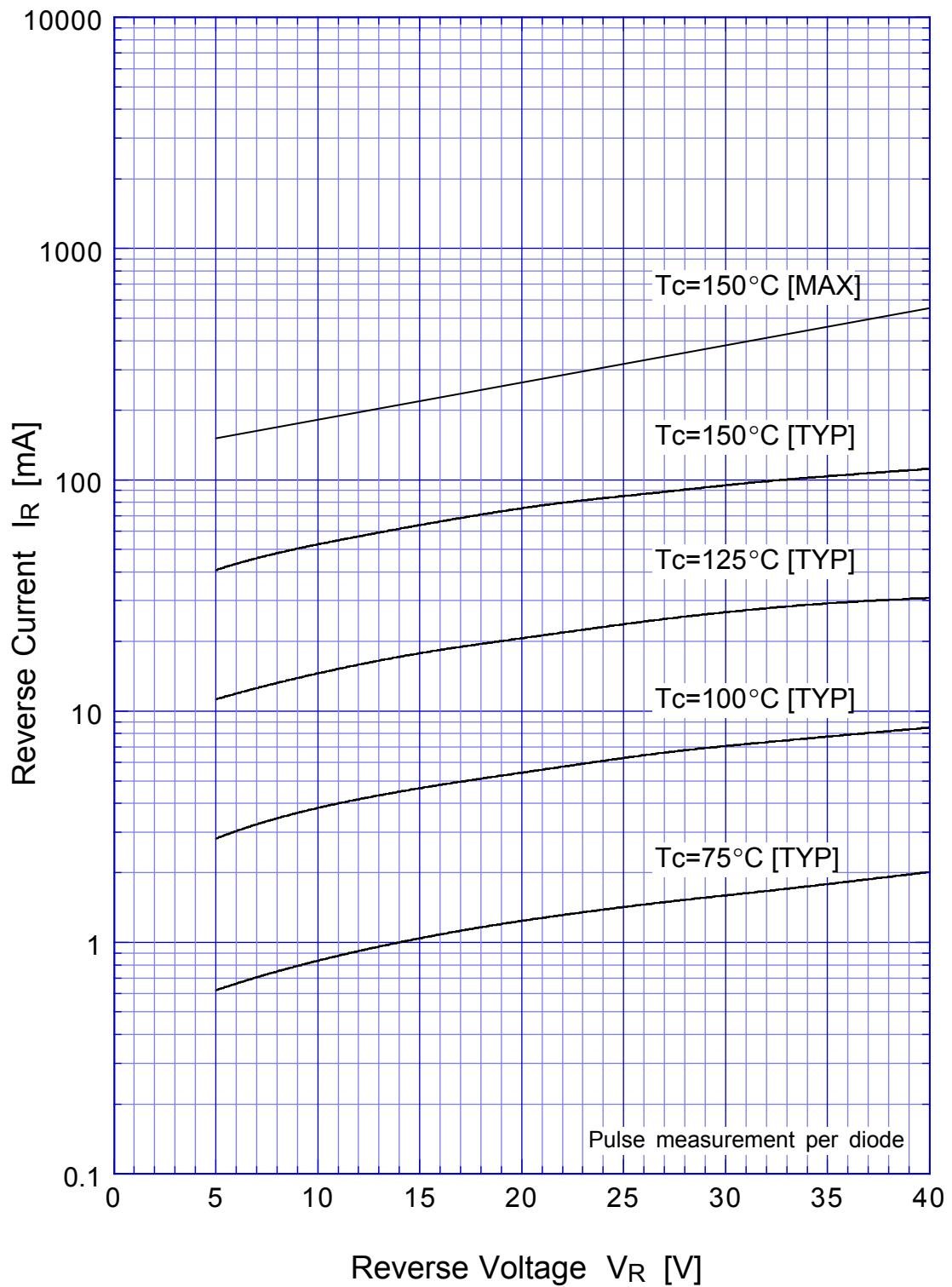
DF30SC4M Forward Voltage



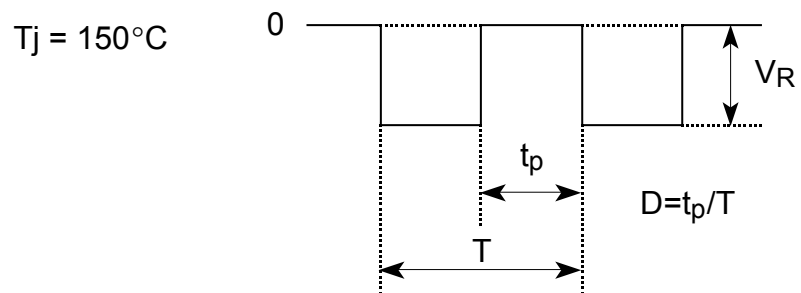
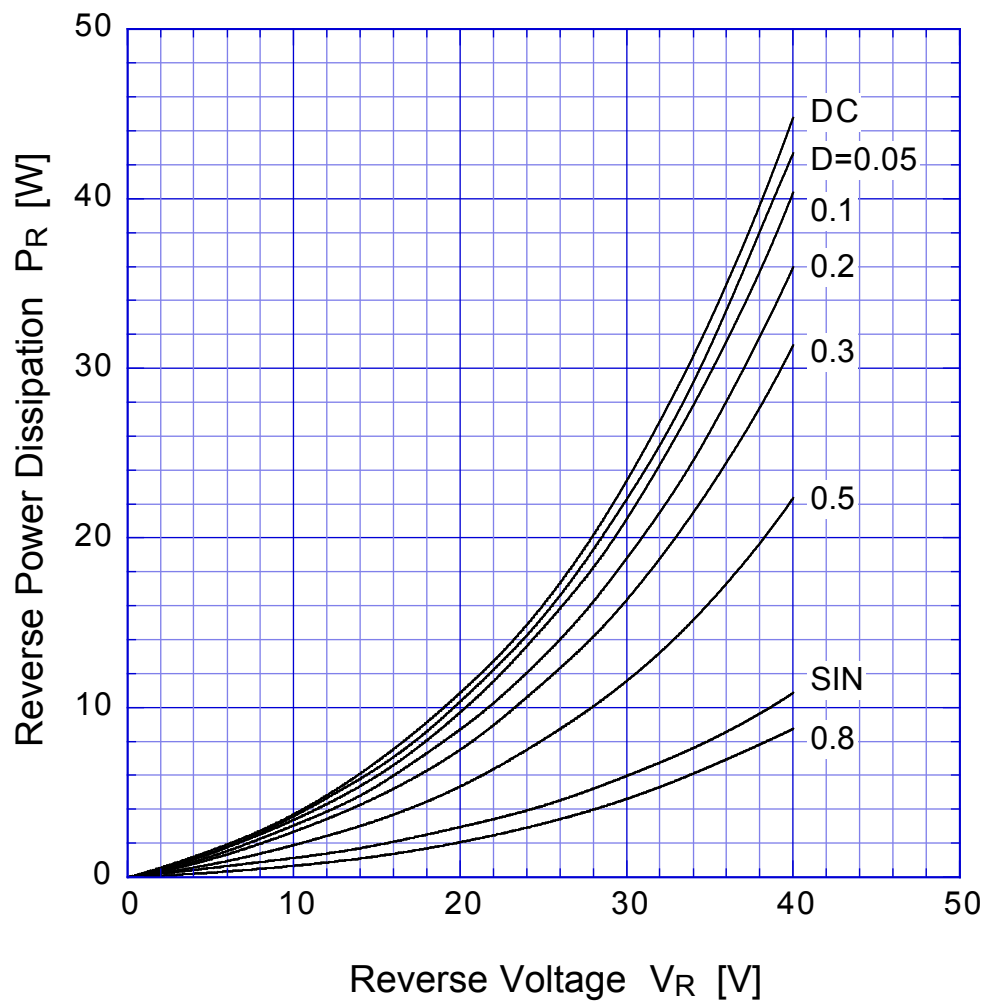
DF30SC4M Junction Capacitance



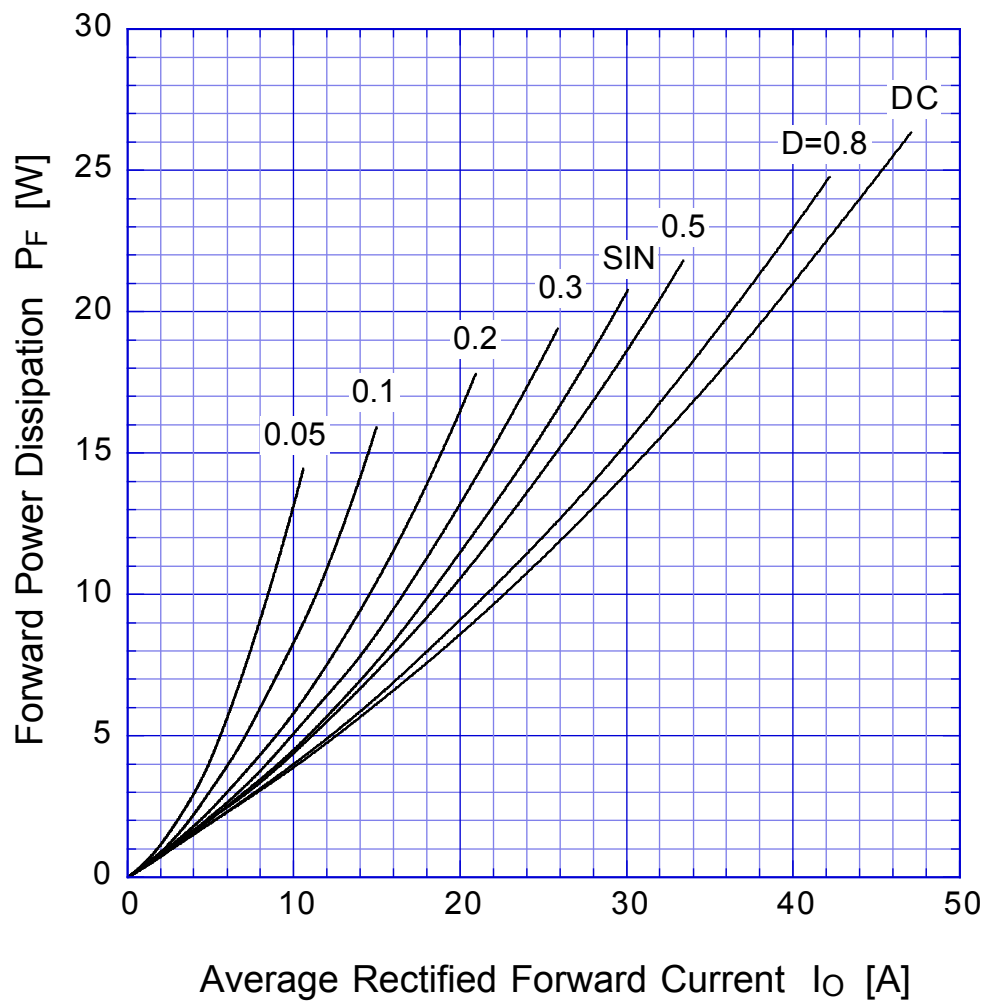
DF30SC4M Reverse Current



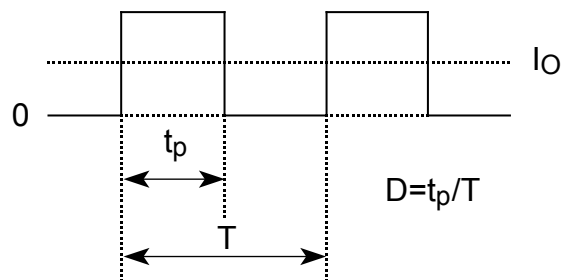
DF30SC4M Reverse Power Dissipation



DF30SC4M Forward Power Dissipation

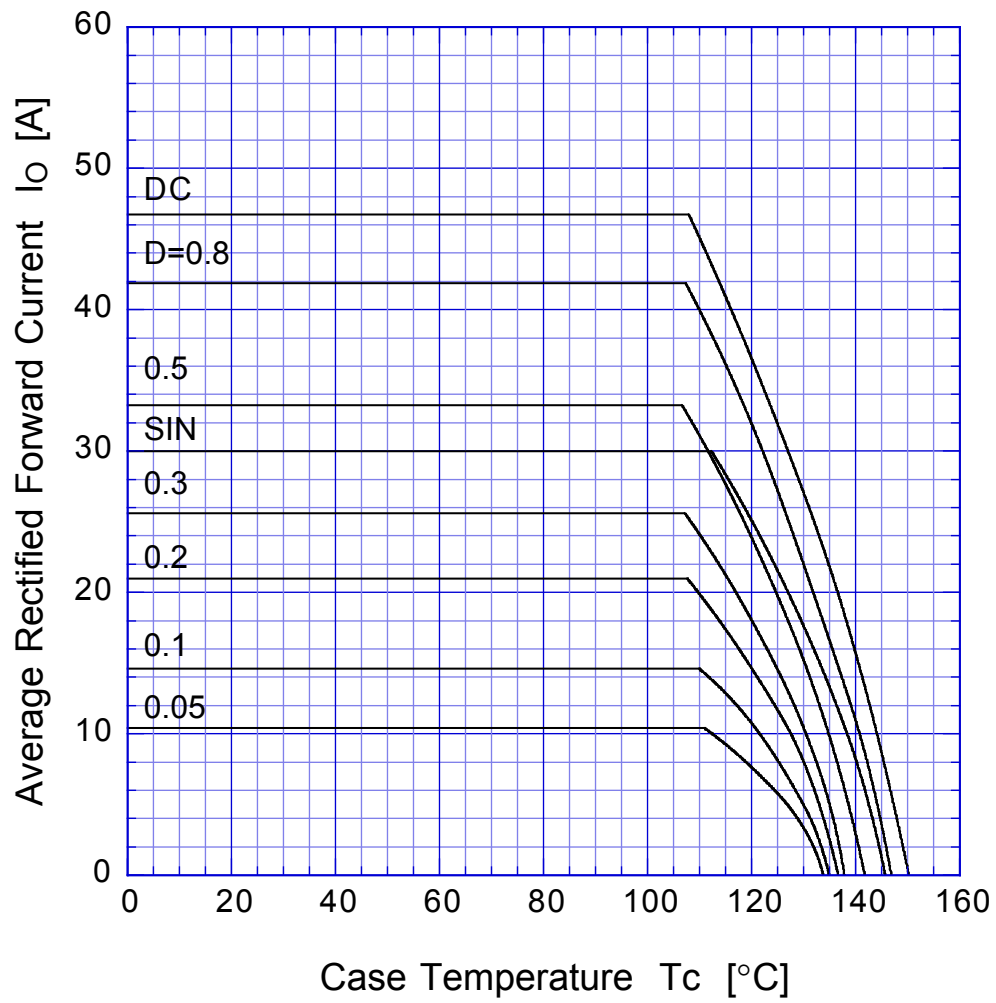


$T_J = 150^\circ\text{C}$

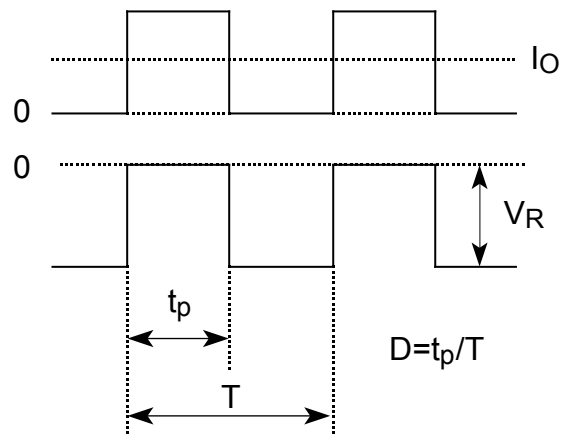


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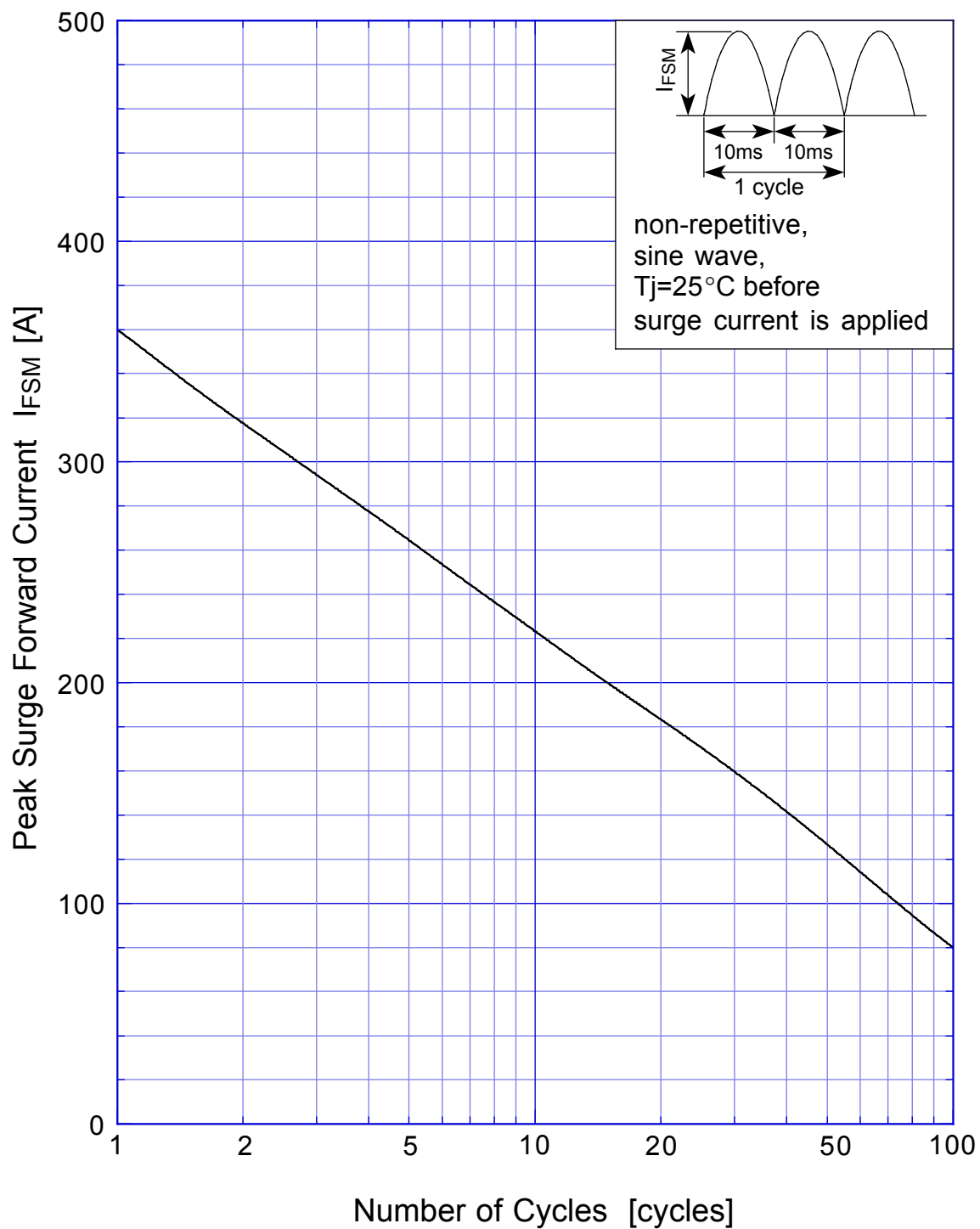
Derating Curve



$V_R = 20V$



DF30SC4M Peak Surge Forward Capability



SBD Repetitive Surge Reverse Power Derating Curve

