

DF25SC6M

60V 25A

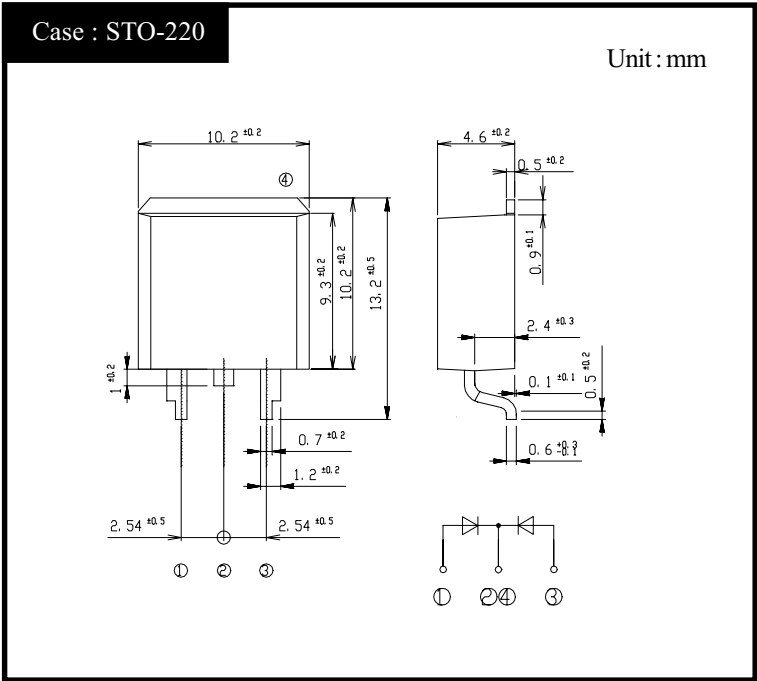
FEATURES

- 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

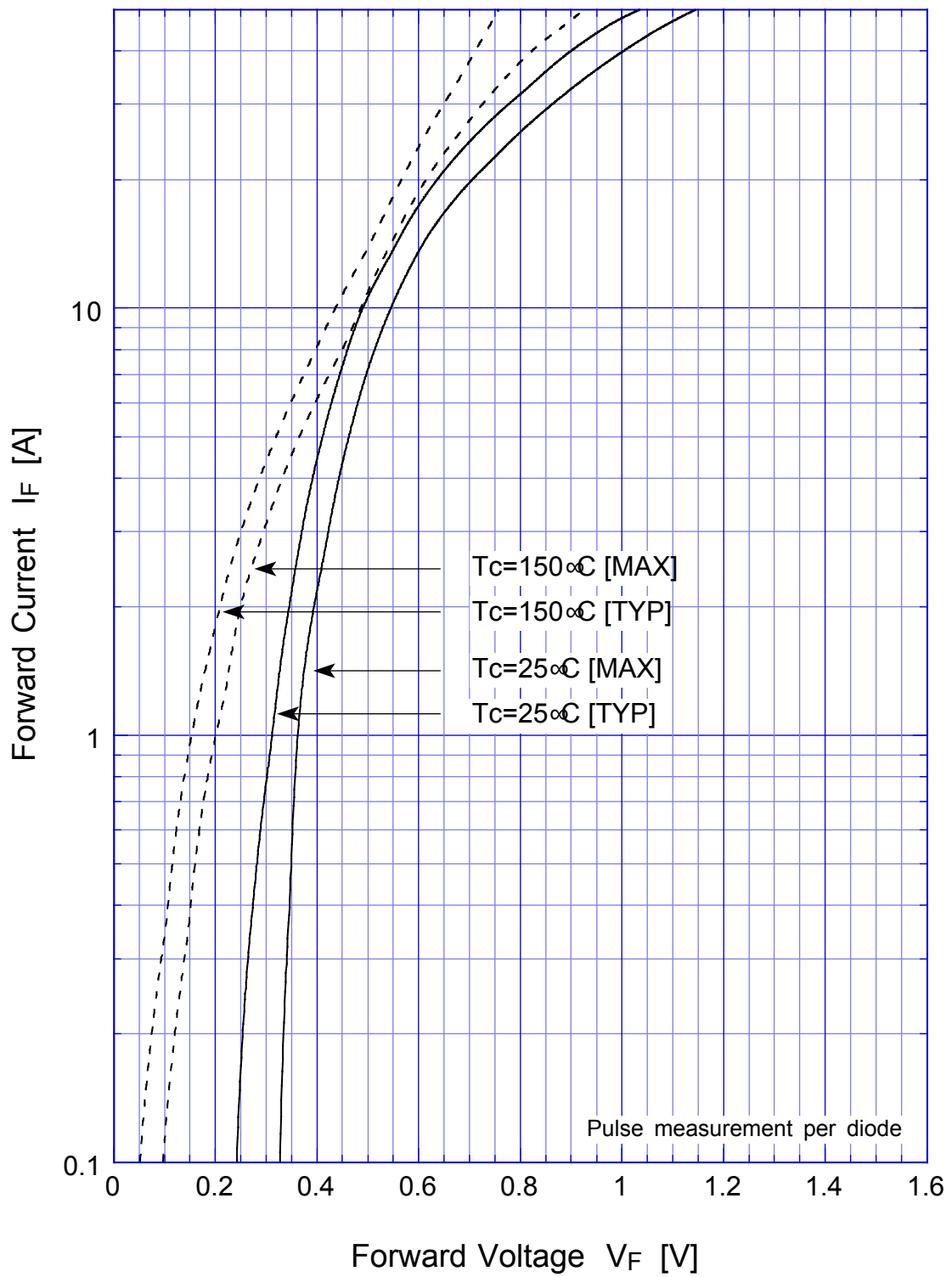
● Absolute Maximum Ratings (If not specified Tc=25°C)

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-40~150	°C
Operating Junction Temperature	Tj		150	°C
Maximum Reverse Voltage	VRM		60	V
Repetitive Peak Surge Reverse Voltage	VRFSM	Pulse width 0.5ms, duty 1/40	65	V
Average Rectified Forward Current	IO	50Hz sine wave, R-load, Rating for each diode IO/2, Tc=115°C	25	A
Peak Surge Forward Current	IFSM	50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=25°C	300	A
Repetitive Peak Surge Reverse Power	PRFSM	Pulse width 10 μs, Rating of per diode, Tj= 25°C	660	W

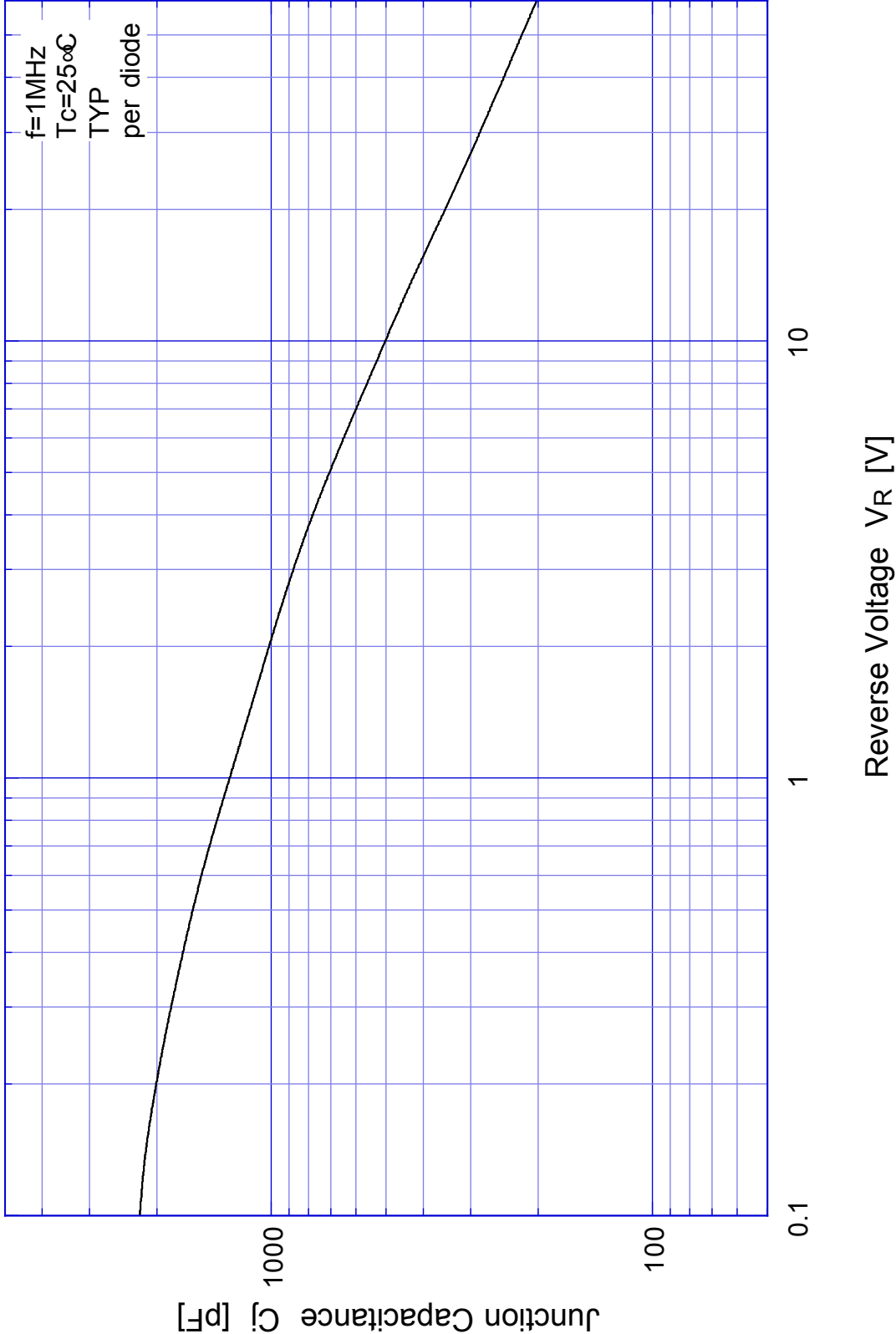
● Electrical Characteristics (If not specified Tc=25°C)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	VF	IF=12.5A, Pulse measurement, Rating of per diode	Max.0.58	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.490	pF
Thermal Resistance	θ ic	junction to case	Max.1.6	°C/W

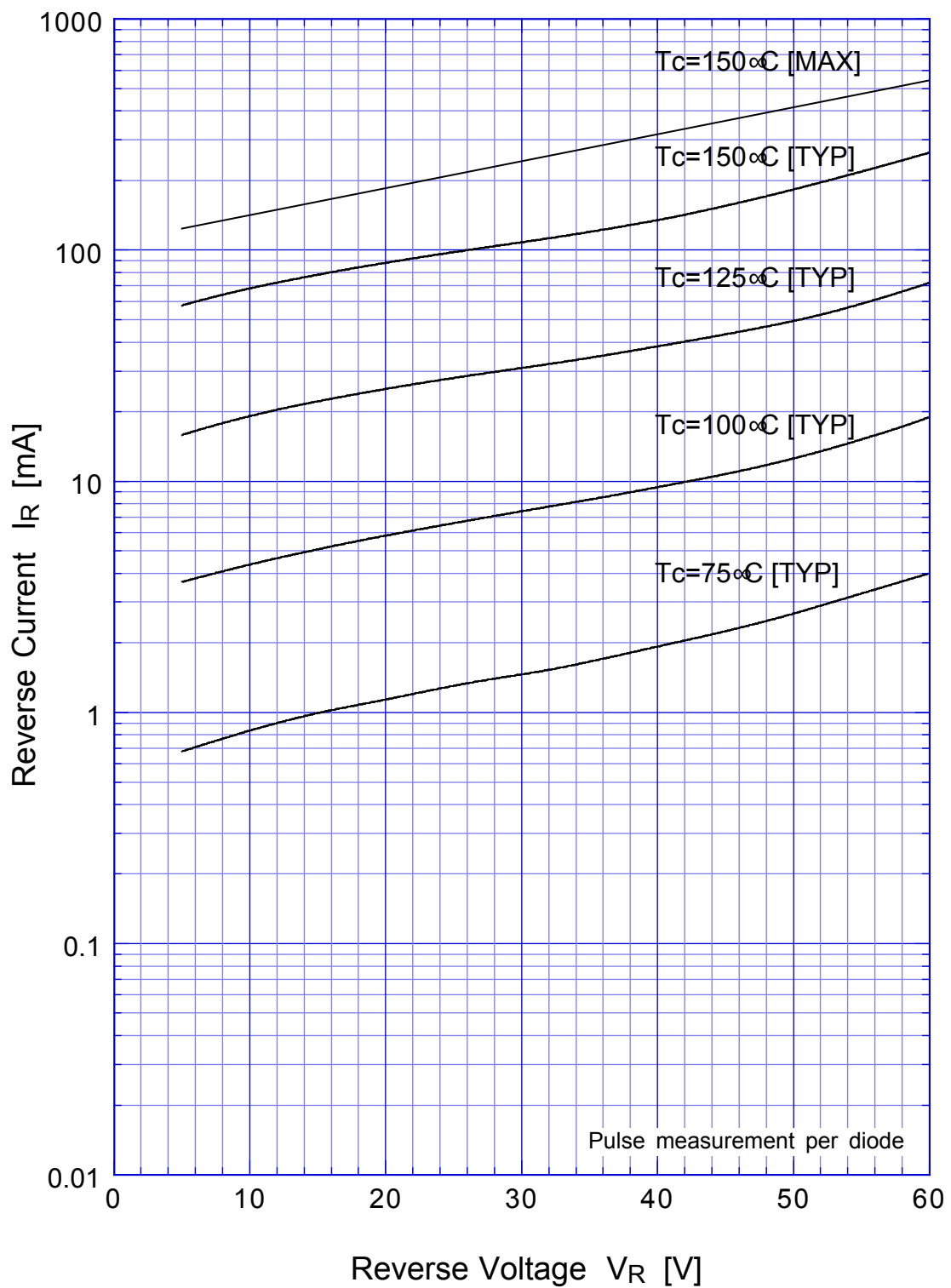
DF25SC6M Forward Voltage



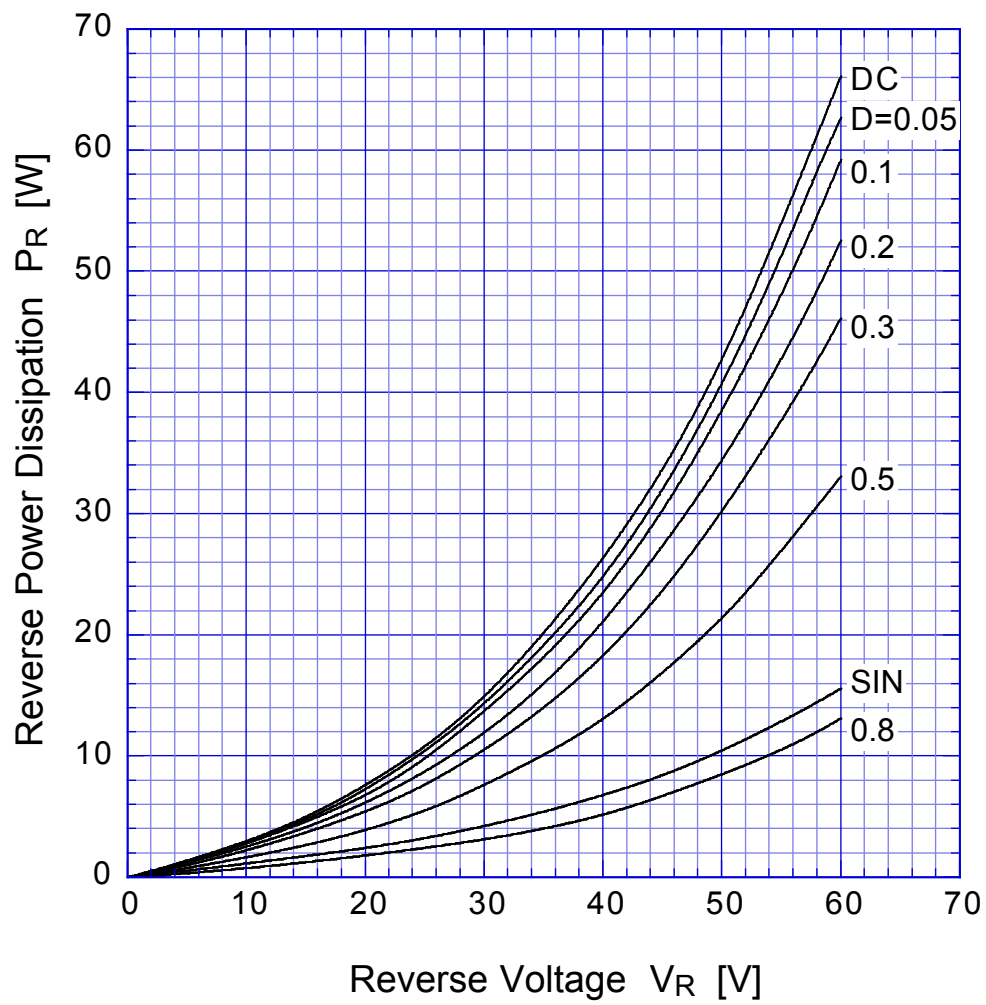
DF25SC6M Junction Capacitance



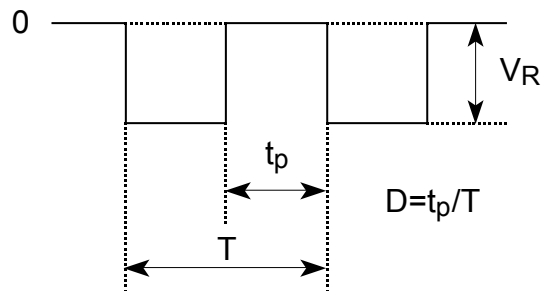
DF25SC6M Reverse Current



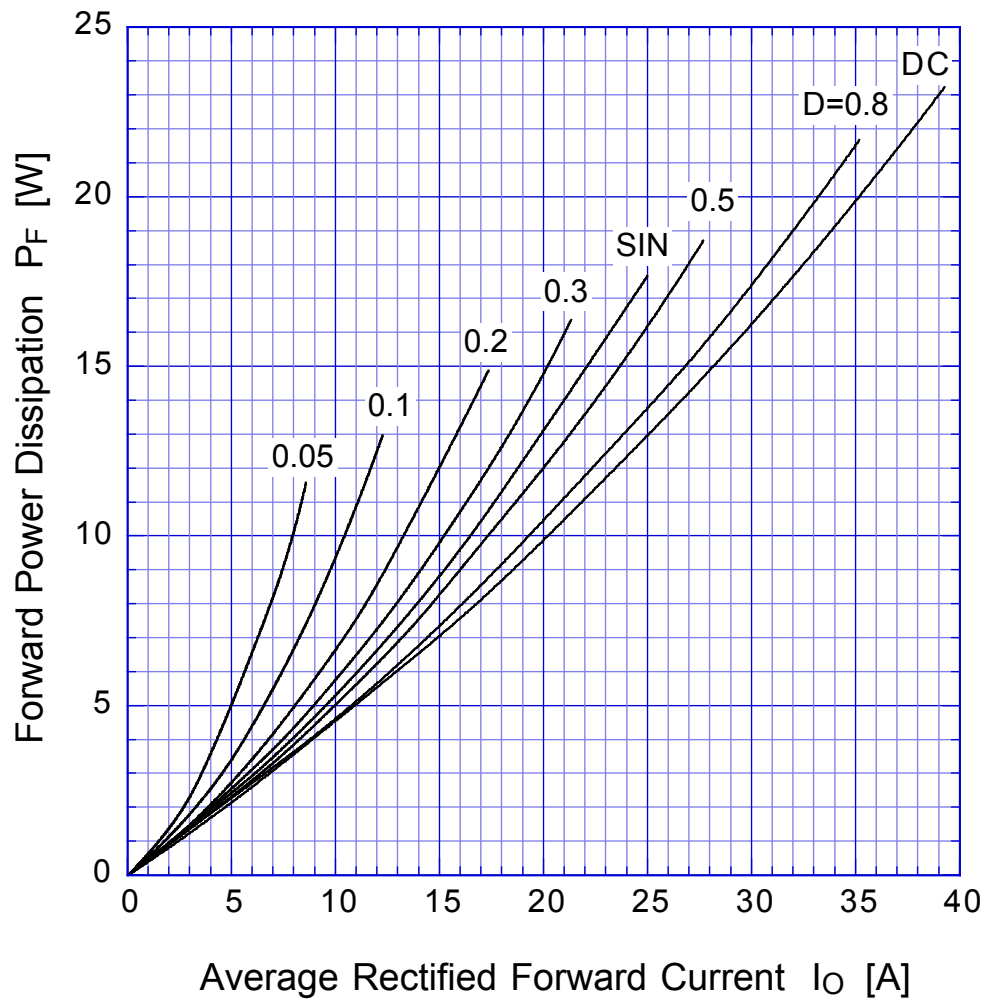
DF25SC6M Reverse Power Dissipation



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



DF25SC6M Forward Power Dissipation

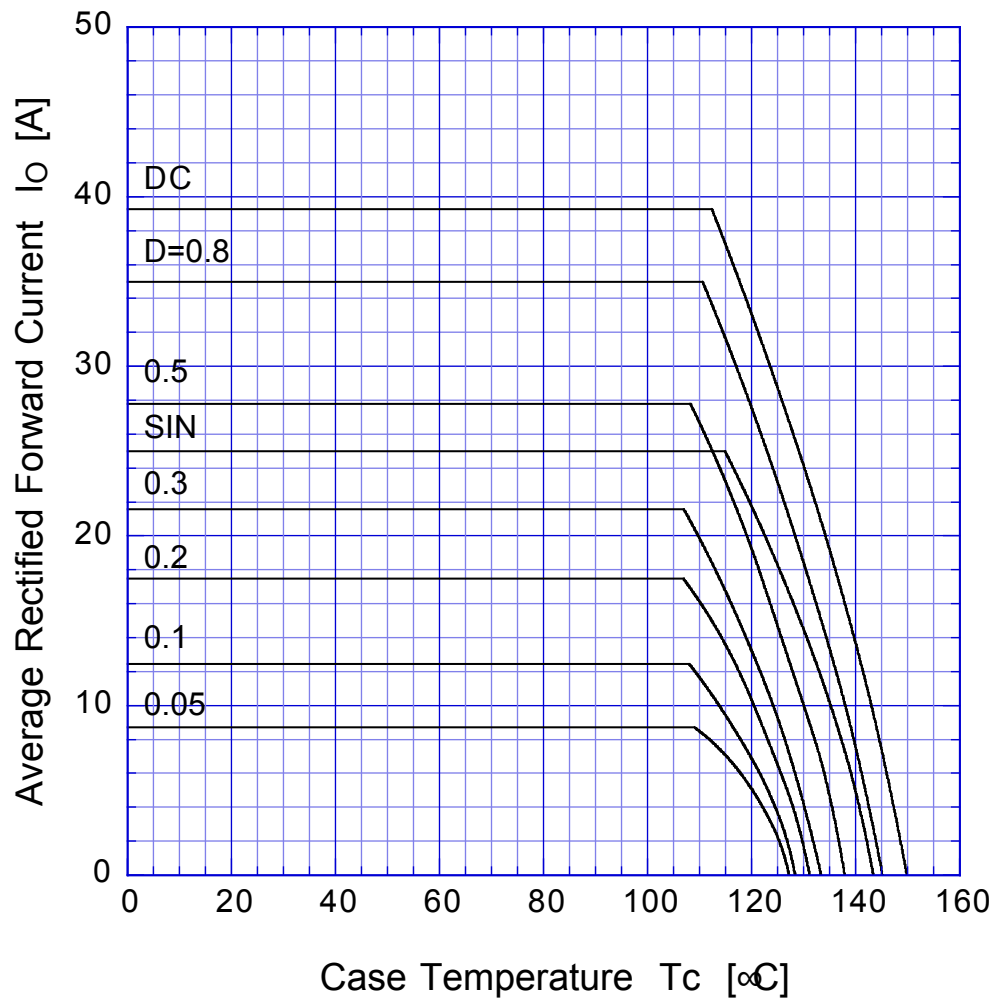


$T_j = 150^\circ\text{C}$

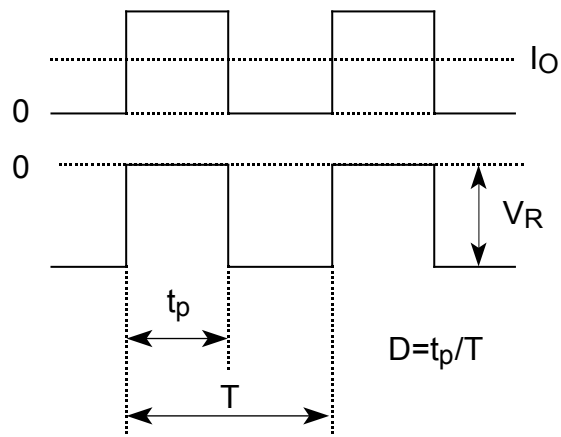


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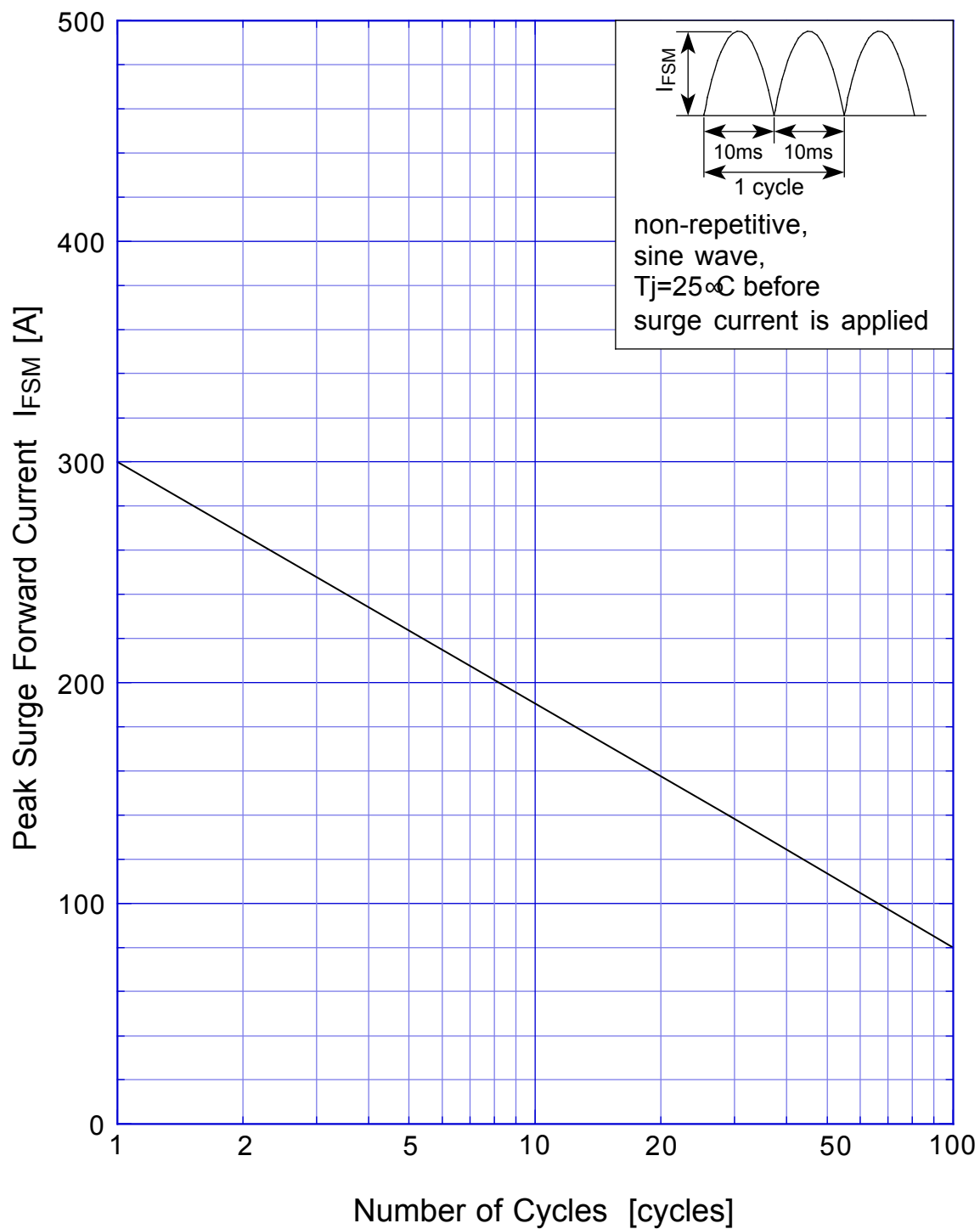
Derating Curve



$V_R = 30V$



DF25SC6M Peak Surge Forward Capability



SBD Repetitive Surge Reverse Power Derating Curve



