

D1NS4

40V 1A

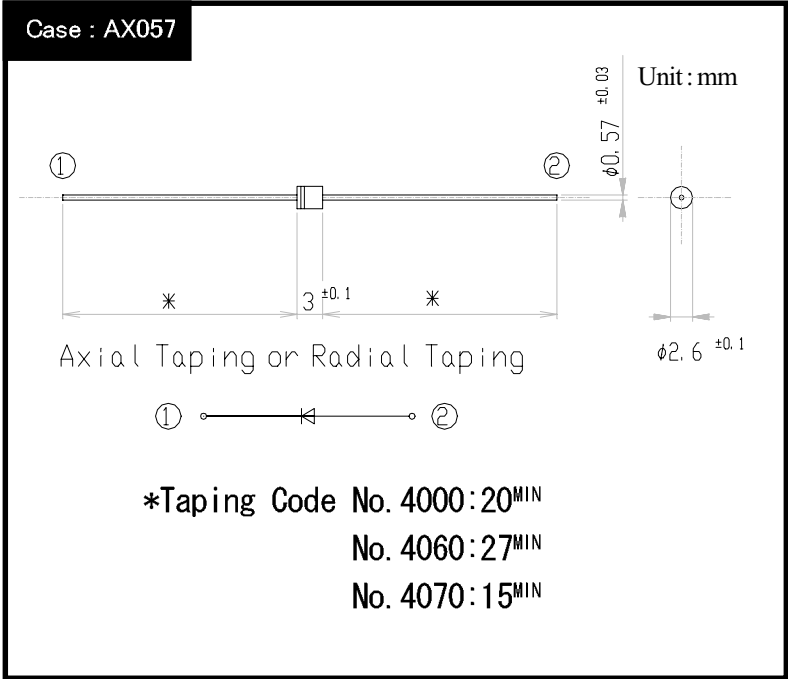
FEATURES

- Tj150°C
- PRRSM avalanche guaranteed
- 5 mm pitch mounting applicable

APPLICATION

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

OUTLINE DIMENSIONS



RATINGS

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

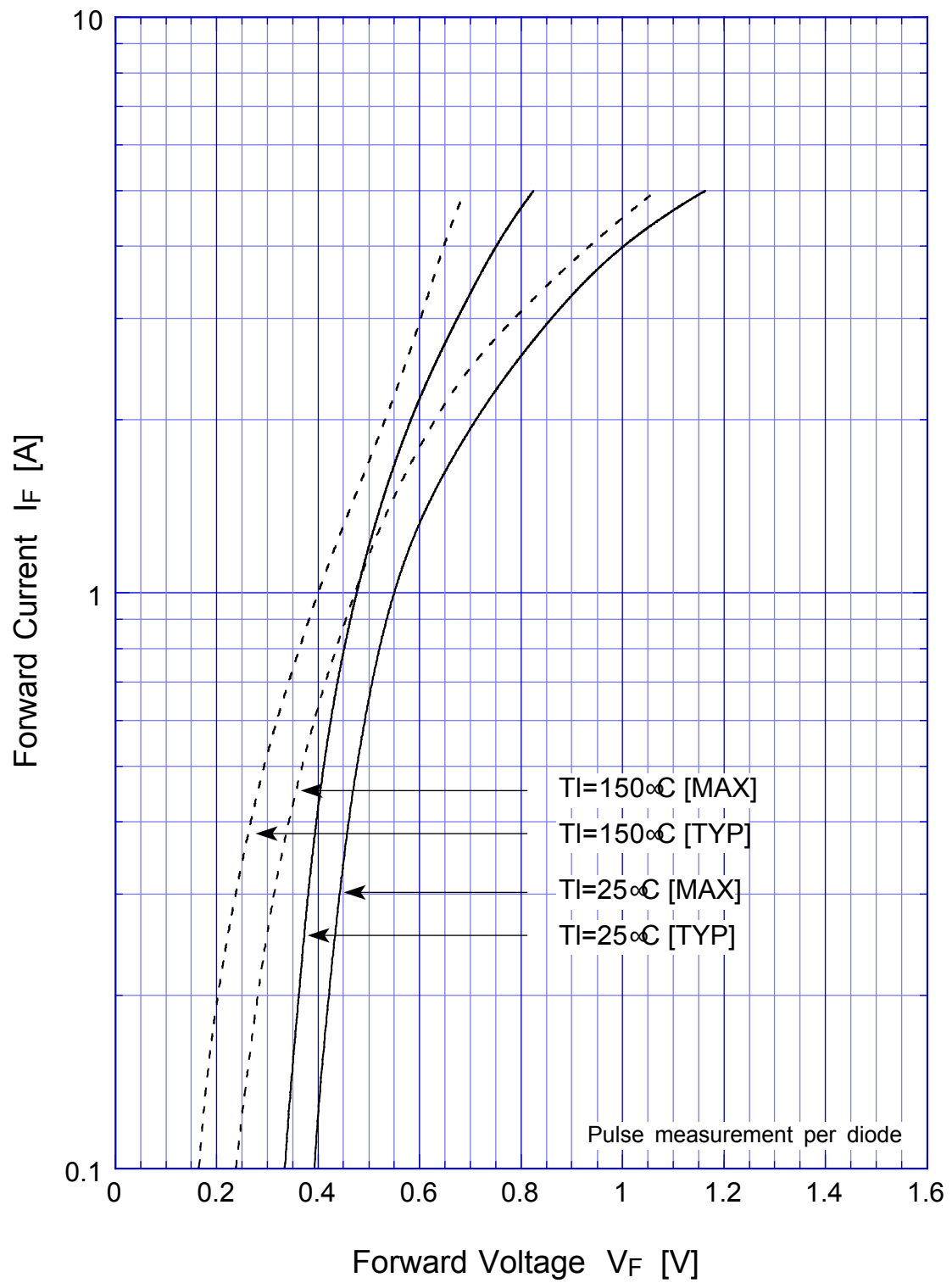
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T stg		-55~150	°C
Operating Junction Temperature	T j		150	°C
Maximum Reverse Voltage	V RM		40	V
Repetitive Peak Surge Reverse Voltage	V RRSM	Pulse width 0.5ms, duty 1/40	45	V
Average Rectified Forward Current	I O	50Hz sine wave, Ta=59°C	1	A
Peak Surge Forward Current	I FSM	50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=125 °C	30	A
Repetitive Peak Surge Reverse Power	P RRSM	Pulse width 10 μ s, Tj=25°C	60	W

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

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V F	I F=1A, Pulse measurement	Max.0.55	V
Reverse Current	I R	V R=40V, Pulse measurement	Max.0.8	mA
Junction Capacitance	C j	f=1MHz, V R=10V	Typ.50	pF
Thermal Resistance	θ jl	junction to lead	Max.10	°C/W
	θ ja	junction to ambient, On P.C.B.	Max.113	

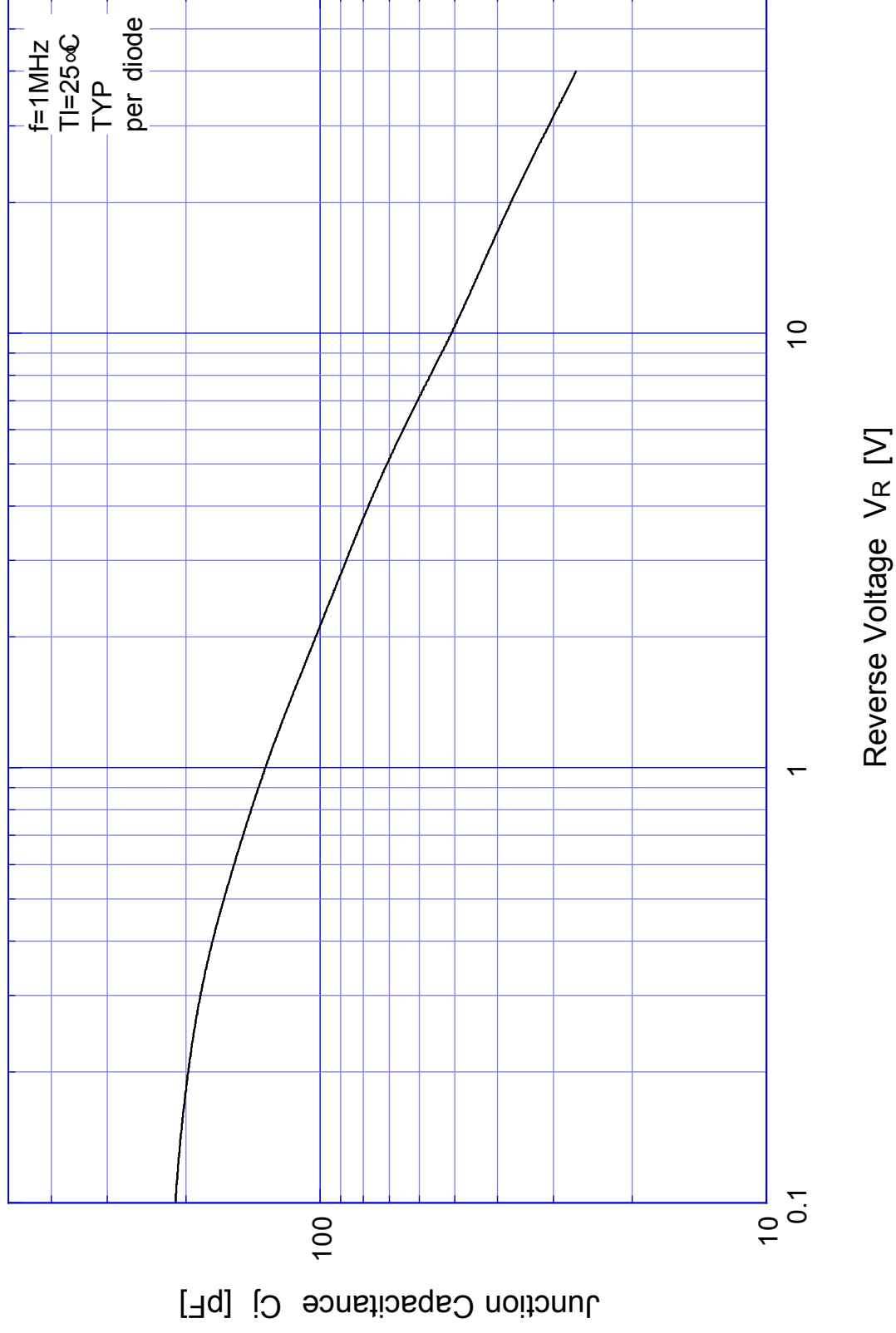
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Forward Voltage



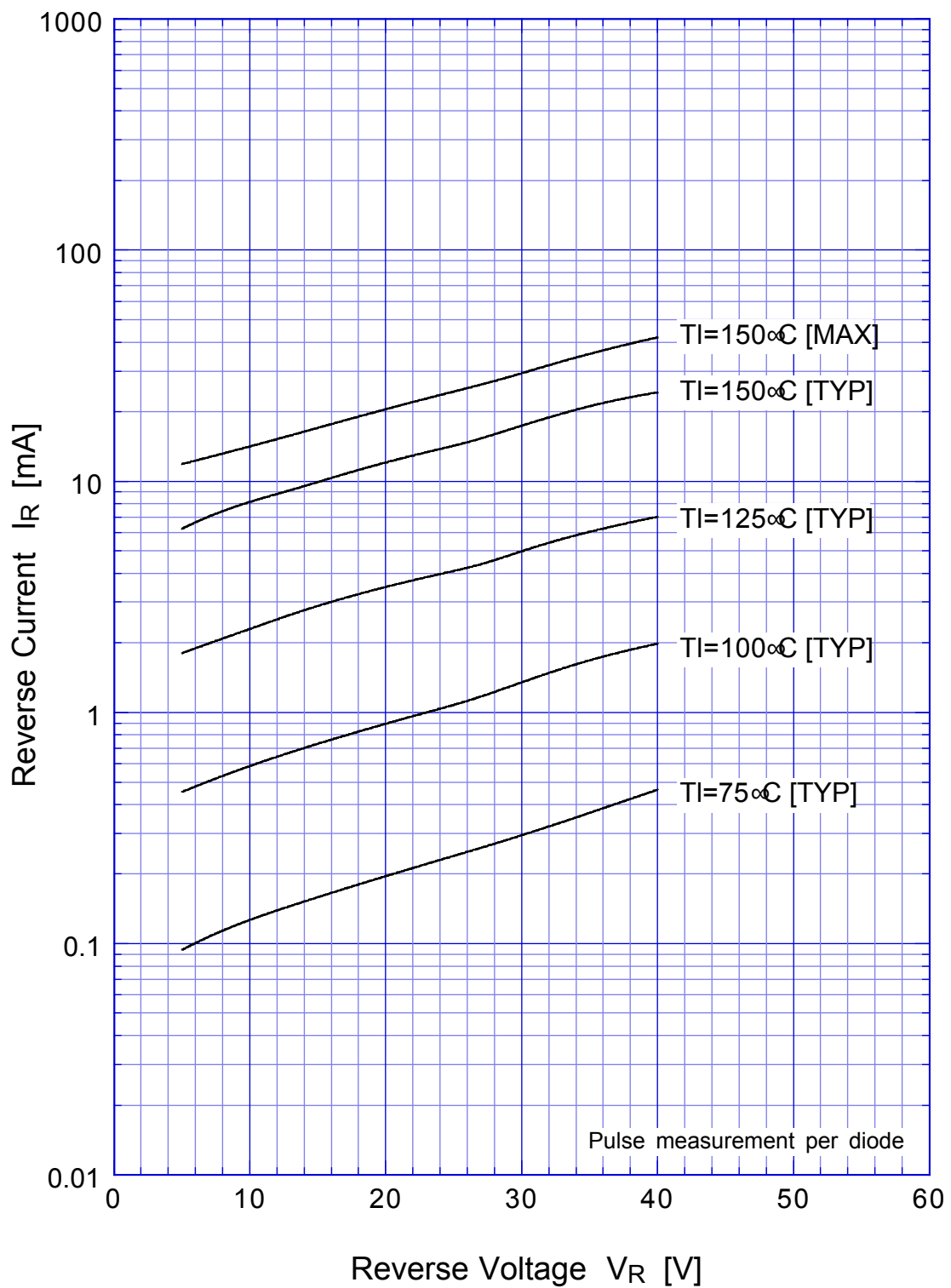
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Junction Capacitance



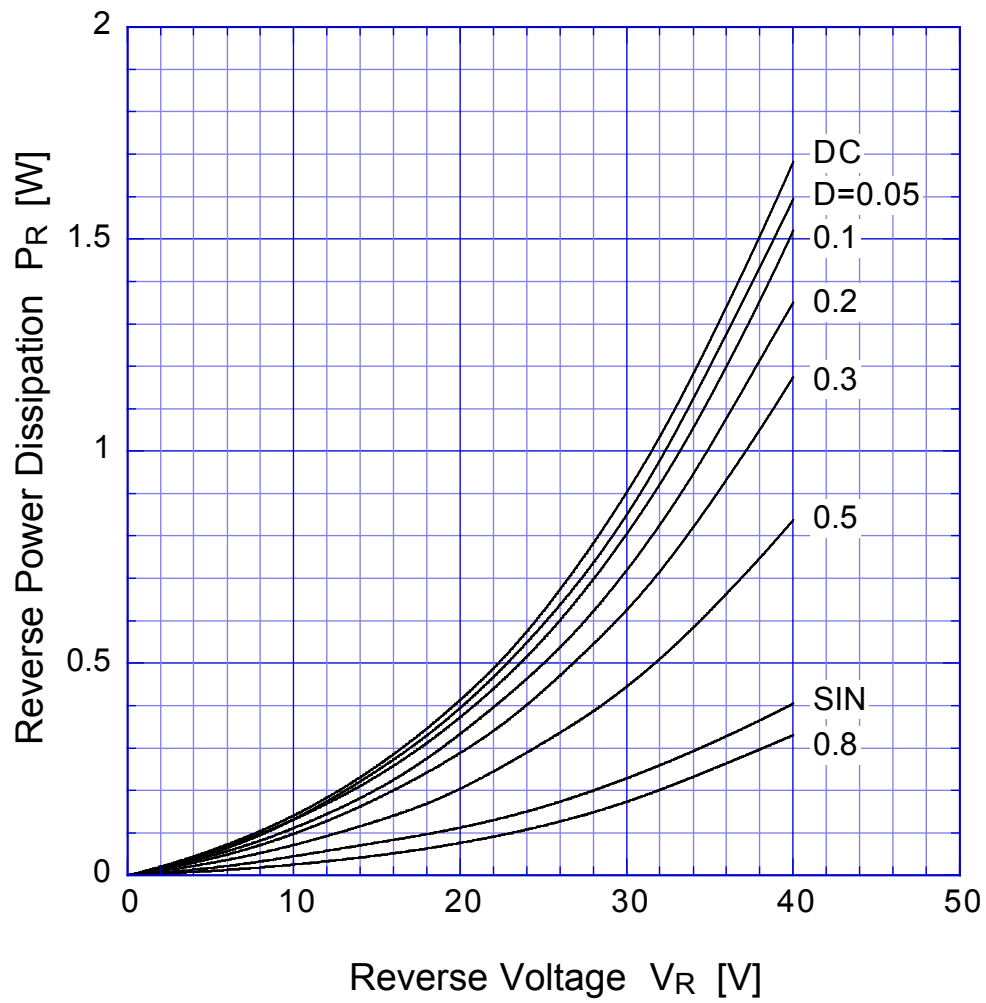
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Reverse Current

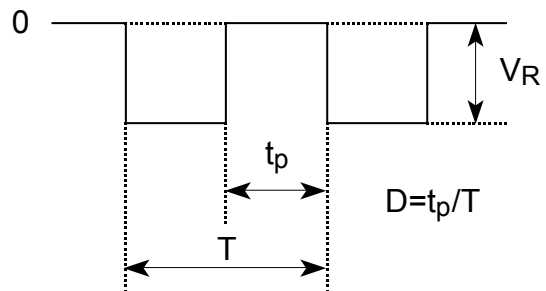


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Reverse Power Dissipation

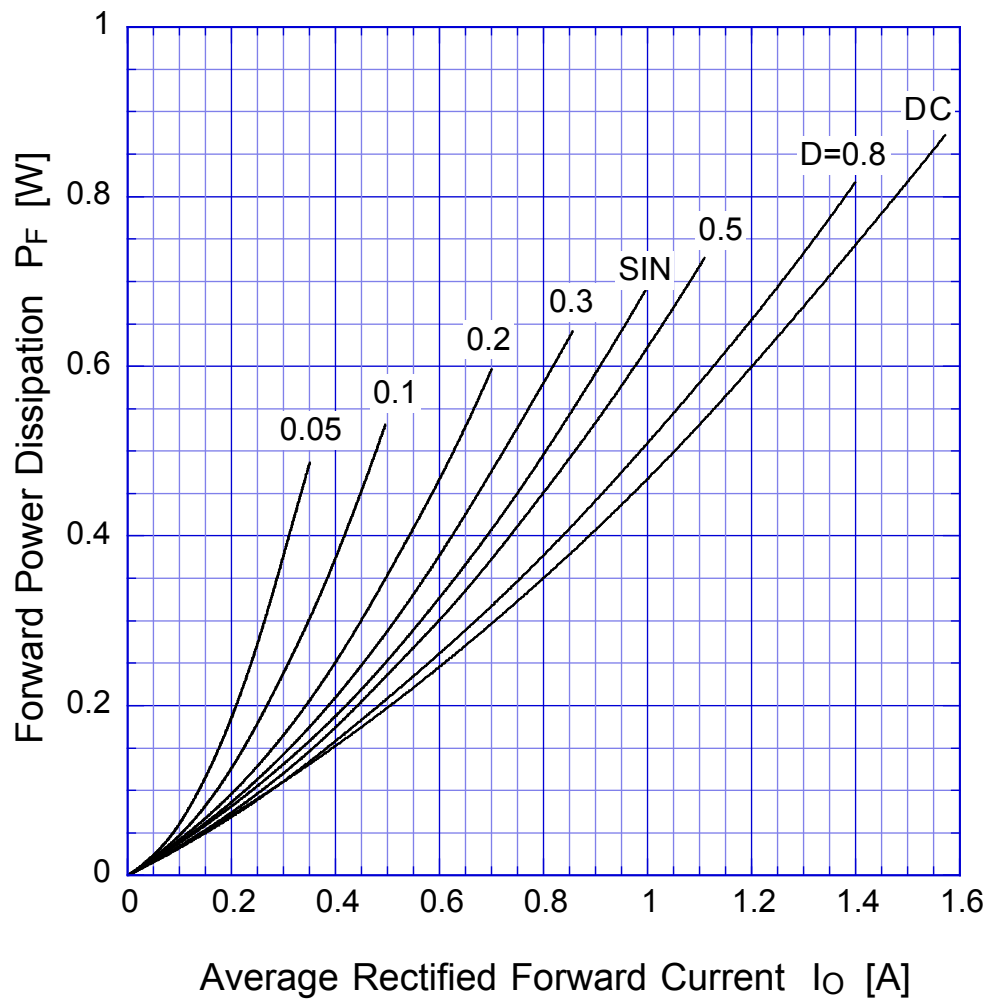


$T_j = 150^\circ\text{C}$

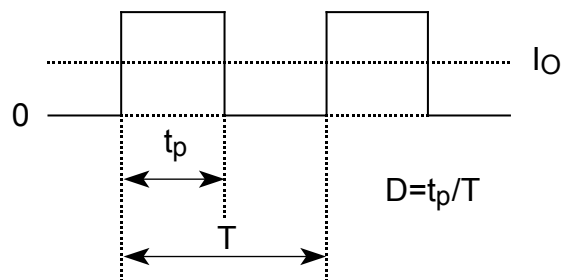


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Forward Power Dissipation

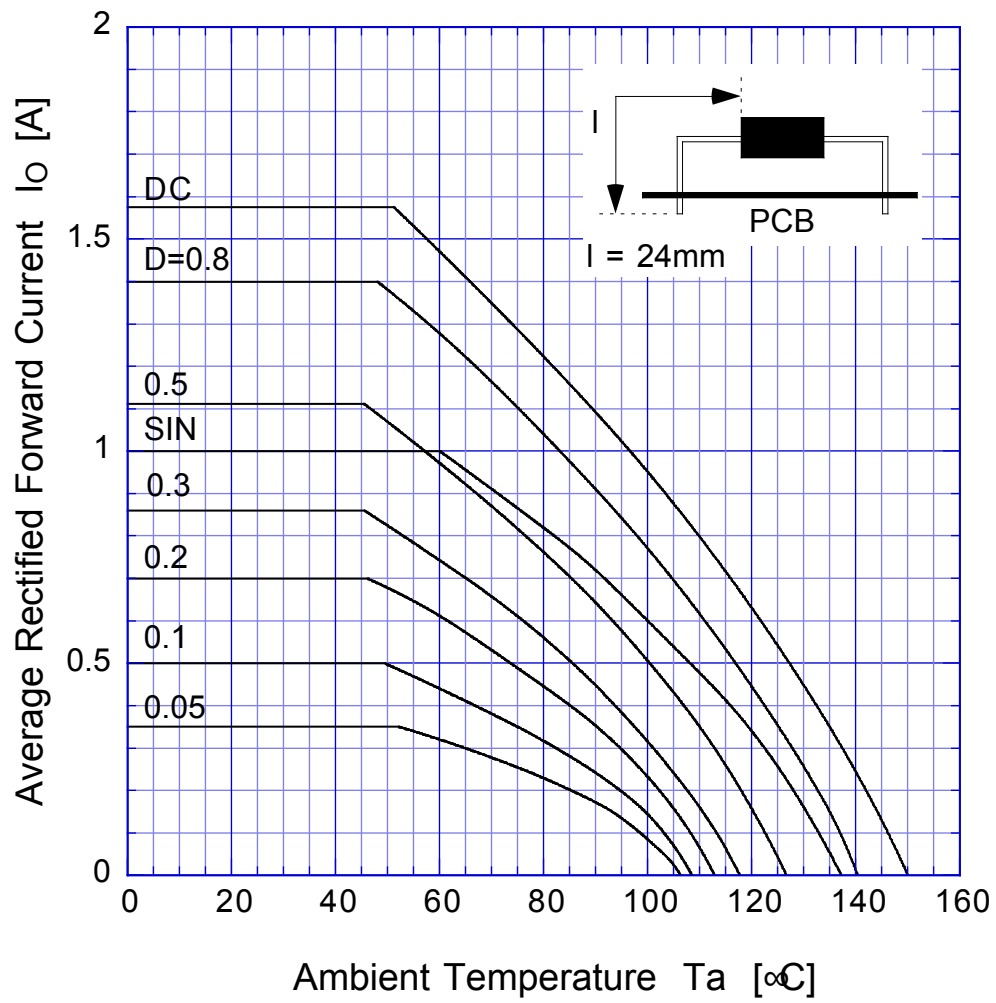


$T_j = 150^\circ\text{C}$

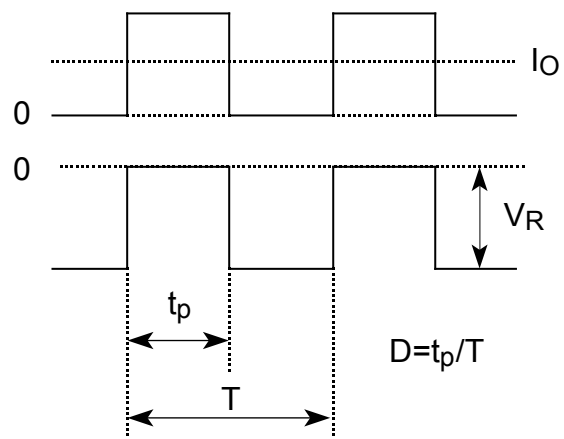


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Derating Curve

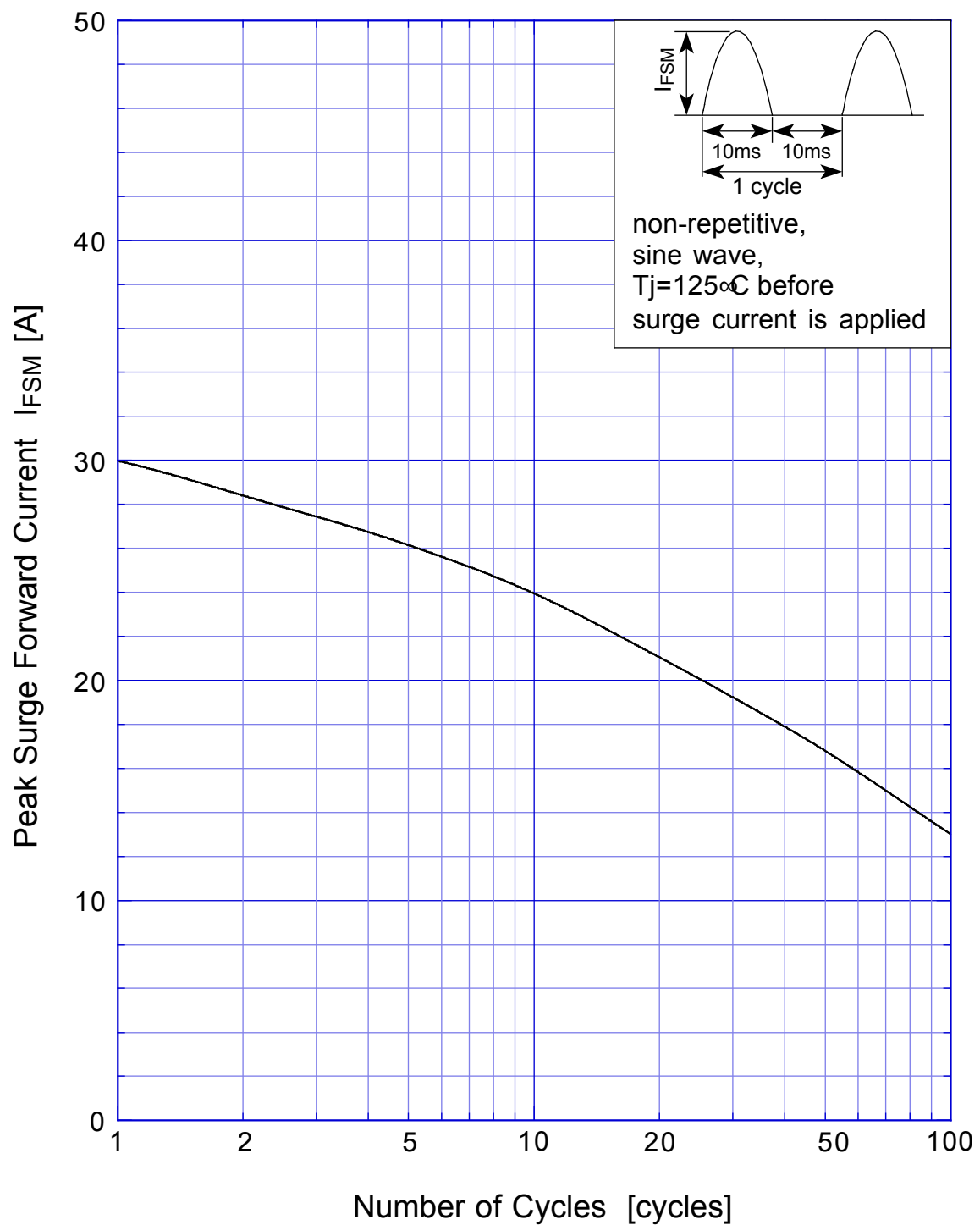


$V_R = 20\text{V}$



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Peak Surge Forward Capability



SBD Repetitive Surge Reverse Power Derating Curve

