

D1NS6

60V 1A

FEATURES

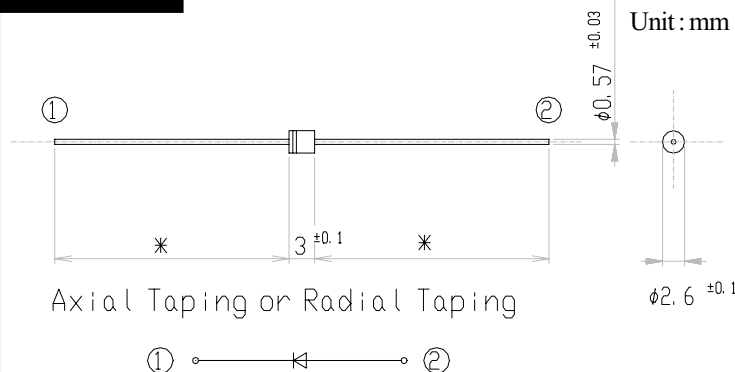
- $T_j 150^{\circ}\text{C}$
- P_{RRSM} avalanche guaranteed
- 5 mm pitch mounting applicable

APPLICATION

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

OUTLINE DIMENSIONS

Case : AX057



*Taping Code No. 4000:20^{MIN}
 No. 4060:27^{MIN}
 No. 4070:15^{MIN}

RATINGS

● Absolute Maximum Ratings (If not specified $T_l=25^{\circ}\text{C}$)

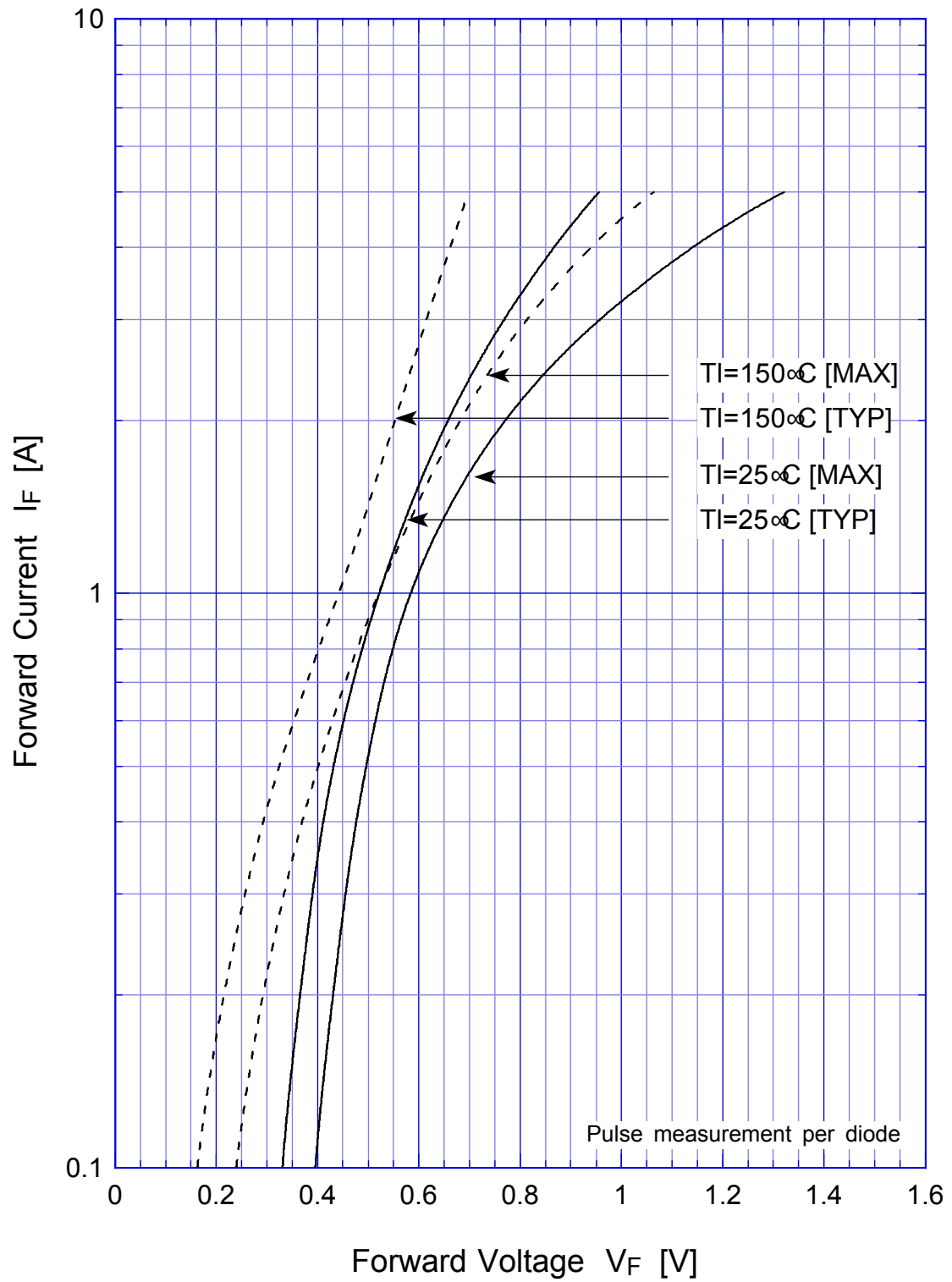
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T_{stg}		$-55 \sim 150$	$^{\circ}\text{C}$
Operating Junction Temperature	T_j		150	$^{\circ}\text{C}$
Maximum Reverse Voltage	V_{RM}		60	V
Repetitive Peak Surge Reverse Voltage	V_{RRSM}	Pulse width 0.5ms, duty 1/40	65	V
Average Rectified Forward Current	I_o	50Hz sine wave, $T_a=46^{\circ}\text{C}$	1	A
Peak Surge Forward Current	I_{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, $T_j=25^{\circ}\text{C}$	30	A
Repetitive Peak Surge Reverse Power	P_{RRSM}	Pulse width 10 μ s, $T_j=25^{\circ}\text{C}$	60	W

● Electrical Characteristics (If not specified $T_l=25^{\circ}\text{C}$)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V_F	$I_F=1\text{A}$, Pulse measurement	Max.0.58	V
Reverse Current	I_R	$V_R=V_{RM}$, Pulse measurement	Max.1	mA
Junction Capacitance	C_j	$f=1\text{MHz}$, $V_R=10\text{V}$	Typ.53	pF
Thermal Resistance	θ_{jl}	junction to lead	Max.10	$^{\circ}\text{C/W}$
	θ_{ja}	junction to ambient	Max.113	

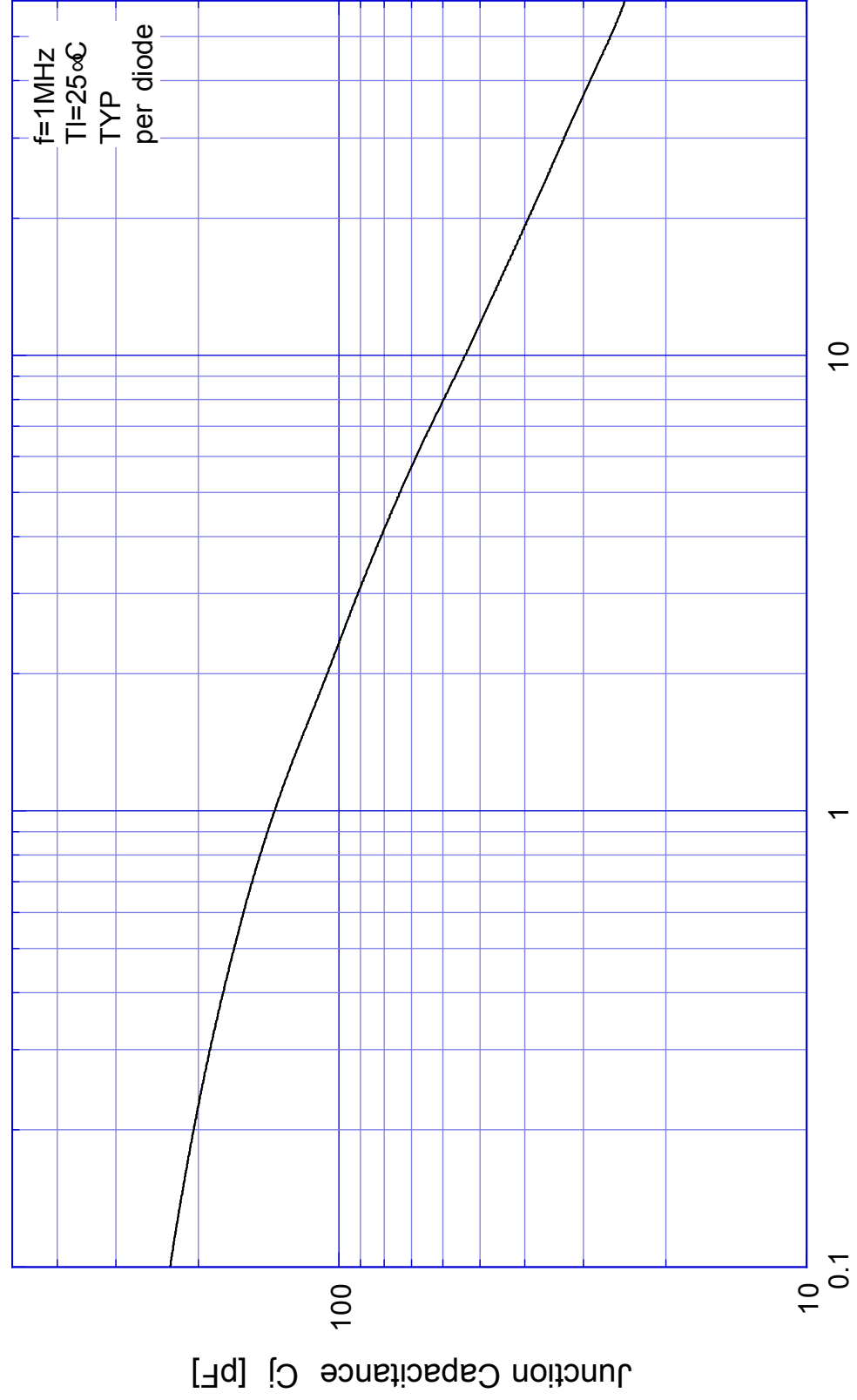
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Forward Voltage



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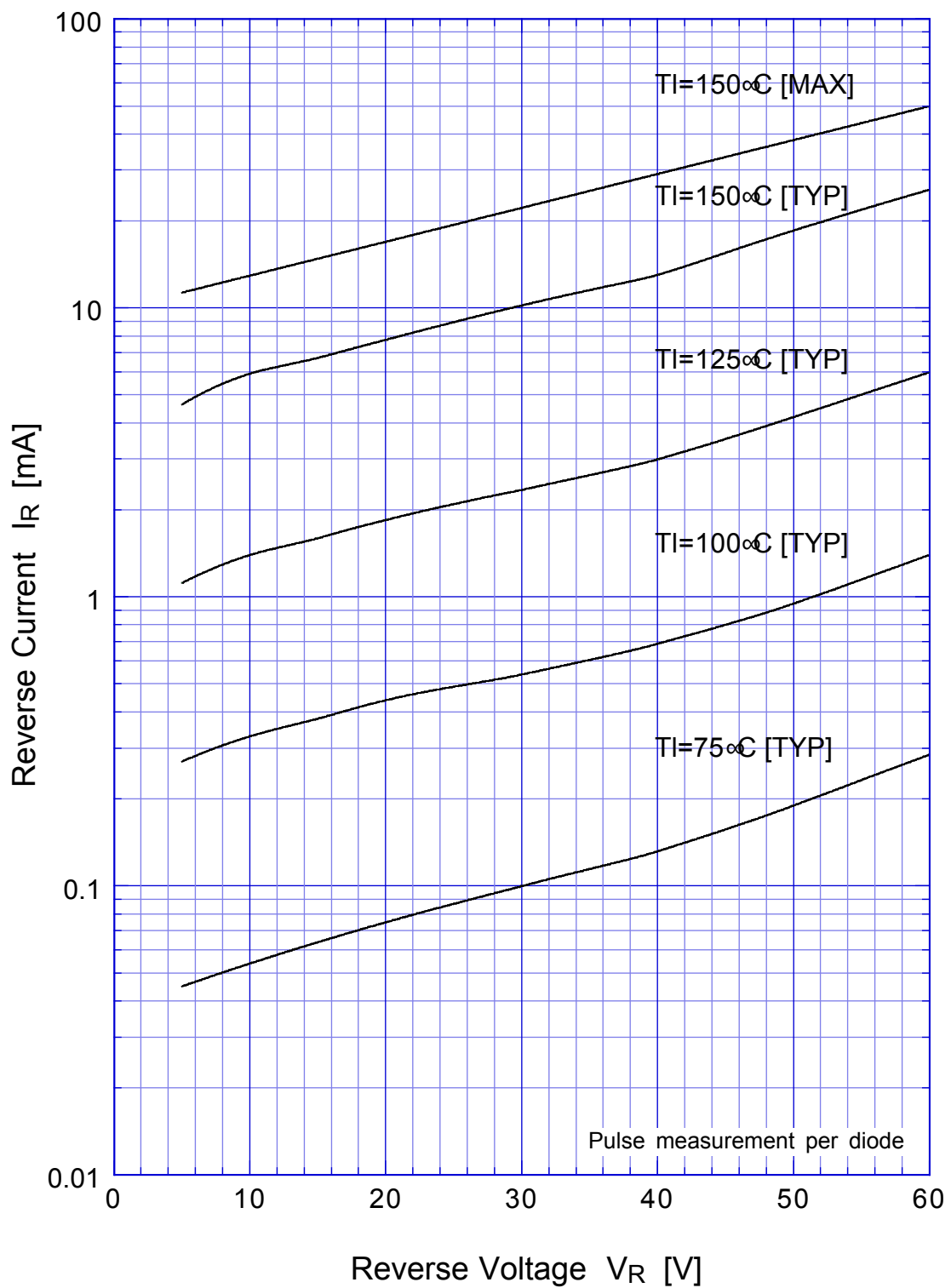
Junction Capacitance



Reverse Voltage V_R [V]

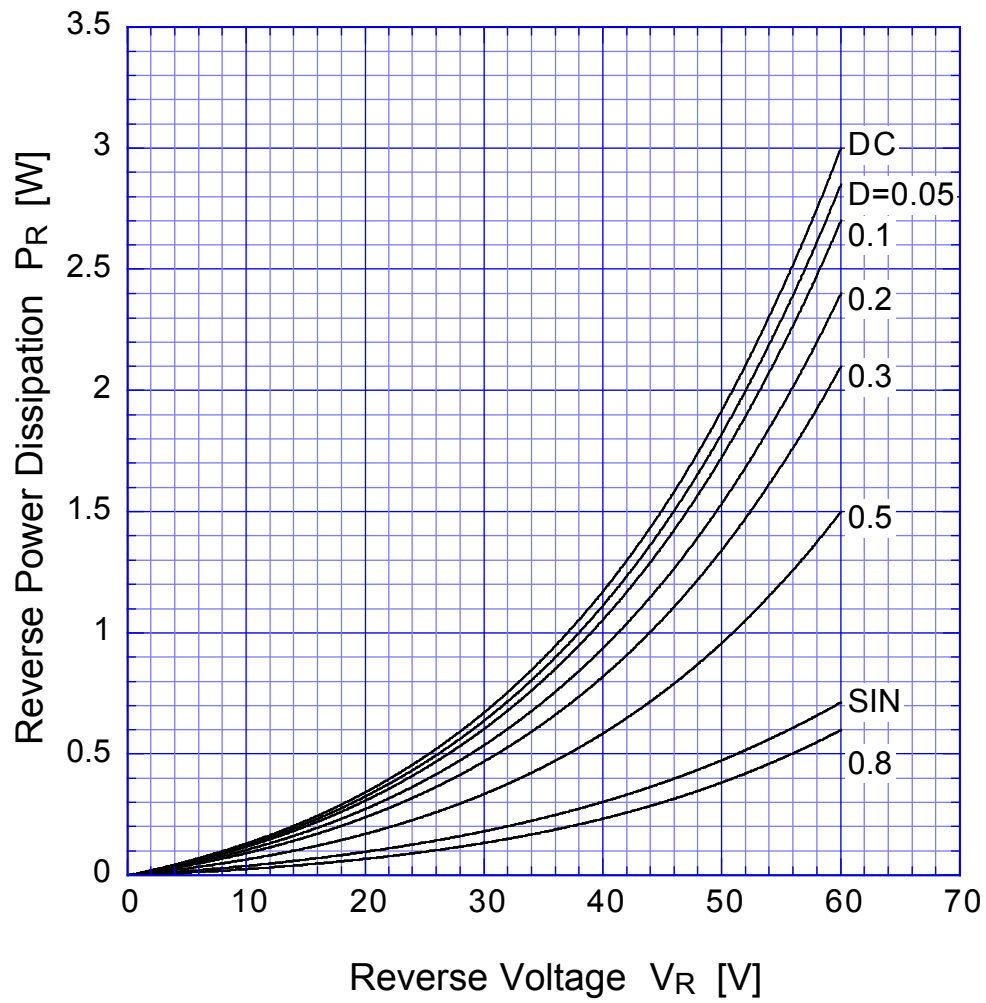
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Reverse Current

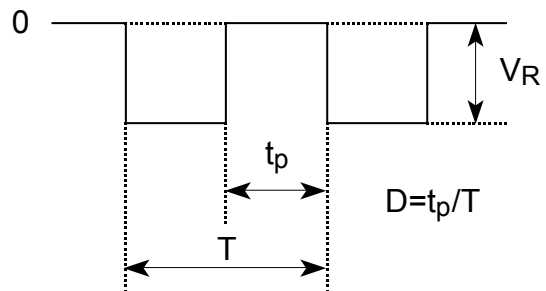


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Reverse Power Dissipation

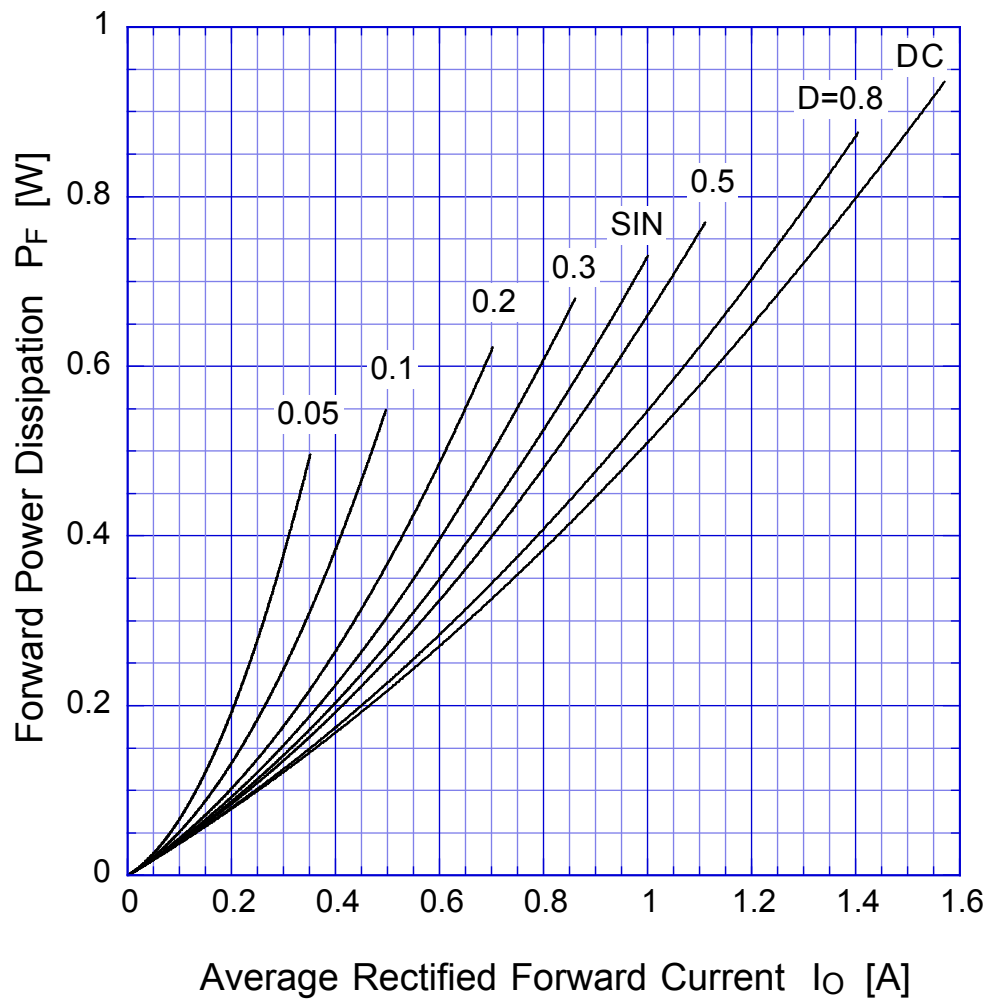


$T_j = 150^\circ\text{C}$

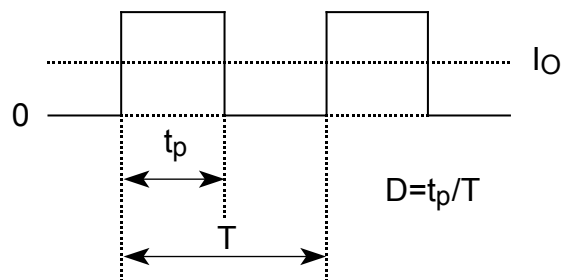


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Forward Power Dissipation

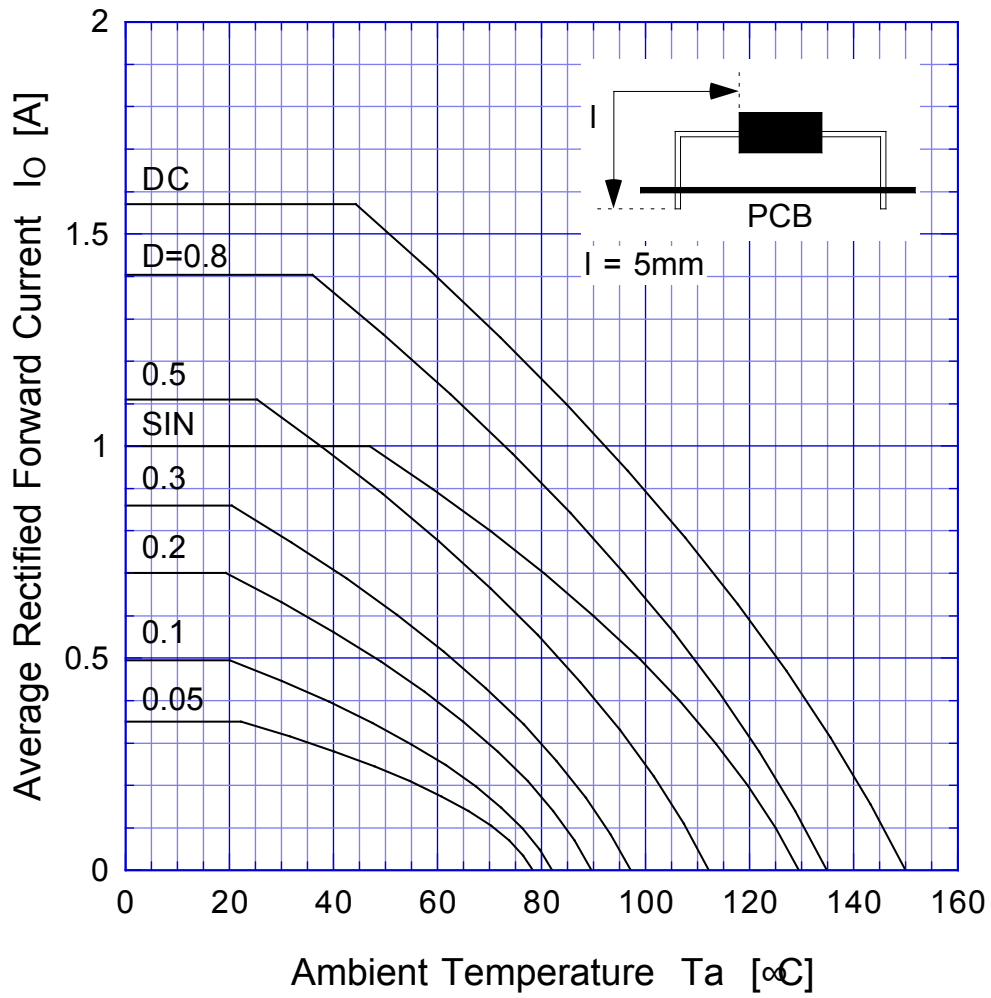


$T_j = 150^\circ\text{C}$

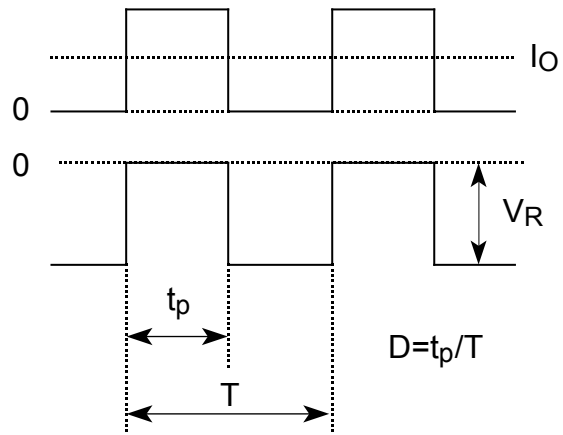


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Derating Curve

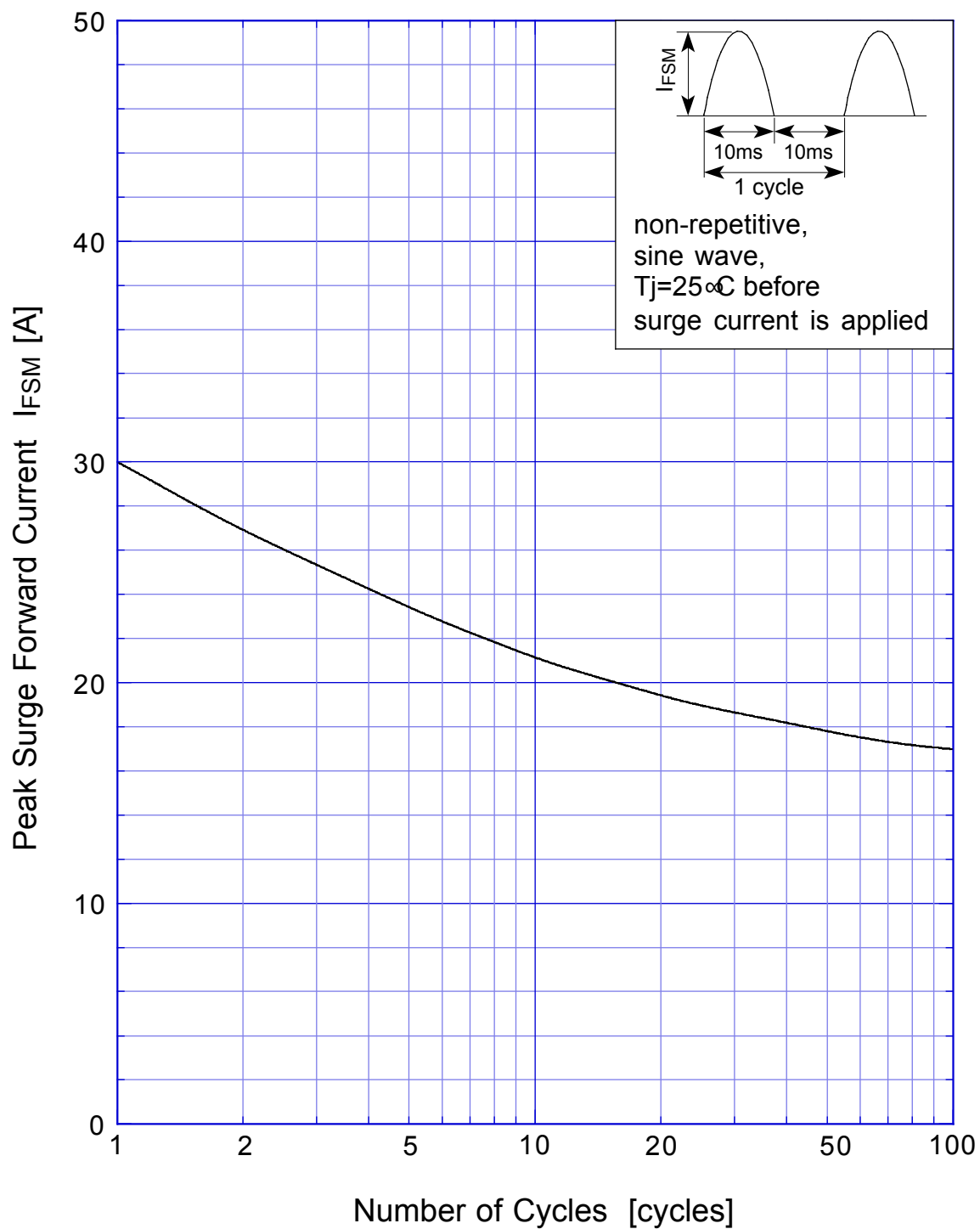


$V_R = 30\text{V}$



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Peak Surge Forward Capability



SBD Repetitive Surge Reverse Power Derating Curve

