

D5S6M

60V 5A

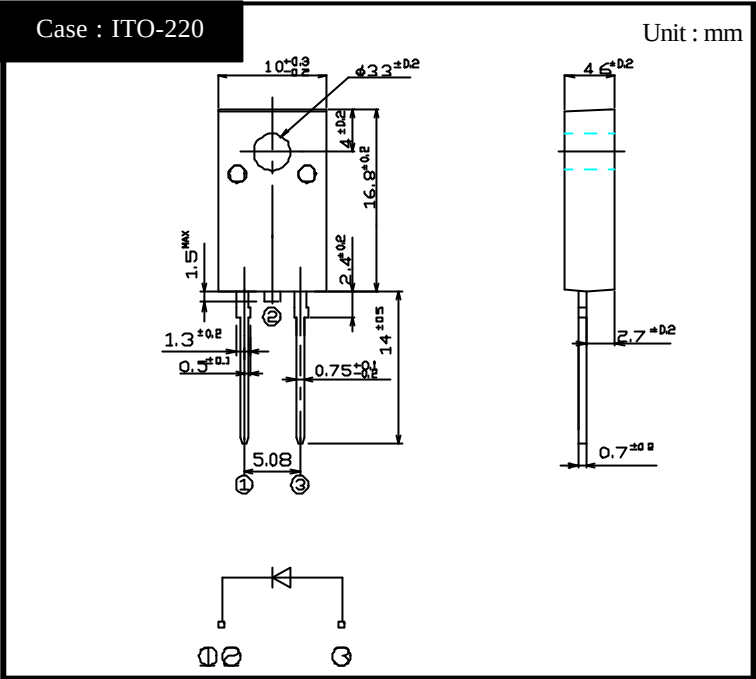
FEATURES

- Tj150°C
- P_{RRSM} avalanche guaranteed
- Fully Isolated Molding

APPLICATION

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

OUTLINE DIMENSIONS



RATINGS

●Absolute Maximum Ratings (If not specified T ≒25°C)

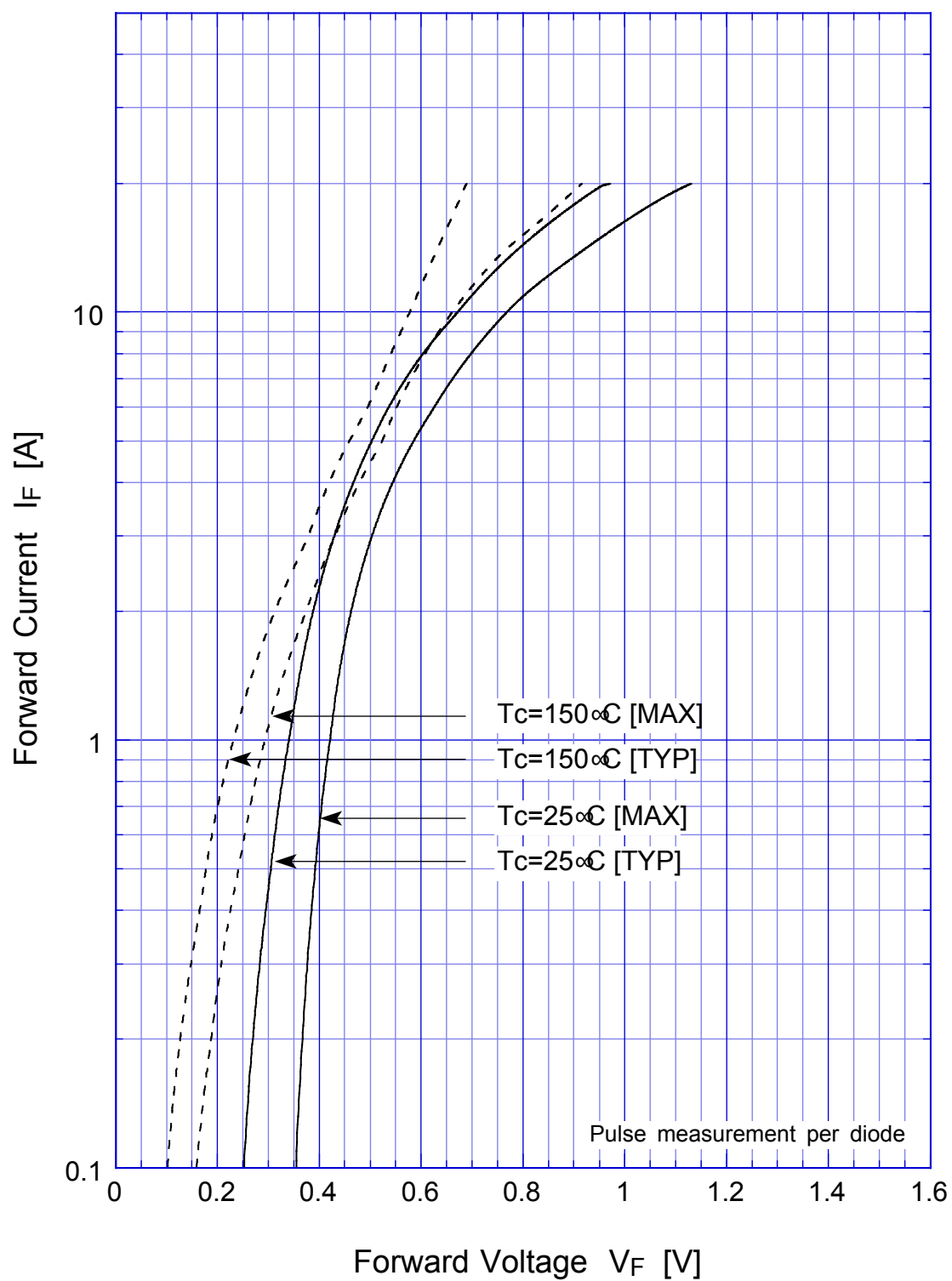
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-55~150	°C
Operating Junction Temperature	Tj		150	°C
Maximum Reverse Voltage	V _{RM}		60	V
Repetitive Peak Surge Reverse Voltage	V _{RRSM}	Pulse width 0.5ms, duty1/40	65	V
Average Rectified Forward Current	I _O	50Hz sine wave, R-load, Tc=130°C	5	A
Peak Surge Forward Current	I _{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=125°C	100	A
Repetitive Peak Surge Reverse Power	P _{RRSM}	Pulse width 10 μs, Tj= 25°C	330	W
Dielectric Strength	V _{dis}	Terminals to case, AC 1 minute	1.5	kV
Mounting Torque	TOR	(Recommended torque 0.3N·m)	0.5	N·m

●Electrical Characteristics (If not specified T ≒25°C)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V _F	I _F =5A, Pulse measurement	Max.0.58	V
Reverse Current	I _R	V _R =V _{RM} , Pulse measurement	Max. 4.5	mA
Junction Capacitance	C _j	f=1MHz, V _R =10V	Typ.260	pF
Thermal Resistance	θ _{jc}	junction to case	Max.4.5	°C/W
	θ _{cf}	case to heatsink	Max.1.5	

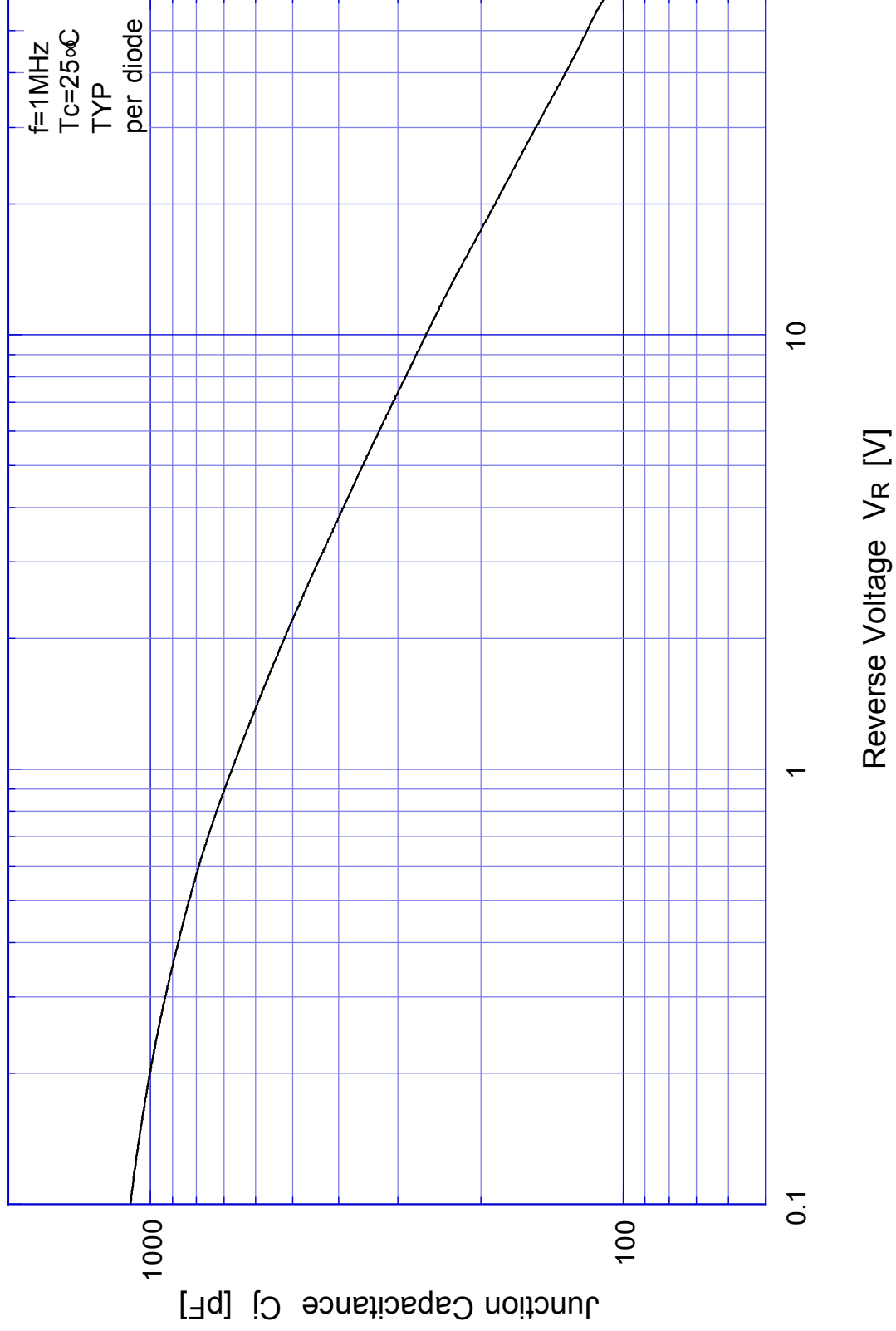
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Forward Voltage



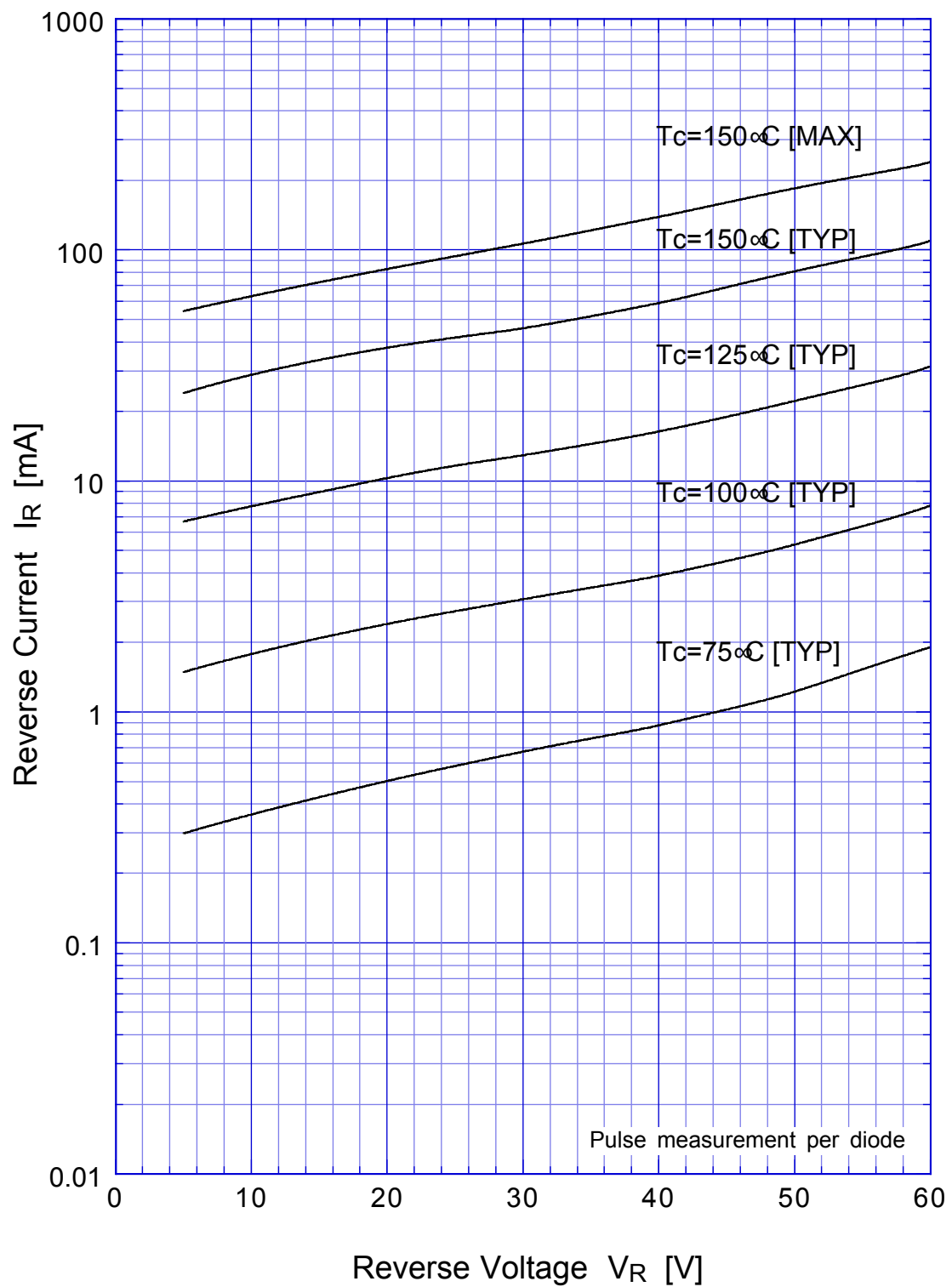
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Junction Capacitance



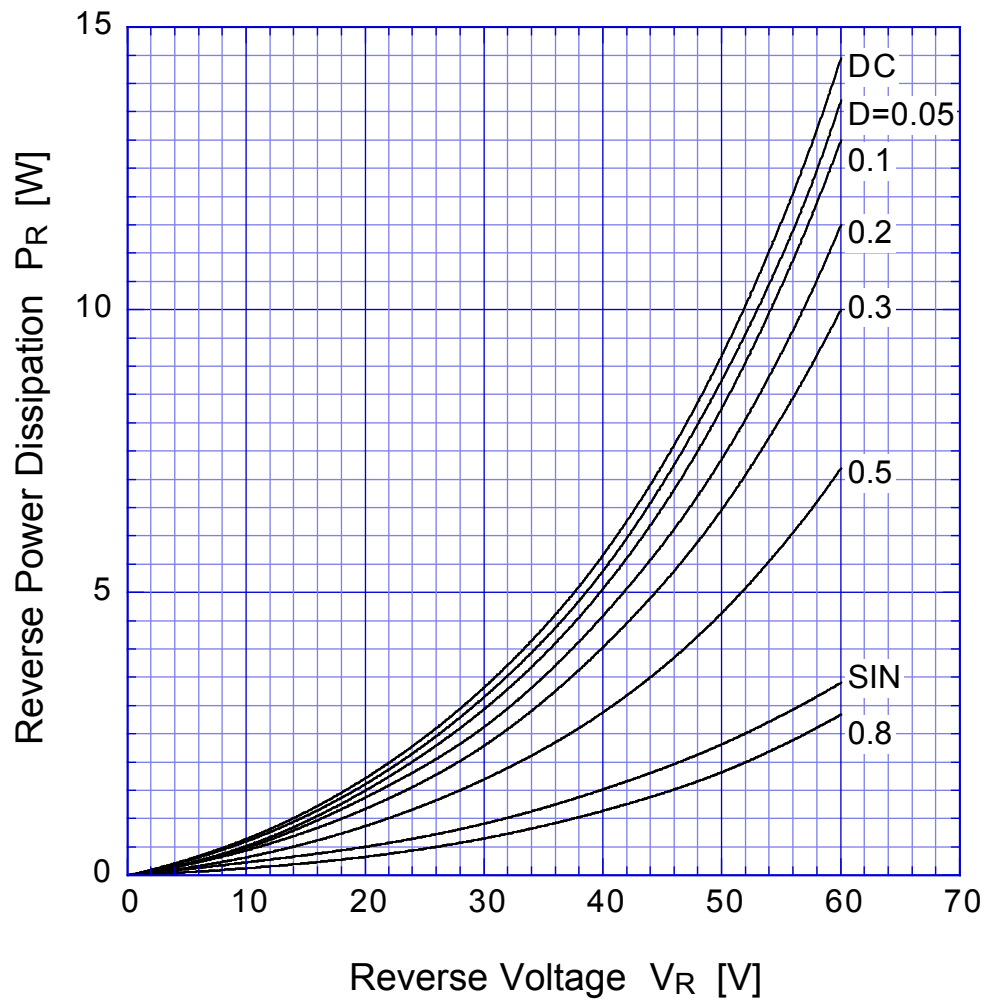
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Reverse Current

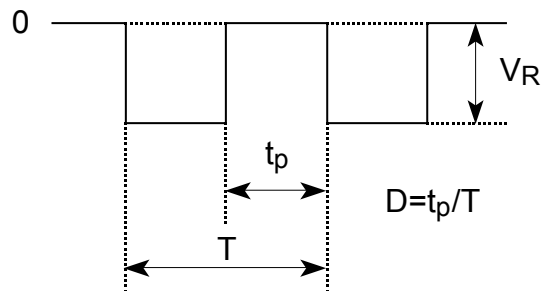


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Reverse Power Dissipation

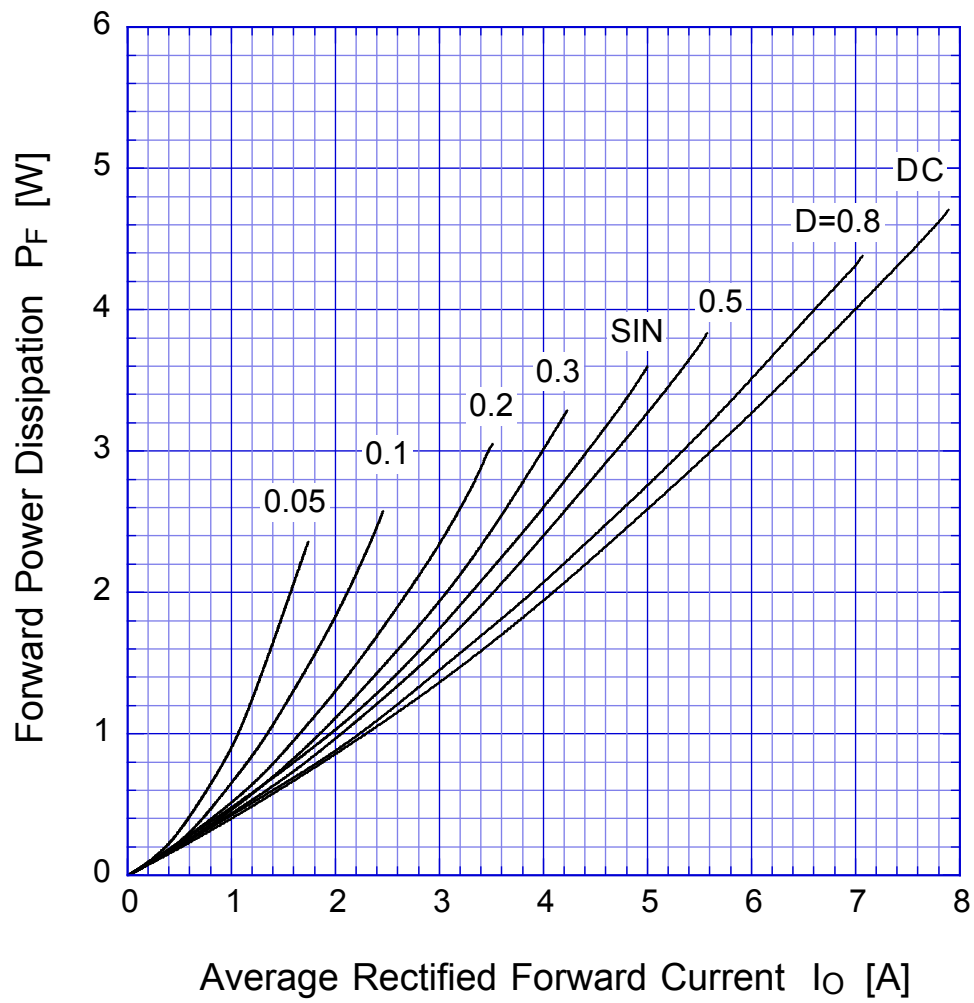


$T_j = 150^\circ\text{C}$

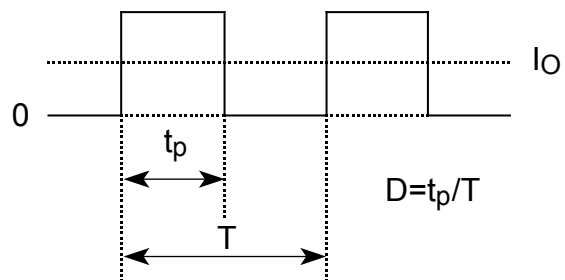


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Forward Power Dissipation

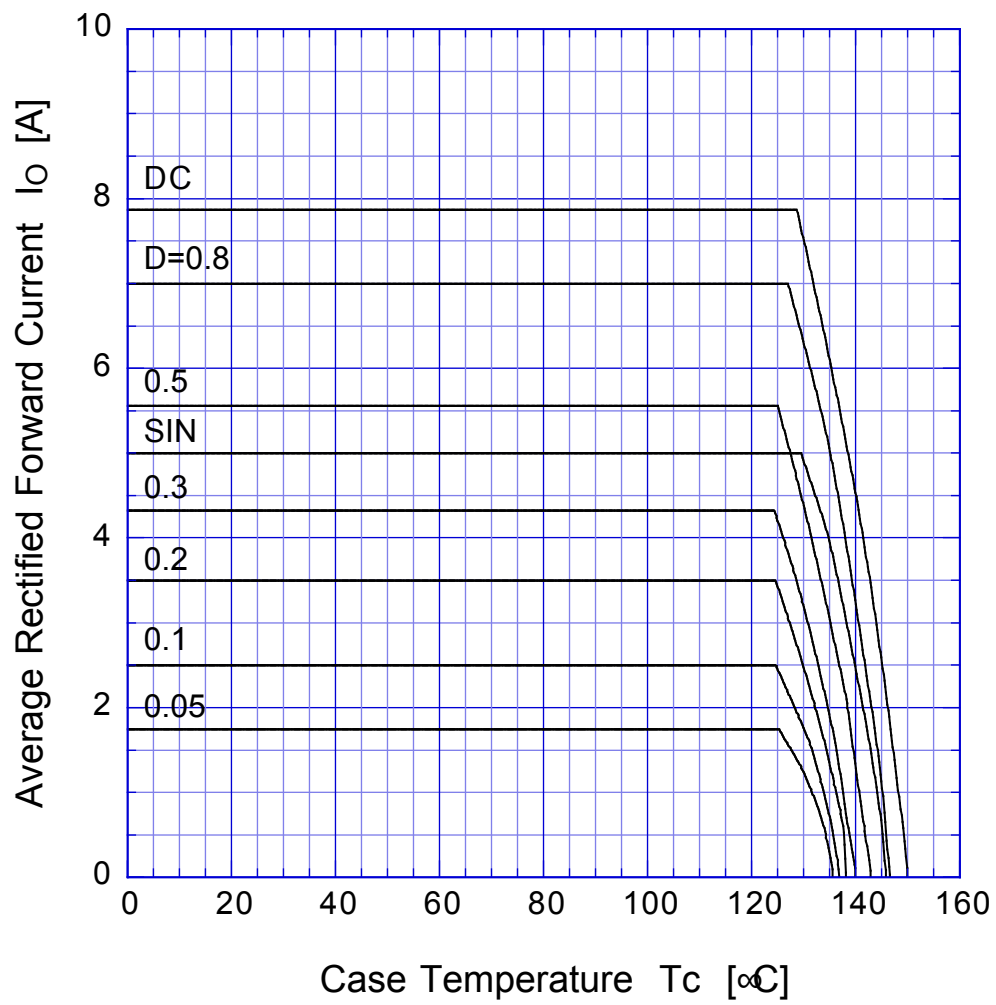


$T_j = 150^\circ\text{C}$

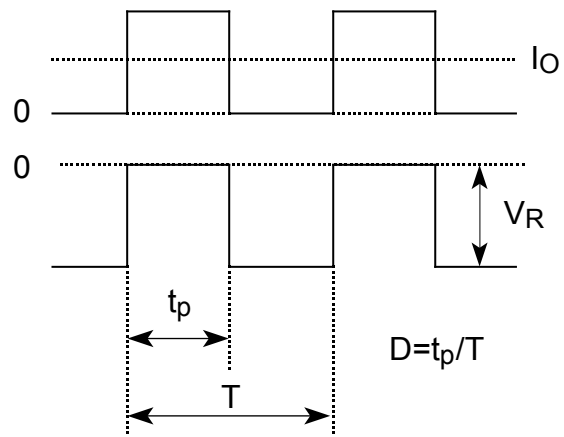


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Derating Curve

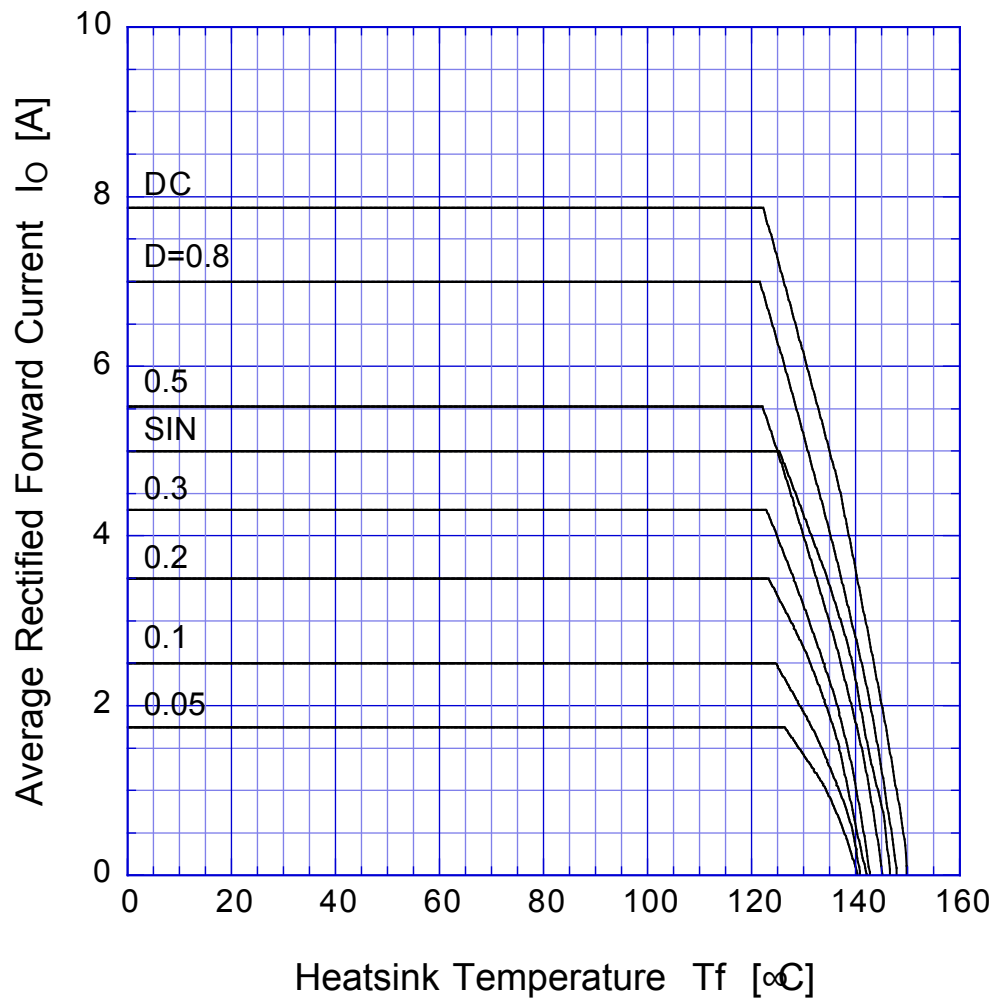


$V_R = 30\text{V}$

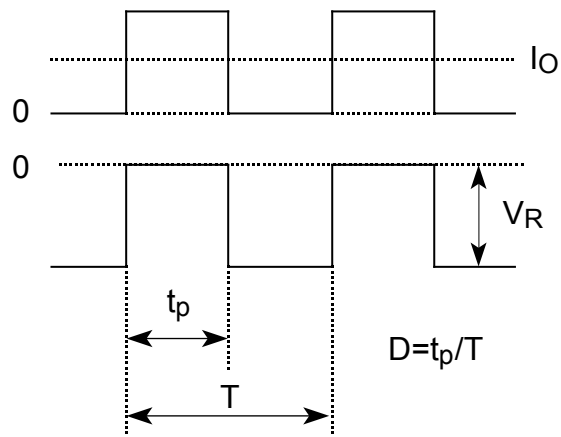


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Derating Curve

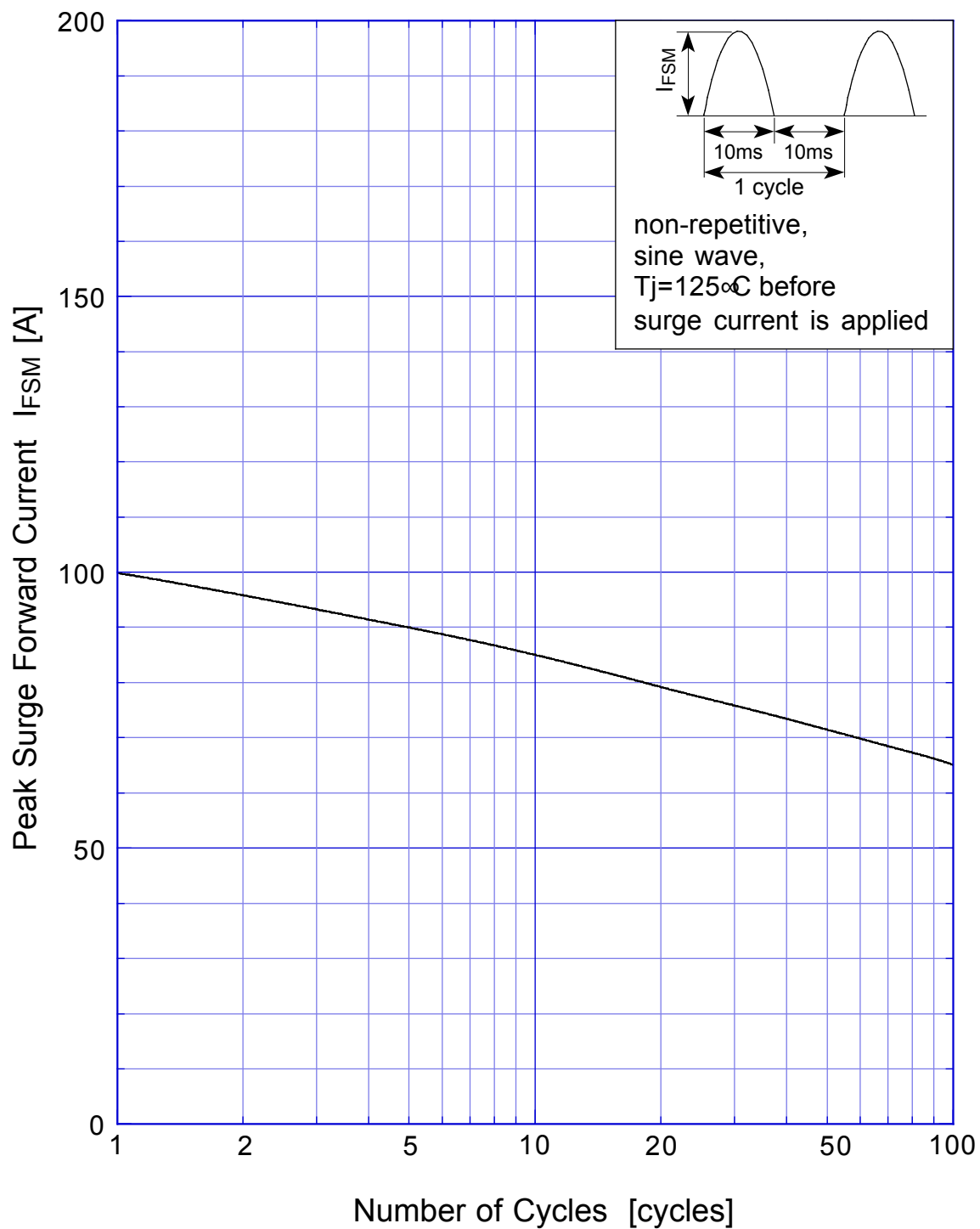


$V_R = 30V$



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Peak Surge Forward Capability



SBD Repetitive Surge Reverse Power Derating Curve

