

SHINDENGEN

Schottky Rectifiers (SBD)

Single

D5S6M**60V 5A**

FEATURES

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

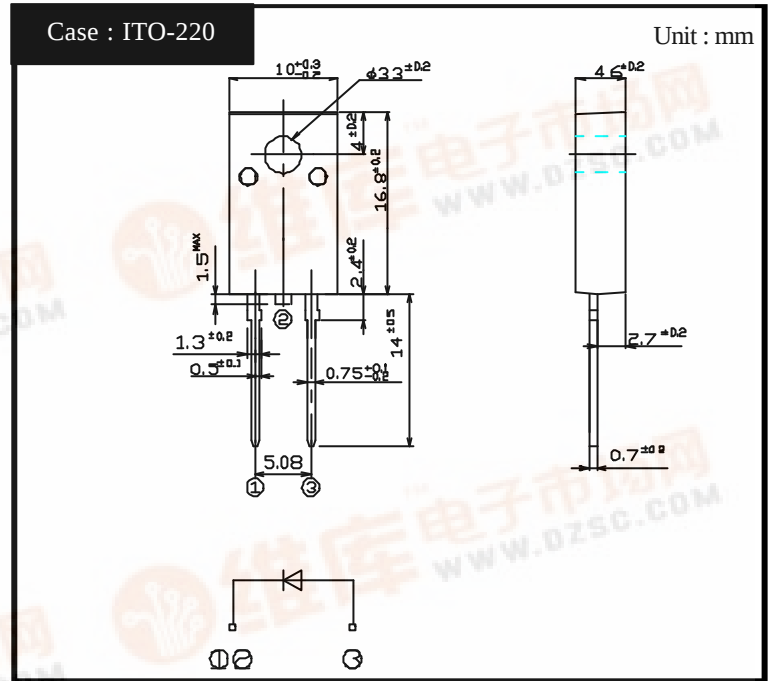
APPLICATION

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

OUTLINE DIMENSIONS

Case : ITO-220

Unit : mm



RATINGS

- Absolute Maximum Ratings (If not specified T = 25 °C)

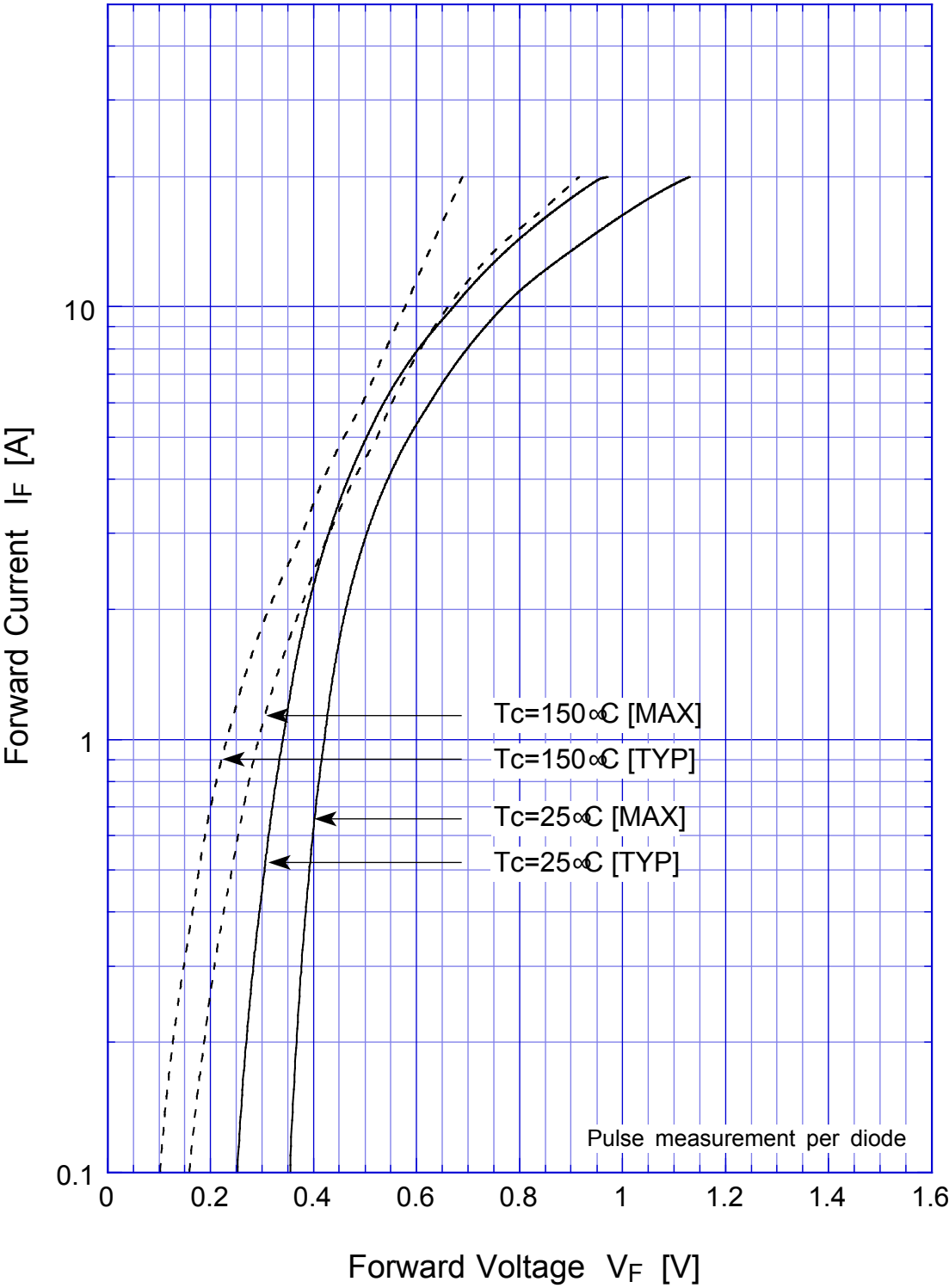
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-55 ~ 150	
Operating Junction Temperature	Tj		150	
Maximum Reverse Voltage	V_{RM}		60	V
Repetitive Peak Surge Reverse Voltage	V_{RRSM}	Pulse width 0.5ms, duty 1/40	65	V
Average Rectified Forward Current	I_o	50Hz sine wave, R-load, Tc=130	5	A
Peak Surge Forward Current	I_{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=125	100	A
Repetitive Peak Surge Reverse Power	P_{RRSM}	Pulse width 10 μs, Tj= 25	330	W
Dielectric Strength	Vdis	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)

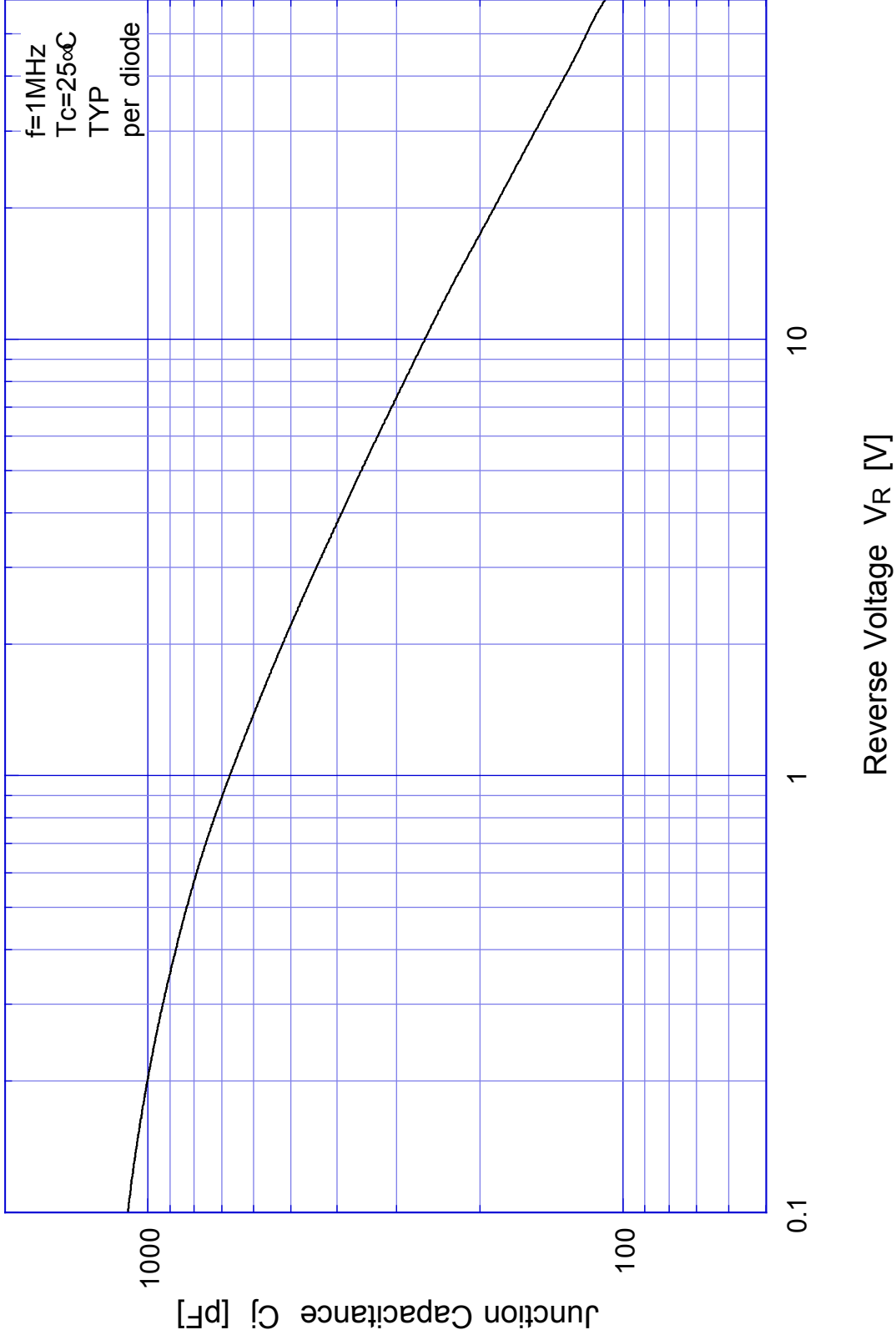
Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V_F	$I_F=5A$, Pulse measurement	Max.0.58	V
Reverse Current	I_R	$V_R=V_{RM}$, Pulse measurement	Max. 4.5	mA
Junction Capacitance	Cj	f=1MHz, $V_R=10V$	Typ.260	pF
Thermal Resistance	θ_{jc}	junction to case	Max.4.5	/W
	θ_{cf}	case to heatsink	Max.1.5	

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Forward Voltage

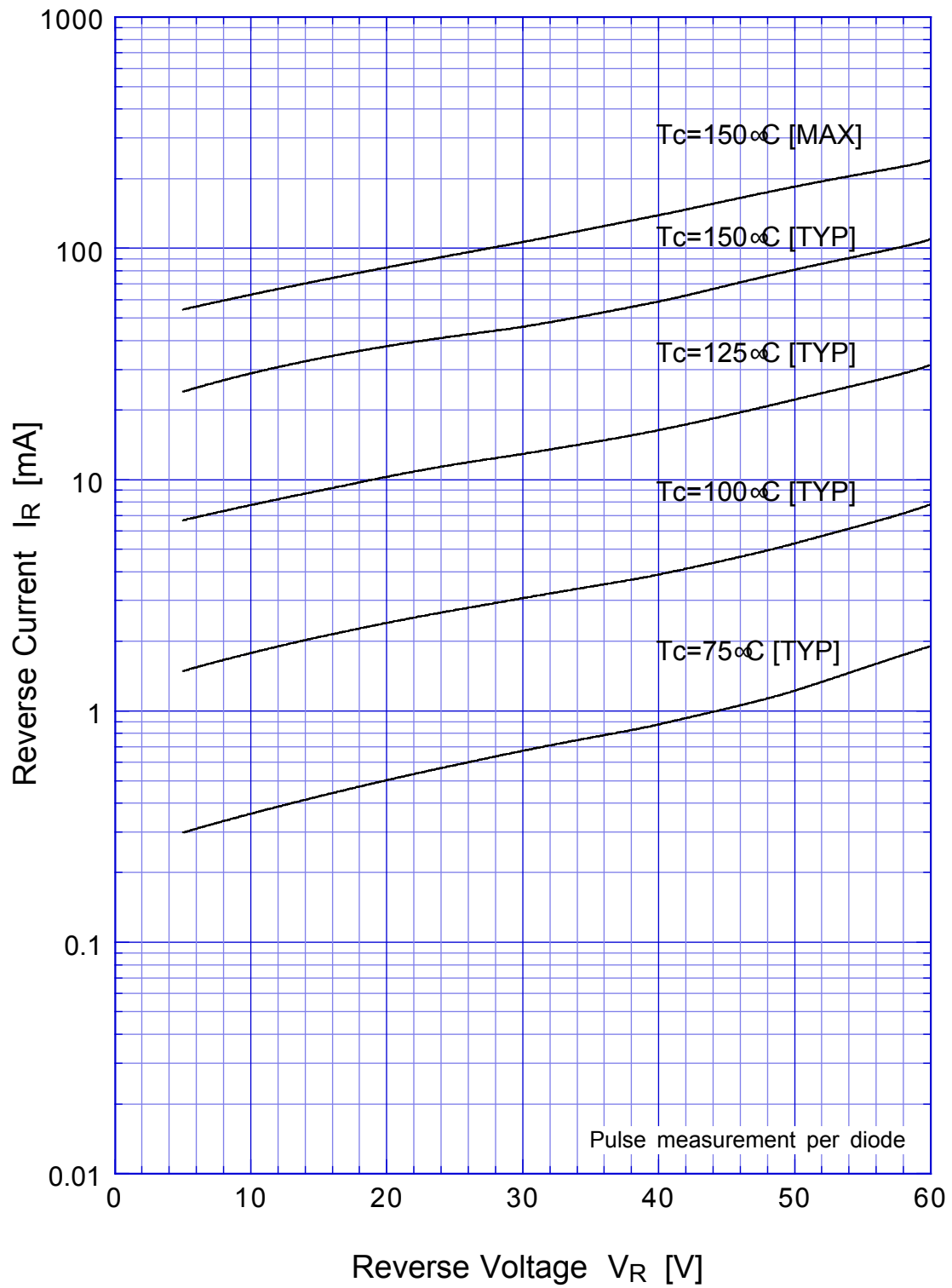


D5S6M Junction Capacitance



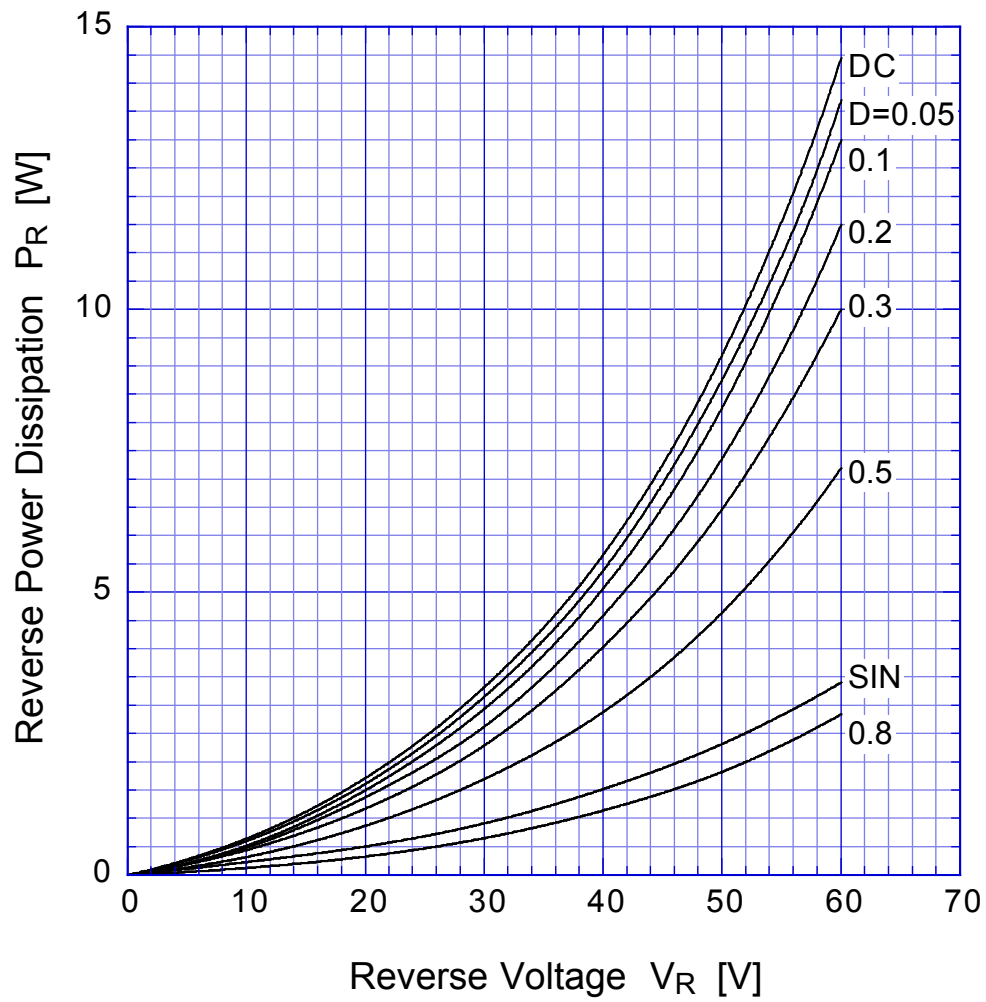
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Reverse Current

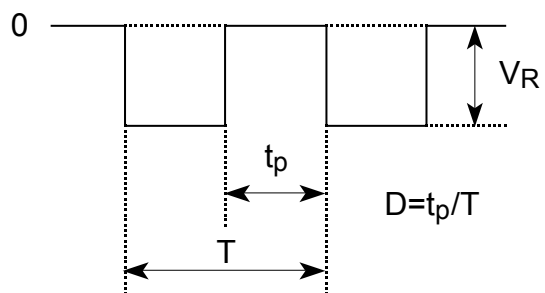


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Reverse Power Dissipation

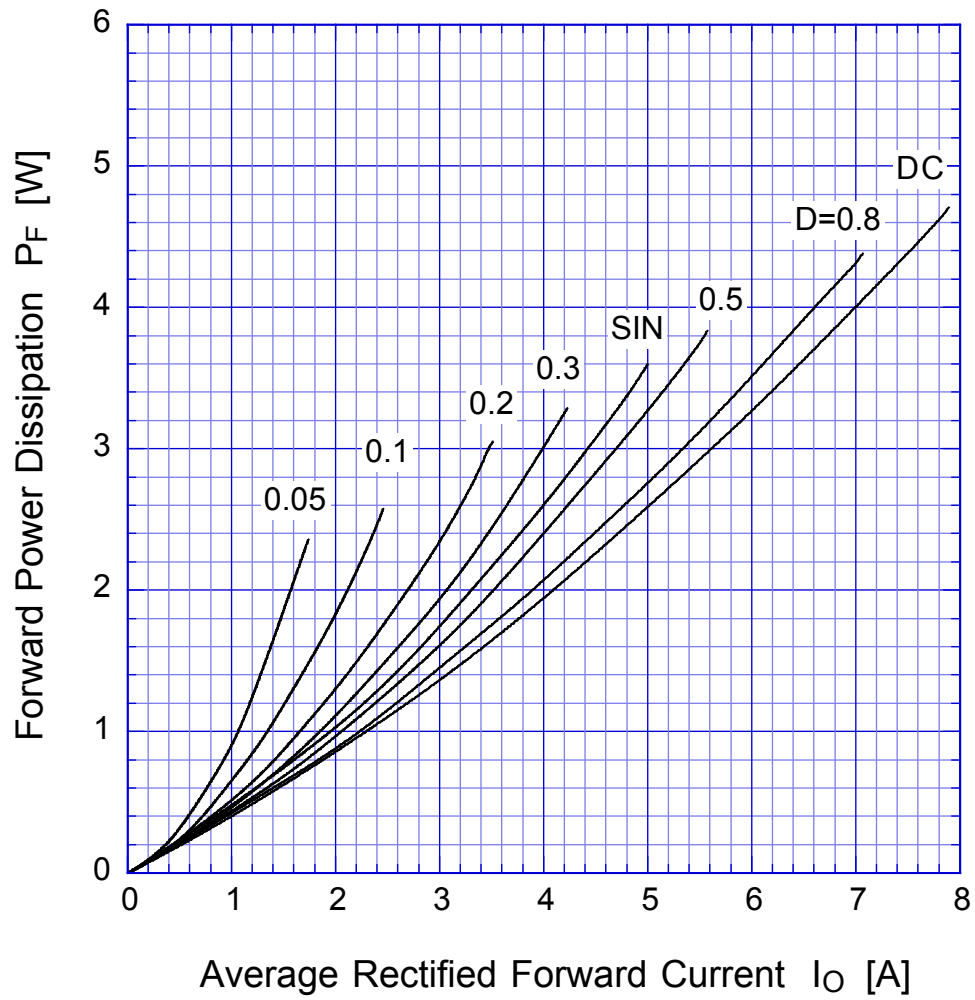


$T_j = 150^\circ\text{C}$

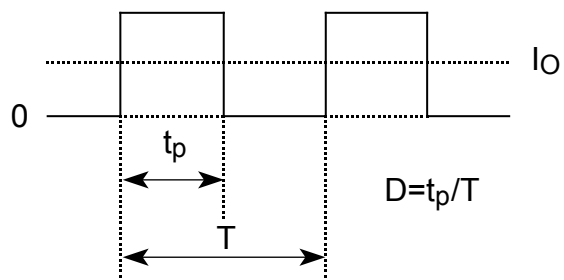


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Forward Power Dissipation

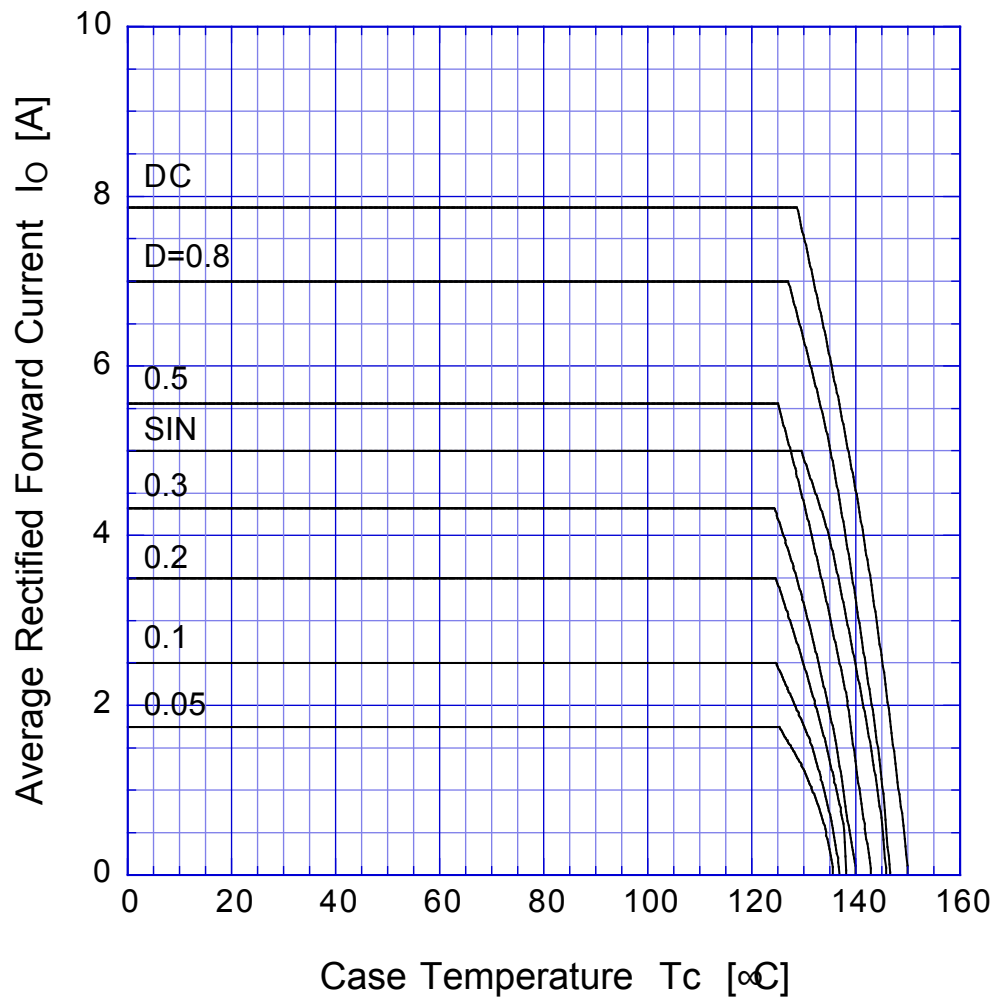


$T_j = 150^\circ\text{C}$

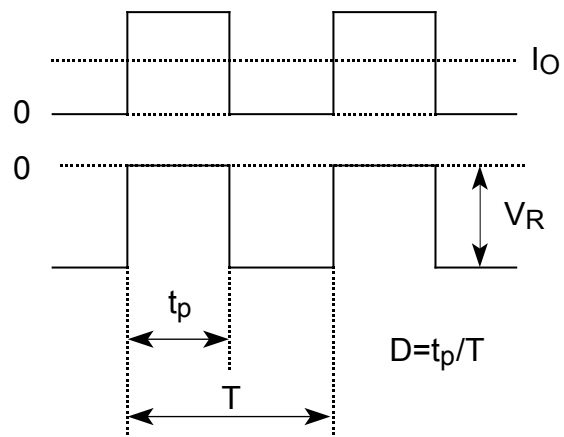


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Derating Curve

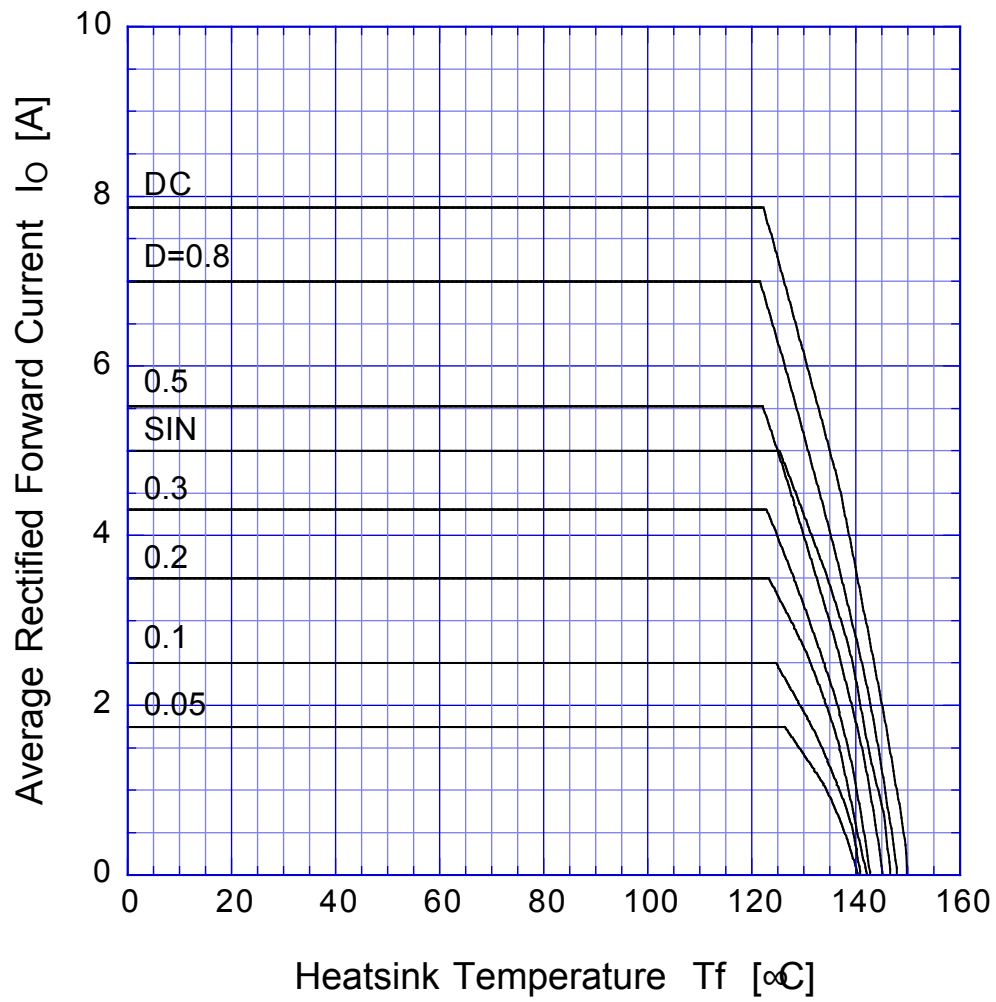


$V_R = 30V$

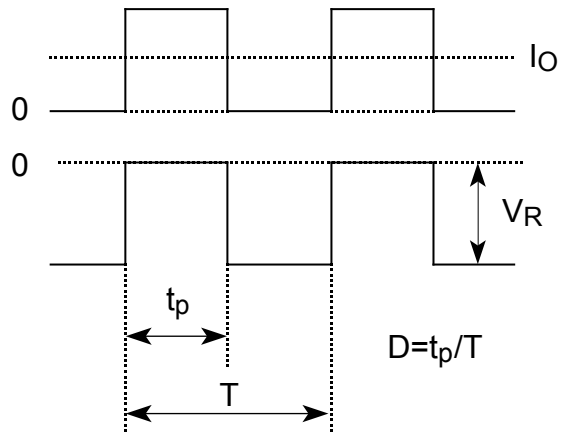


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Derating Curve

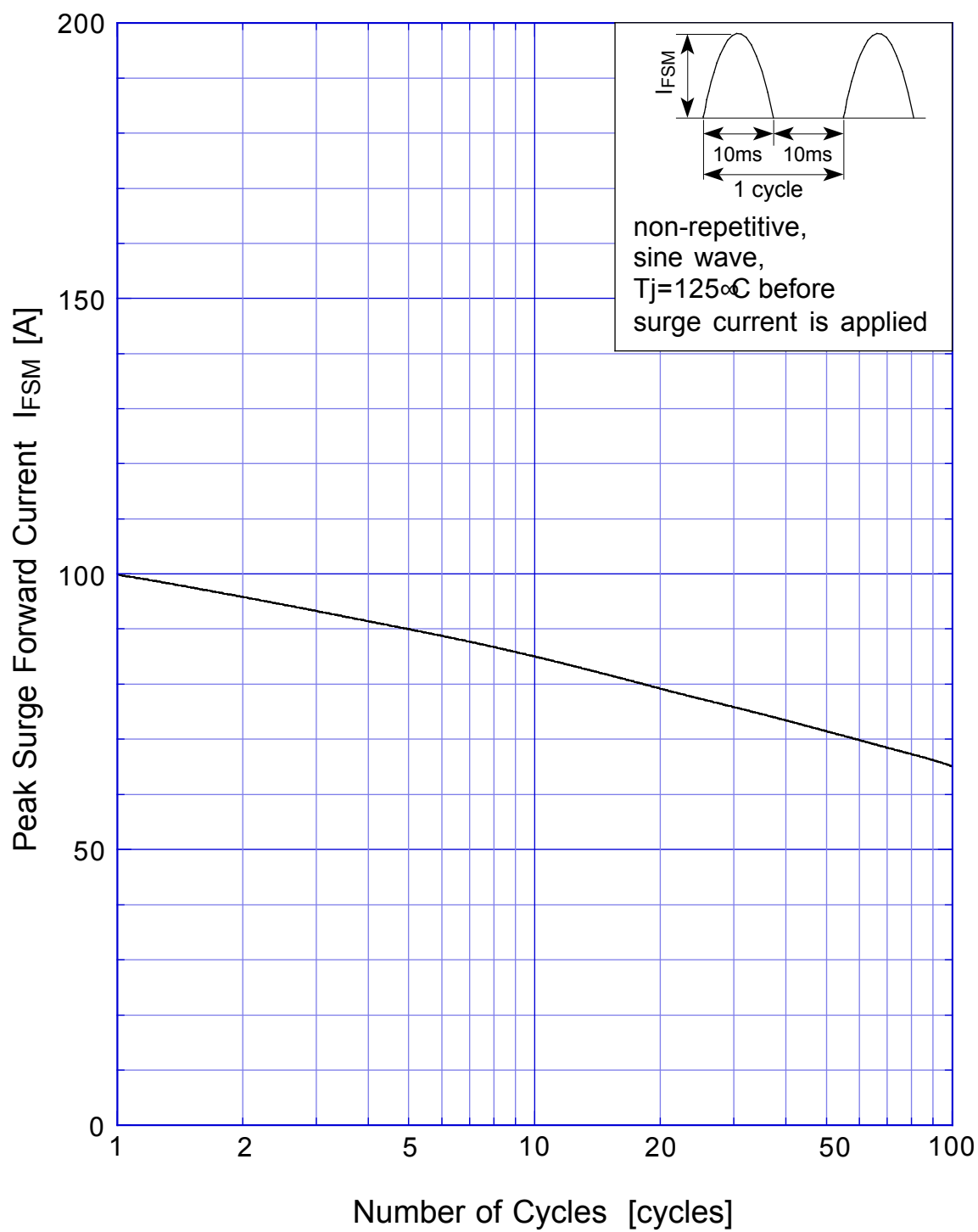


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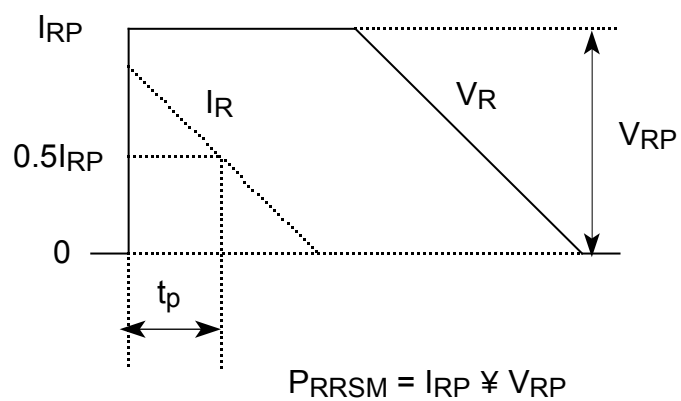
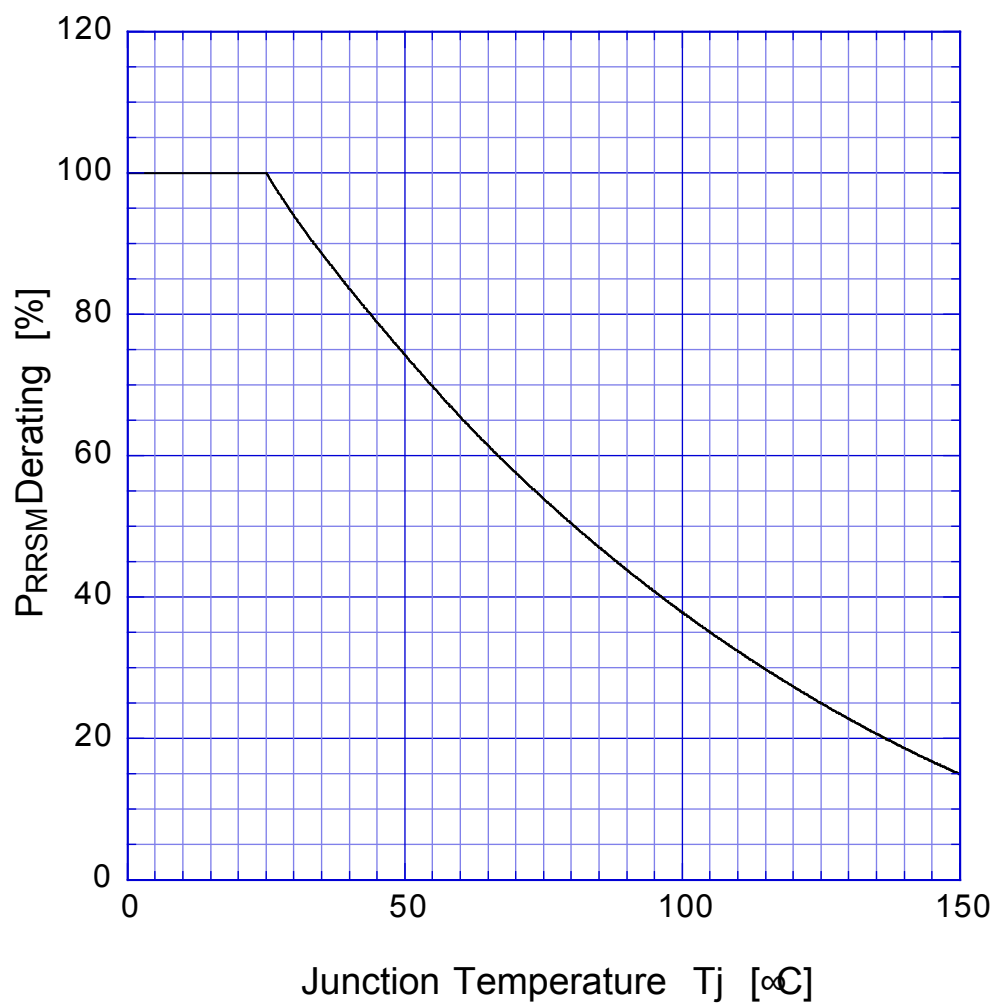


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Peak Surge Forward Capability



SBD Repetitive Surge Reverse Power Derating Curve



SBD

Repetitive Surge Reverse Power Capability

