

SHINDENGEN

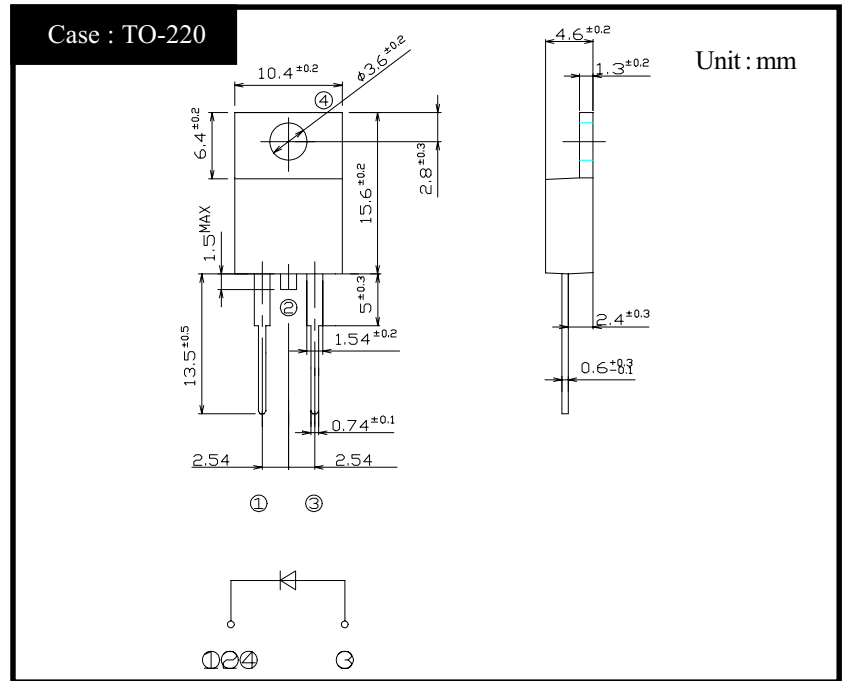
Schottky Rectifiers (SBD)

Single

S5S4M

40V 5A

OUTLINE DIMENSIONS



RATINGS

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

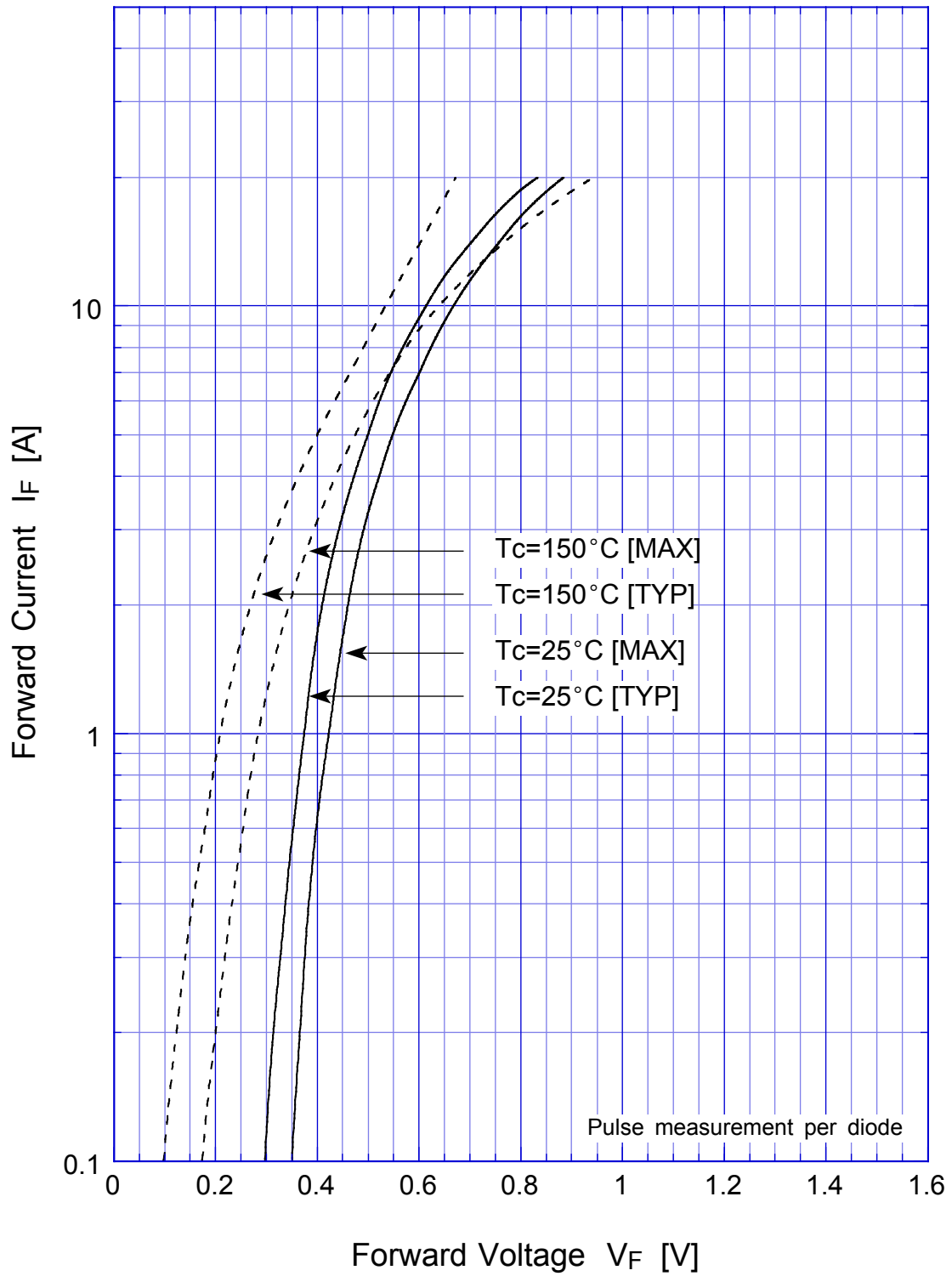
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T_{stg}		-40~150	$^\circ\text{C}$
Operating Junction Temperature	T_j		150	$^\circ\text{C}$
Maximum Reverse Voltage	V_{RM}		40	V
Repetitive Peak Surge Reverse Voltage	V_{RRSM}	Pulse width 0.5ms, duty 1/40	45	V
Average Rectified Forward Current	I_O	50Hz sine wave, R-load $T_c=138^\circ\text{C}$	5	A
Peak Surge Forward Current	I_{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, $T_j=125^\circ\text{C}$	100	A
Repetitive Peak Surge Reverse Power	P_{RRSM}	Pulse width 10 μs , $T_j=25^\circ\text{C}$	330	W
Mounting Torque	TOR	(Recommended torque: 0.3N·m)	0.5	N·m

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

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V_F	$I_F=5\text{A}$, Pulse measurement	Max.0.55	V
Reverse Current	I_R	$V_R=V_{RM}$, Pulse measurement	Max.3.5	mA
Junction Capacitance	C_j	$f=1\text{MHz}$, $V_R=10\text{V}$	Typ.180	pF
Thermal Resistance	θ_{jc}	junction to case	Max.3	$^\circ\text{C/W}$

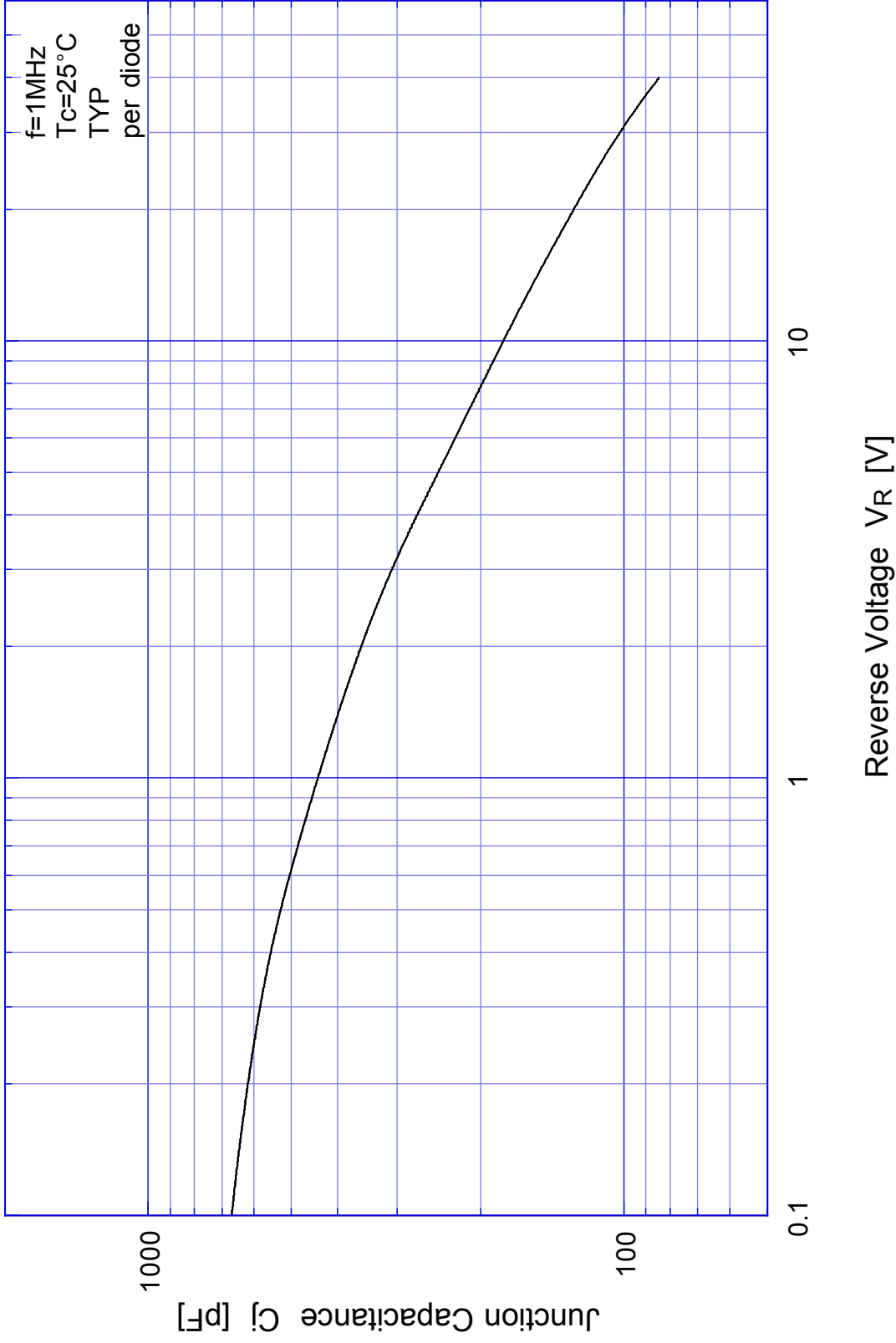
S5S4M

Forward Voltage



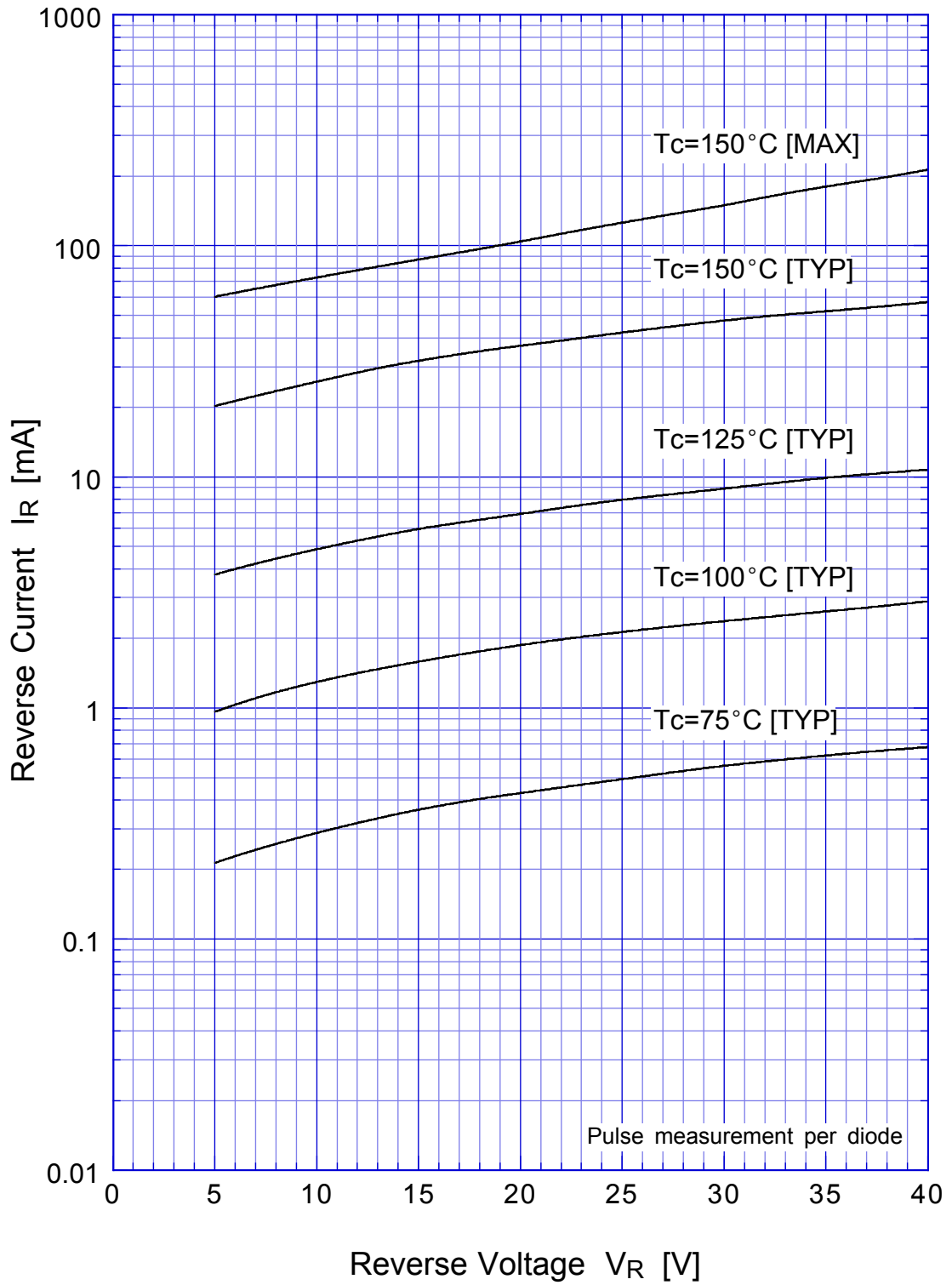
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Junction Capacitance



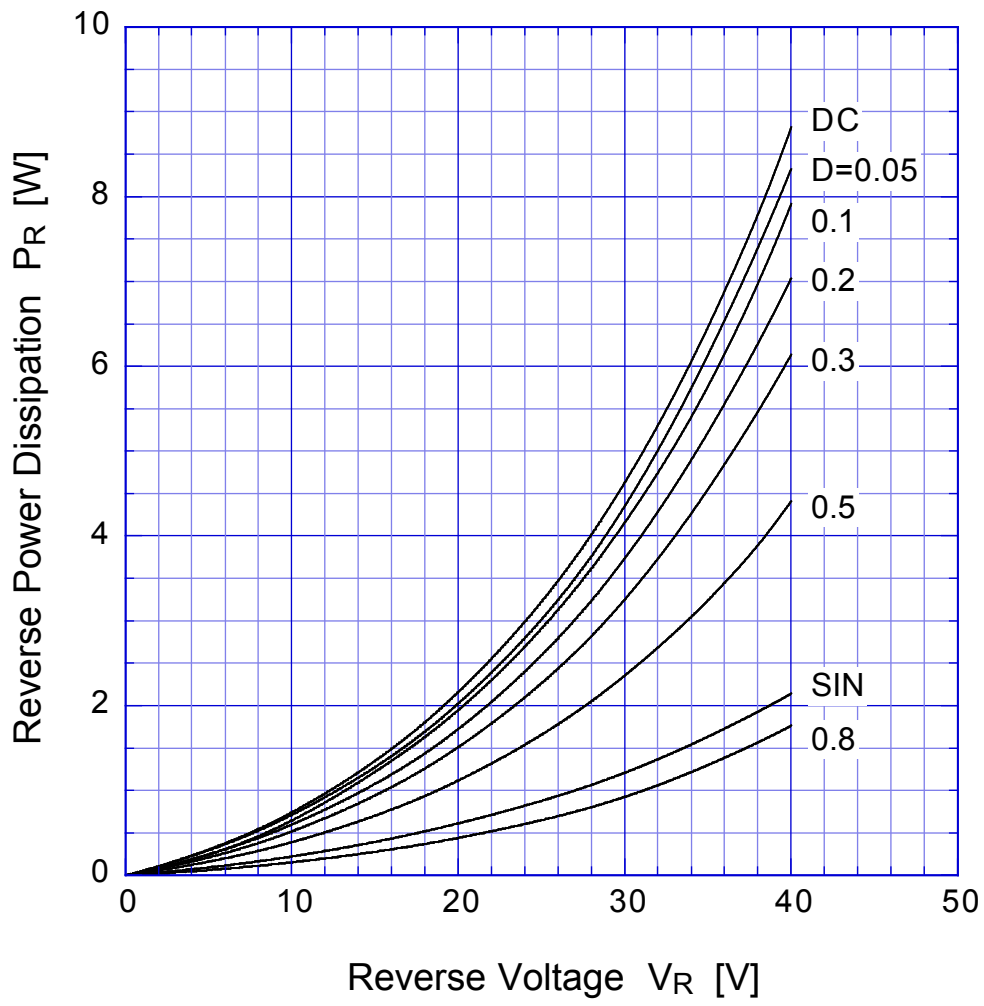
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Reverse Current

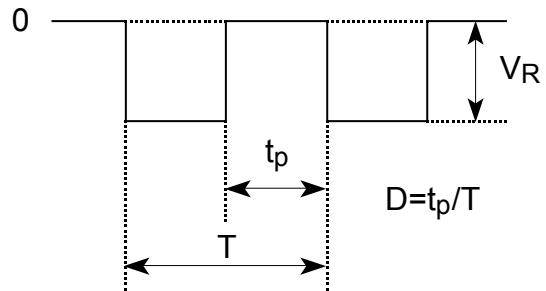


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Reverse Power Dissipation

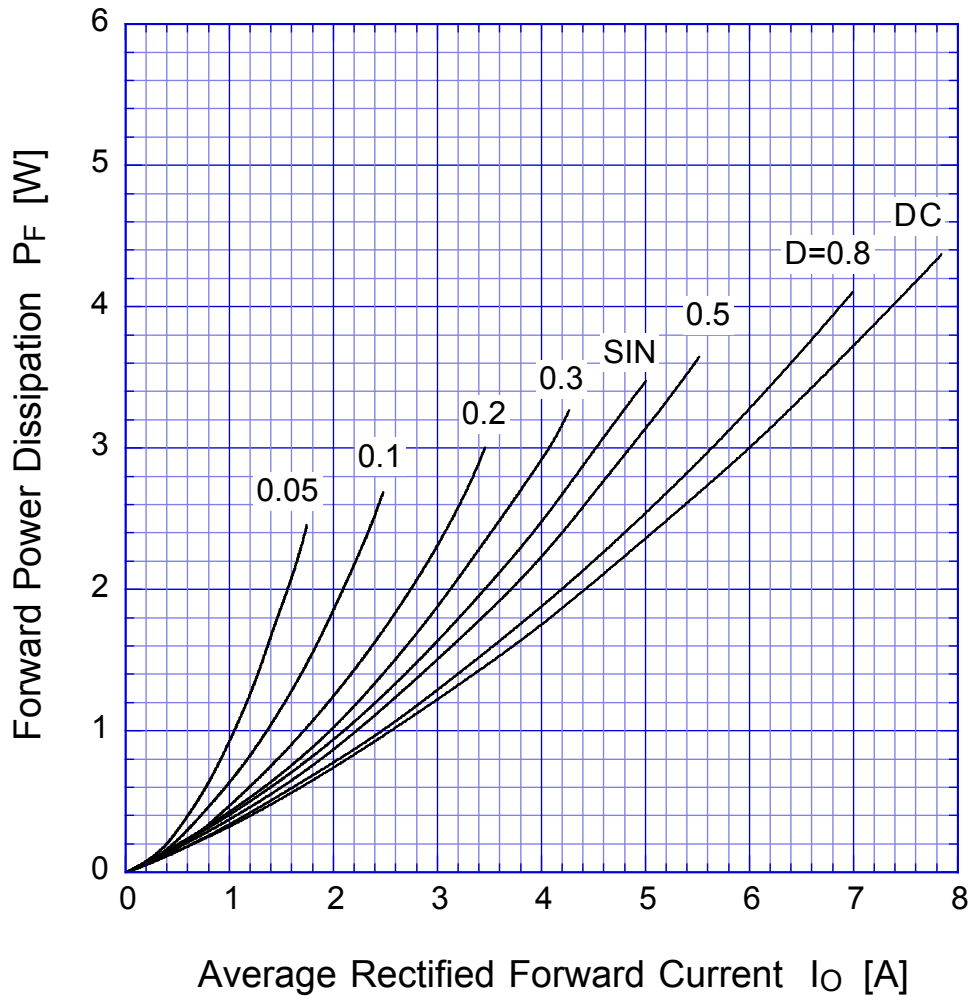


$T_j = 150^\circ\text{C}$

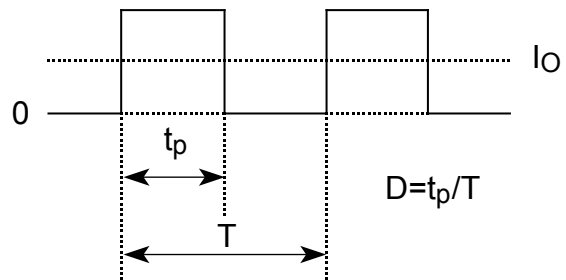


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Forward Power Dissipation

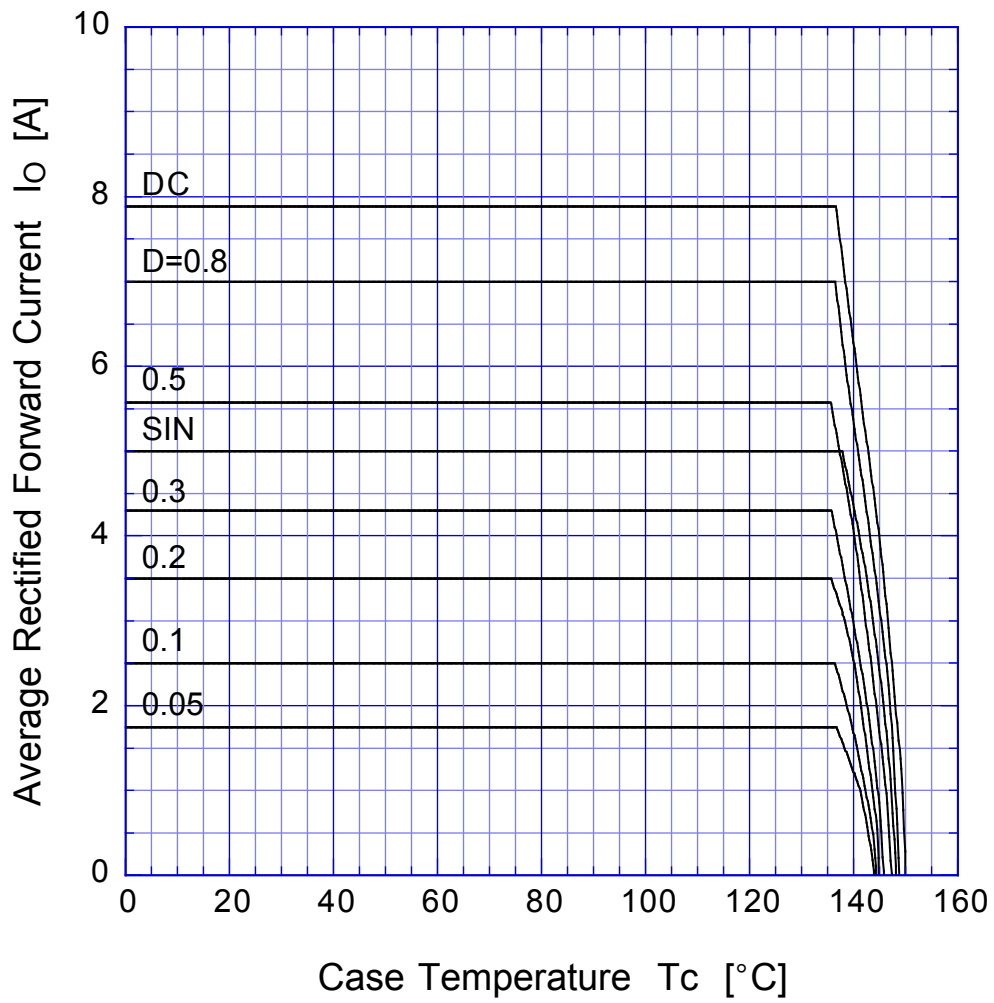


$T_j = 150^\circ\text{C}$



S5S4M

Derating Curve

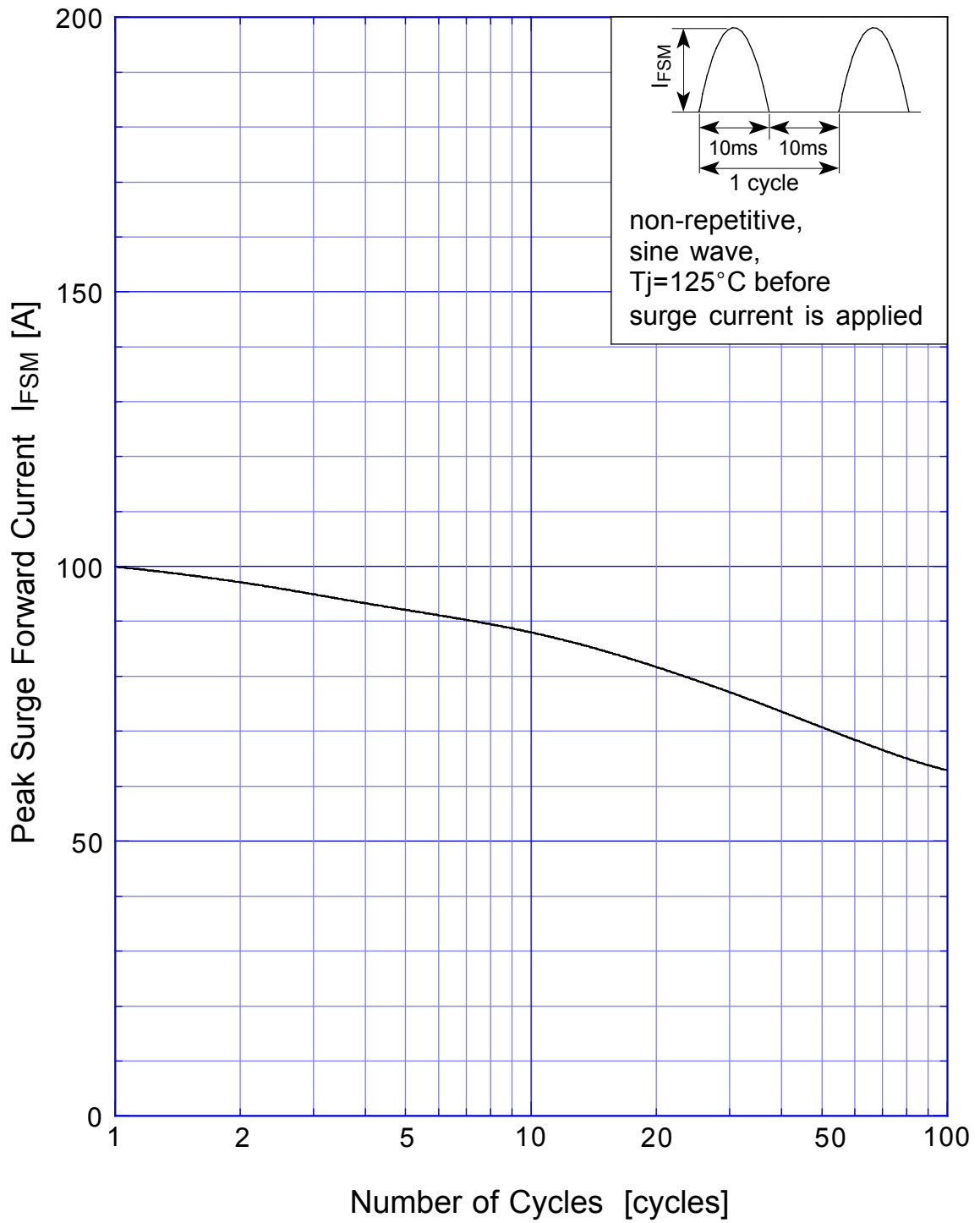


$V_R = 20V$



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Peak Surge Forward Capability



SBD Repetitive Surge Reverse Power Derating Curve



SBD

Repetitive Surge Reverse Power Capability

