

# SHINDENGEN

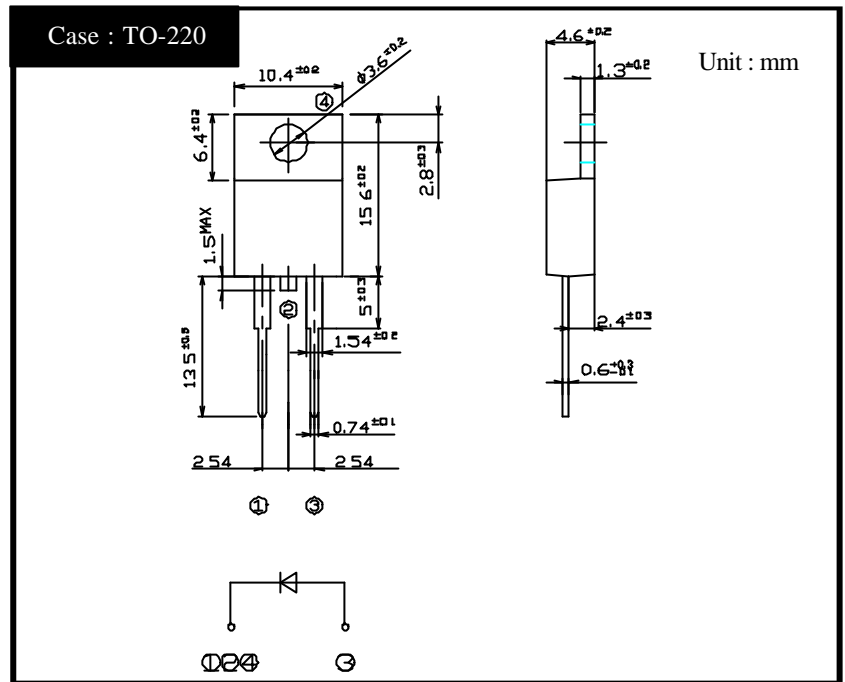
## Schottky Rectifiers (SBD)

Single

# S5S4M

## 40V 5A

### OUTLINE DIMENSIONS



### RATINGS

Absolute Maximum Ratings (If not specified Tc=25 )

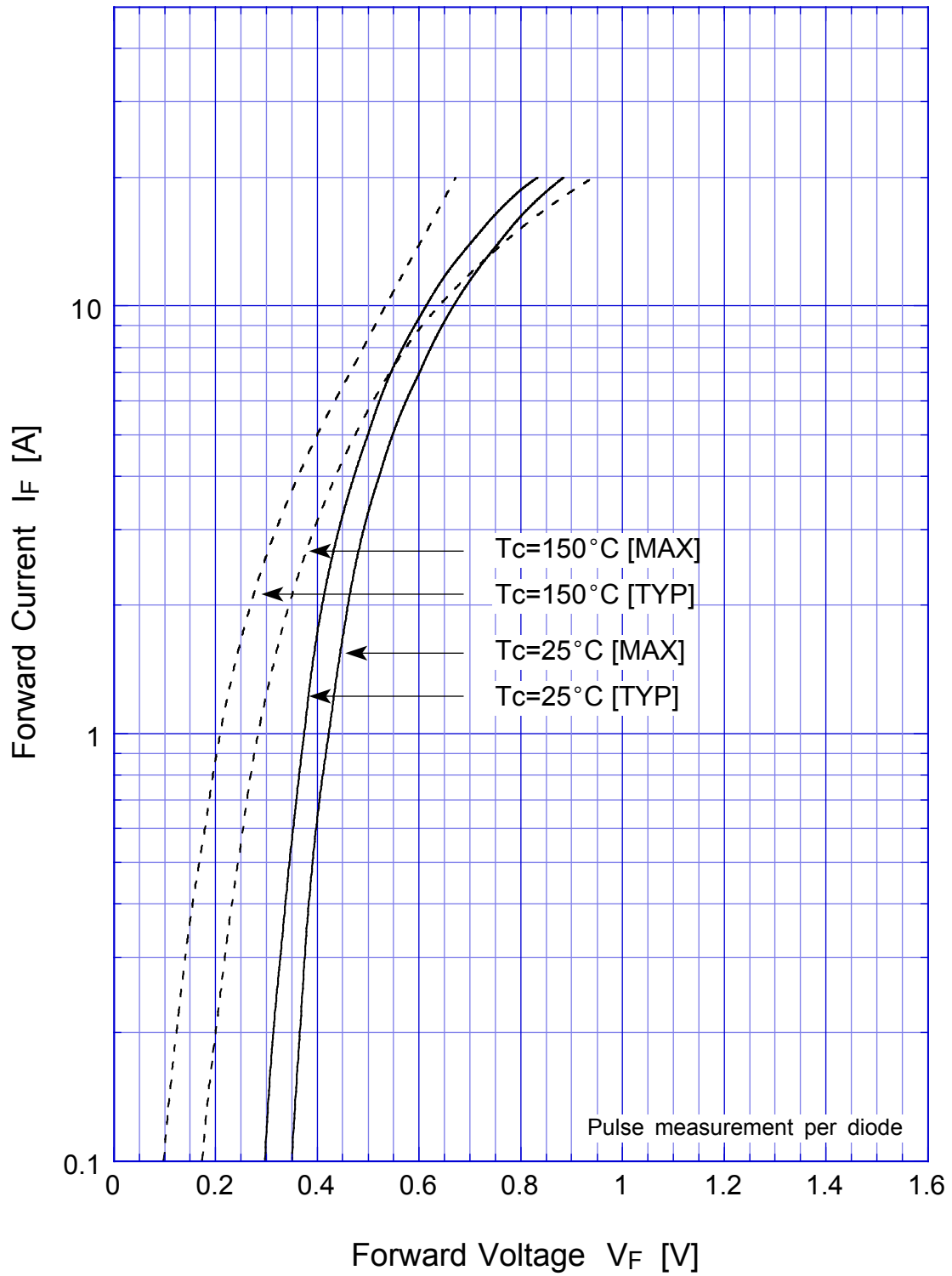
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-40 ~ 150	
Operating Junction Temperature	Tj		150	
Maximum Reverse Voltage	V <sub>RM</sub>		40	V
Repetitive Peak Surge Reverse Voltage	V <sub>RRSM</sub>	Pulse width 0.5ms, duty 1/40	45	V
Average Rectified Forward Current	I <sub>O</sub>	50Hz sine wave, R-load Tc=138	5	A
Peak Surge Forward Current	I <sub>FSM</sub>	50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=125	100	A
Repetitive Peak Surge Reverse Power	P <sub>RRSM</sub>	Pulse width 10 μ s, Tj=25	330	W
Mounting Torque	TOR	(Recommended torque :0.3N·m )	0.5	N·m

Electrical Characteristics (If not specified Tc=25 )

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =5A, Pulse measurement	Max.0.55	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =V <sub>RM</sub> , Pulse measurement	Max.3.5	mA
Junction Capacitance	C <sub>j</sub>	f=1MHz, V <sub>R</sub> =10V	Typ.180	pF
Thermal Resistance	jc	junction to case	Max.3	/W

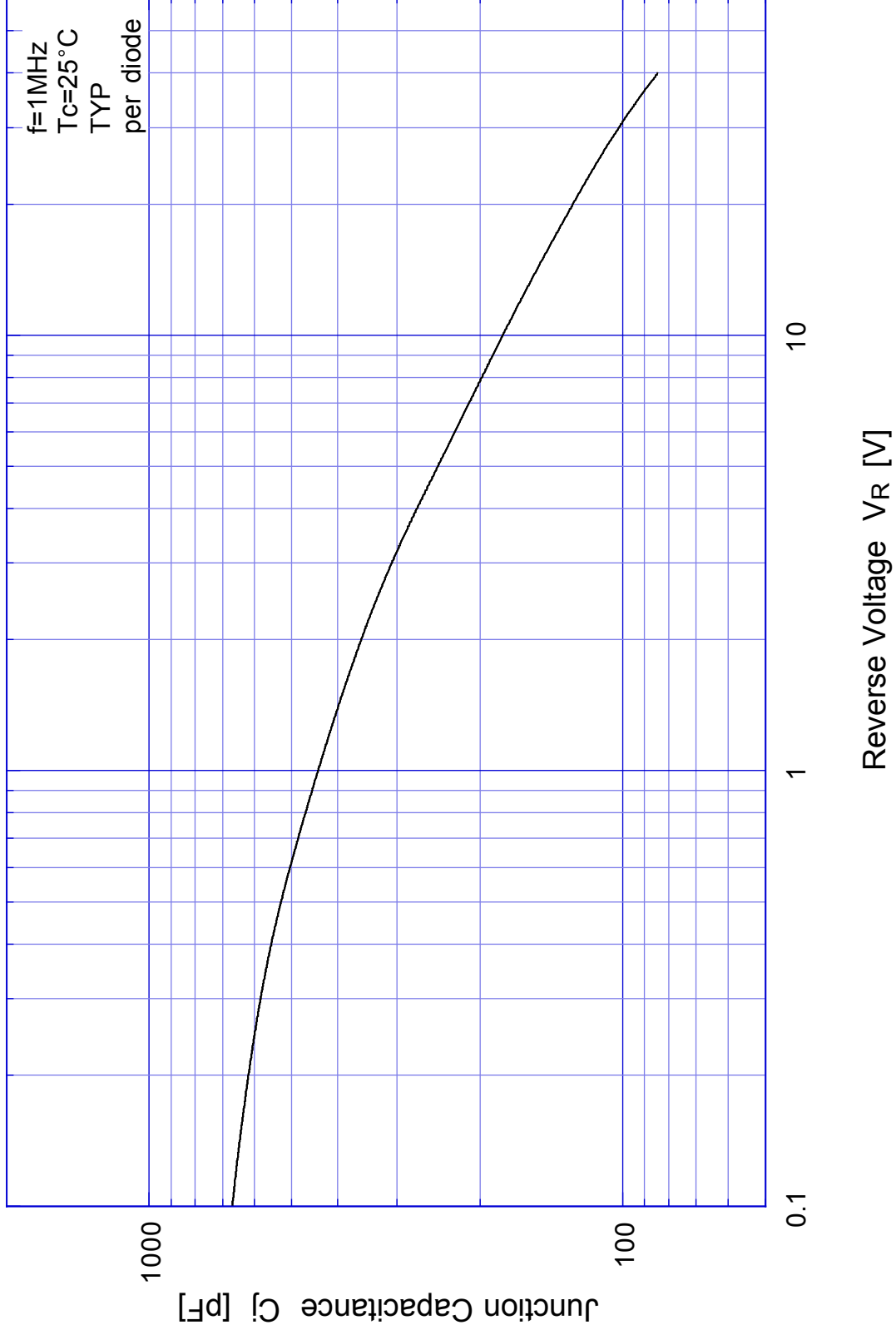
# S5S4M

## Forward Voltage



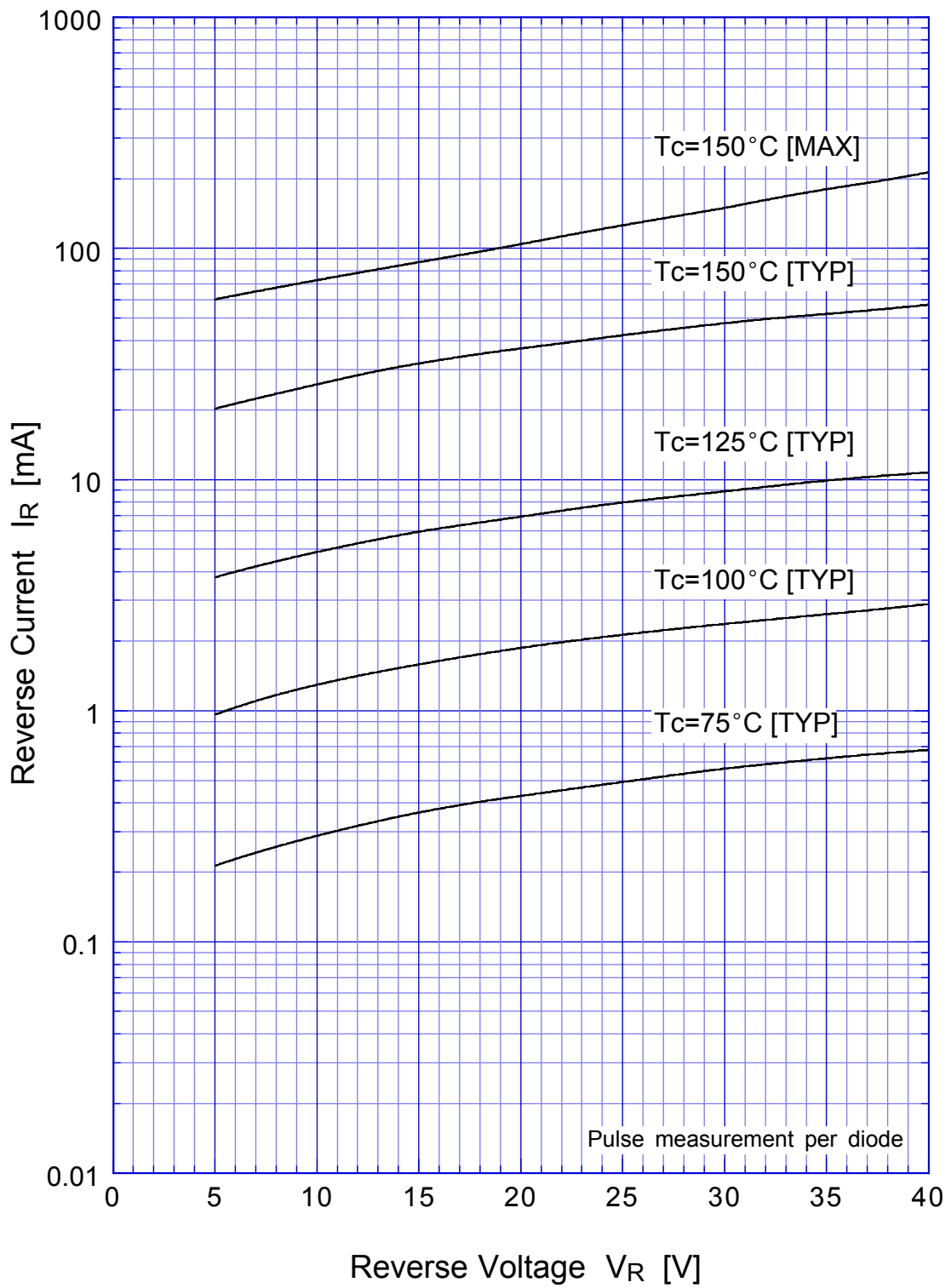
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## Junction Capacitance



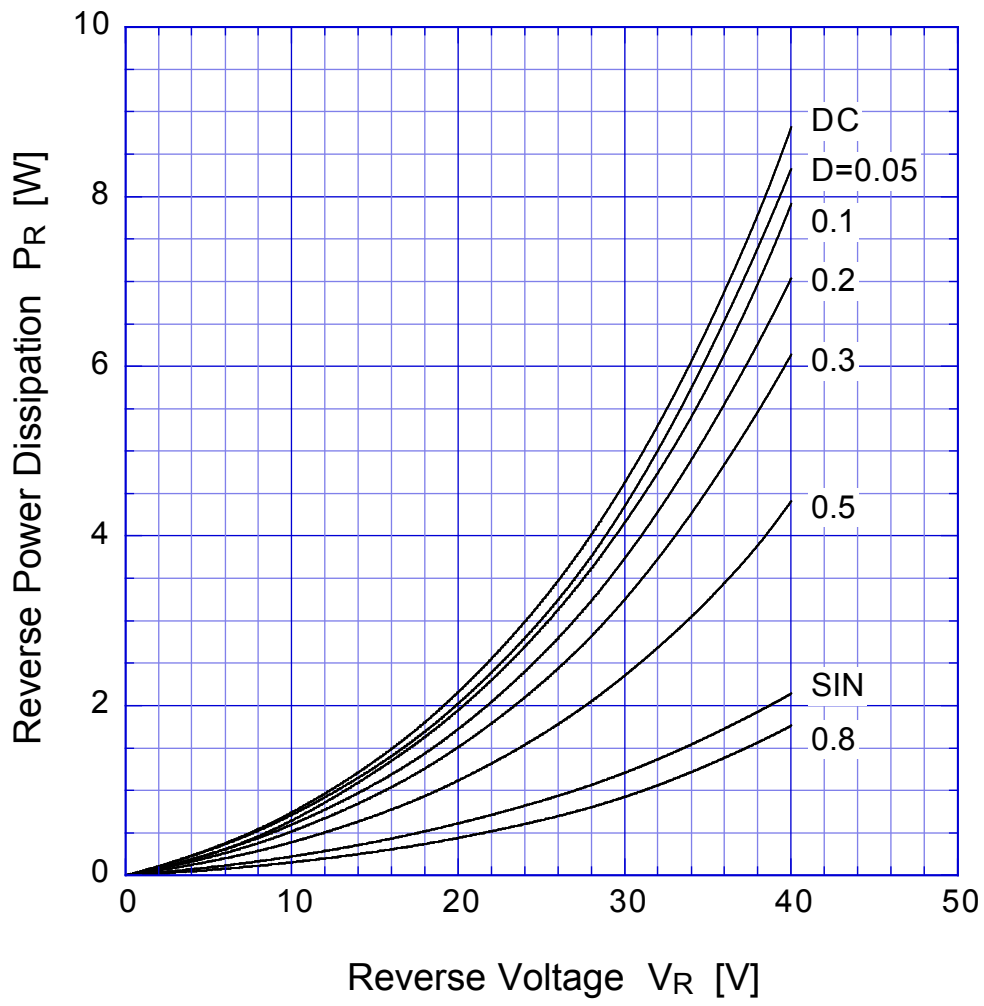
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## Reverse Current

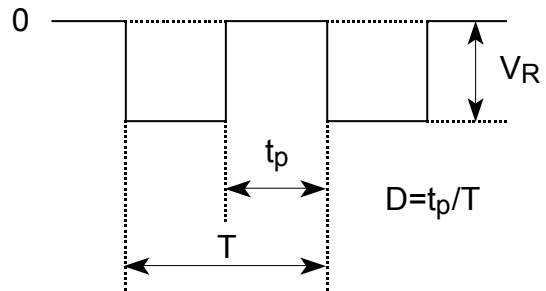


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## Reverse Power Dissipation

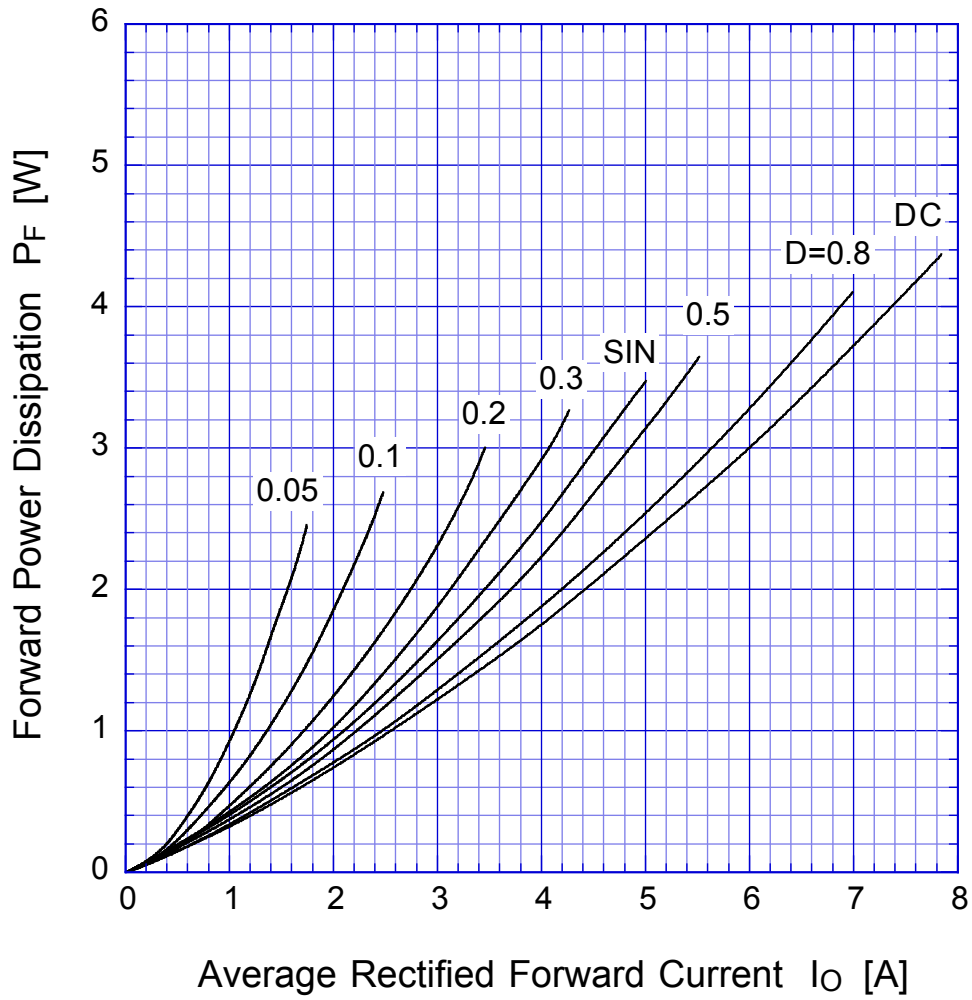


$T_j = 150^\circ\text{C}$

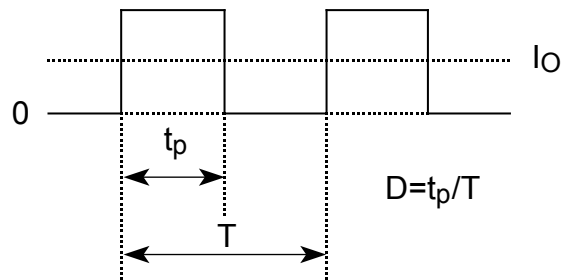


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## Forward Power Dissipation

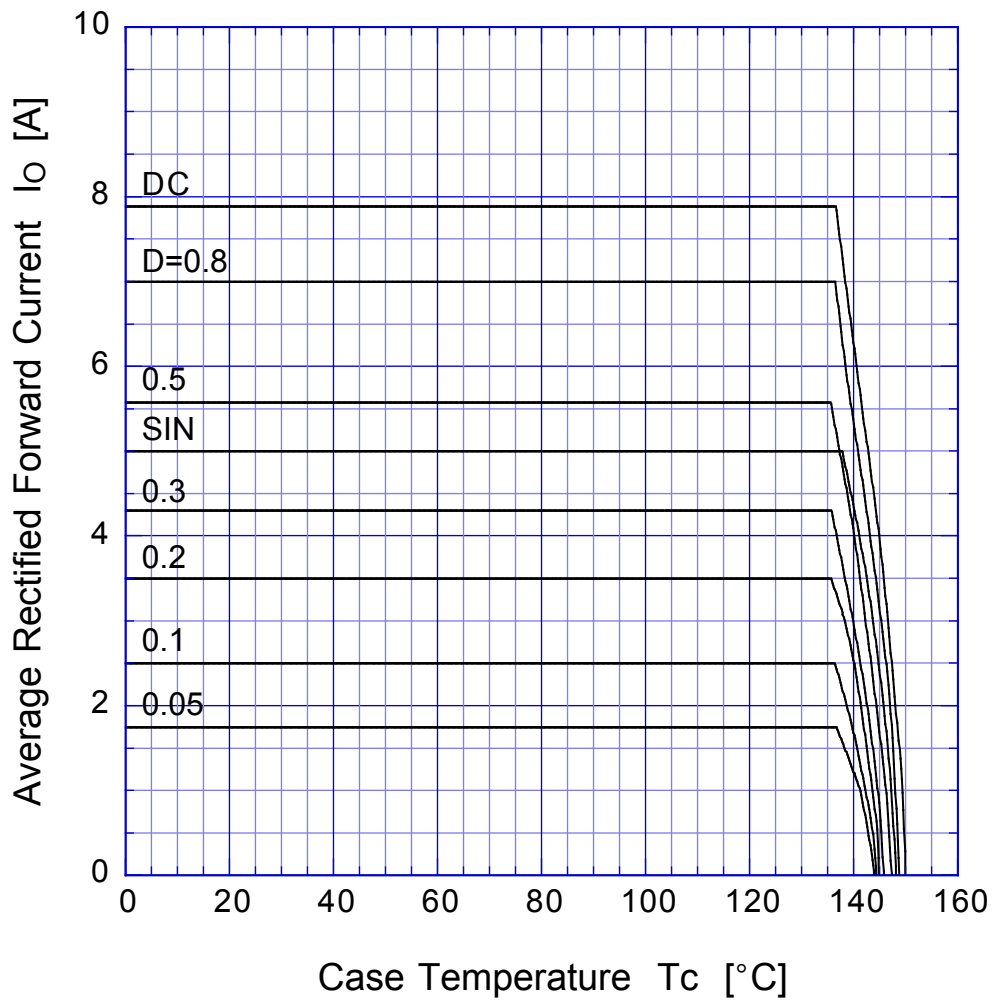


$T_j = 150^\circ\text{C}$



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# Derating Curve

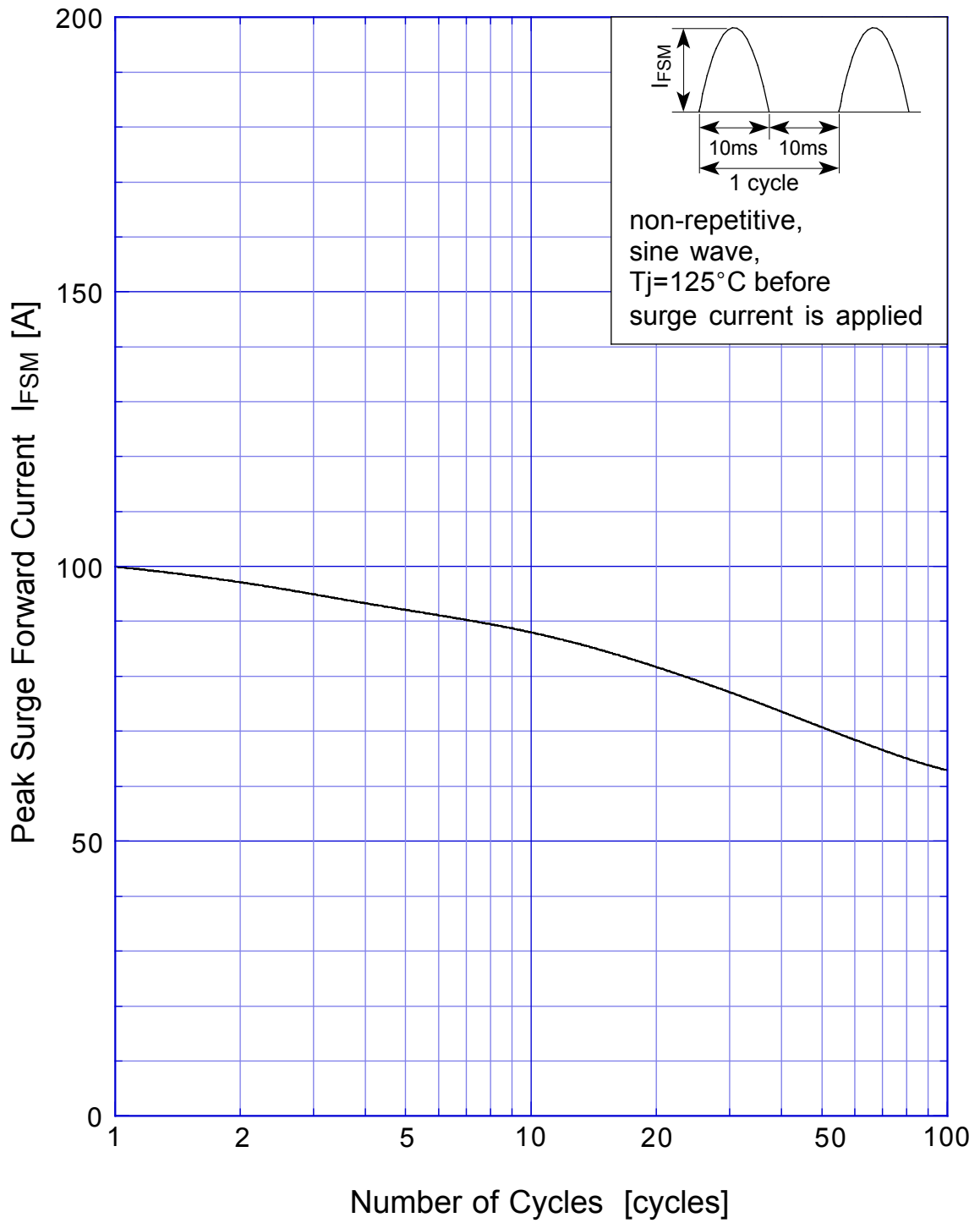


$V_R = 20V$



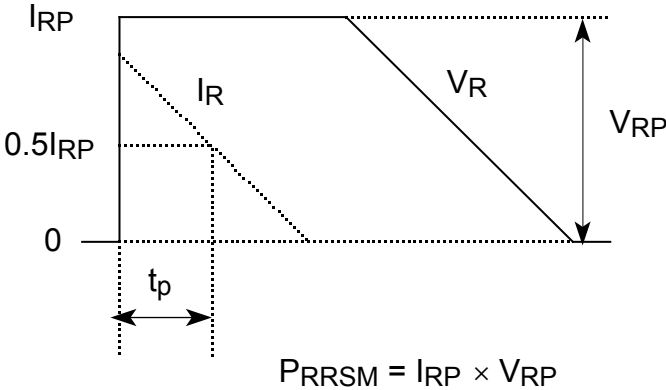
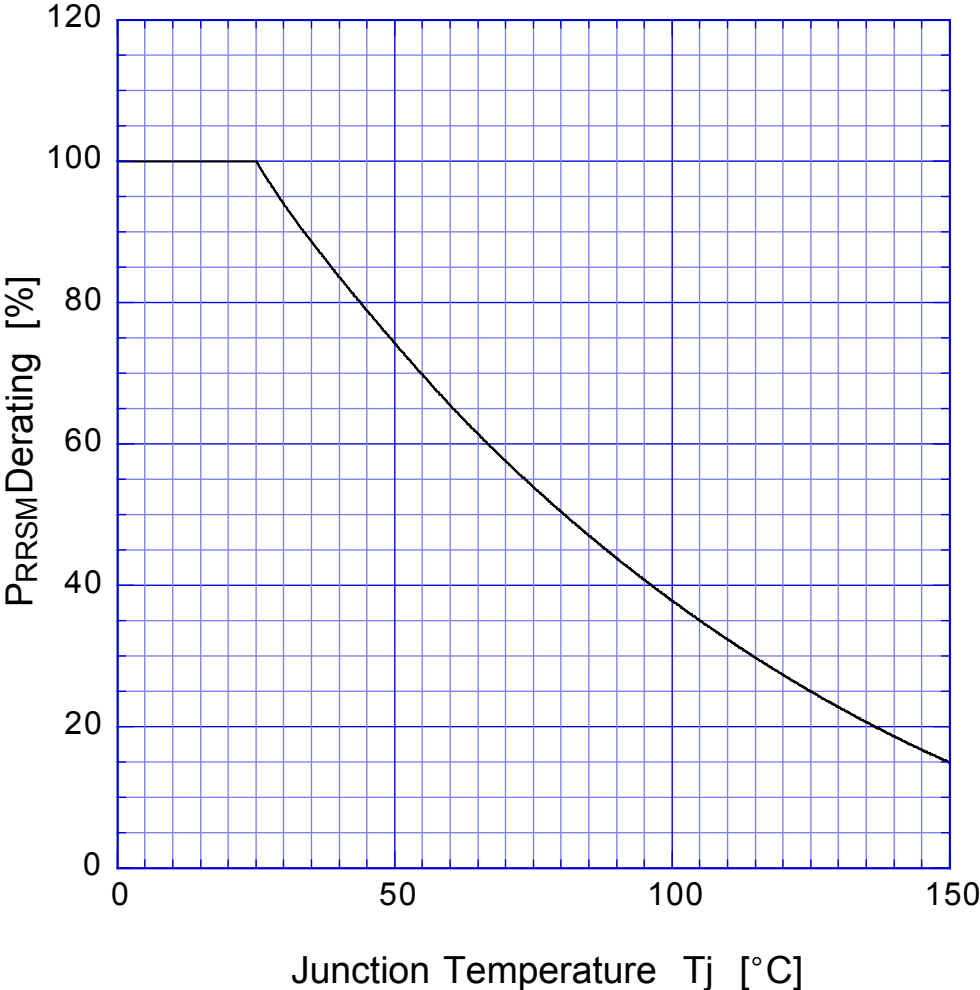
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## Peak Surge Forward Capability





# SBD Repetitive Surge Reverse Power Derating Curve



# SBD

## Repetitive Surge Reverse Power Capability

