

D2FS6

60V 1.5A

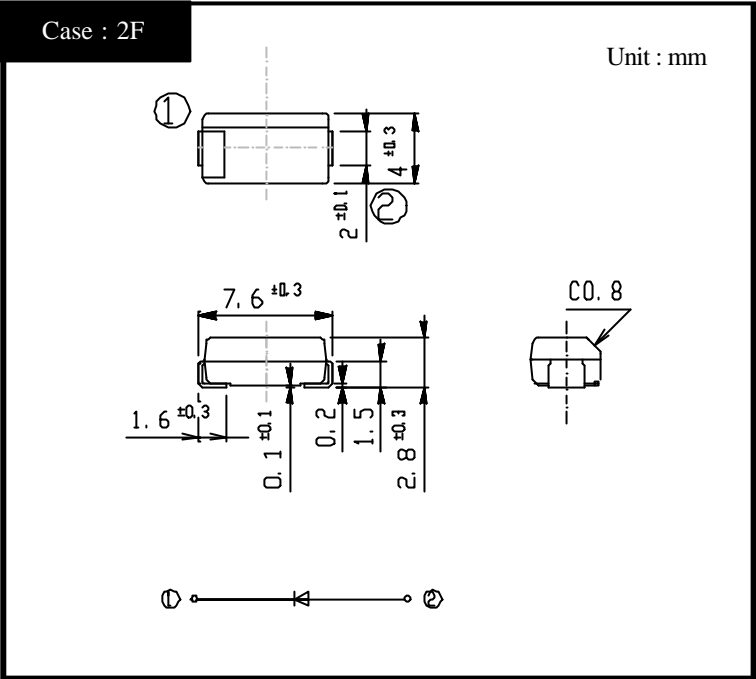
FEATURES

- Small SMT
- Tj150
- P<sub>RRSM</sub> avalanche guaranteed

APPLICATION

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

OUTLINE DIMENSIONS



RATINGS

Absolute Maximum Ratings (If not specified Tl=25 )

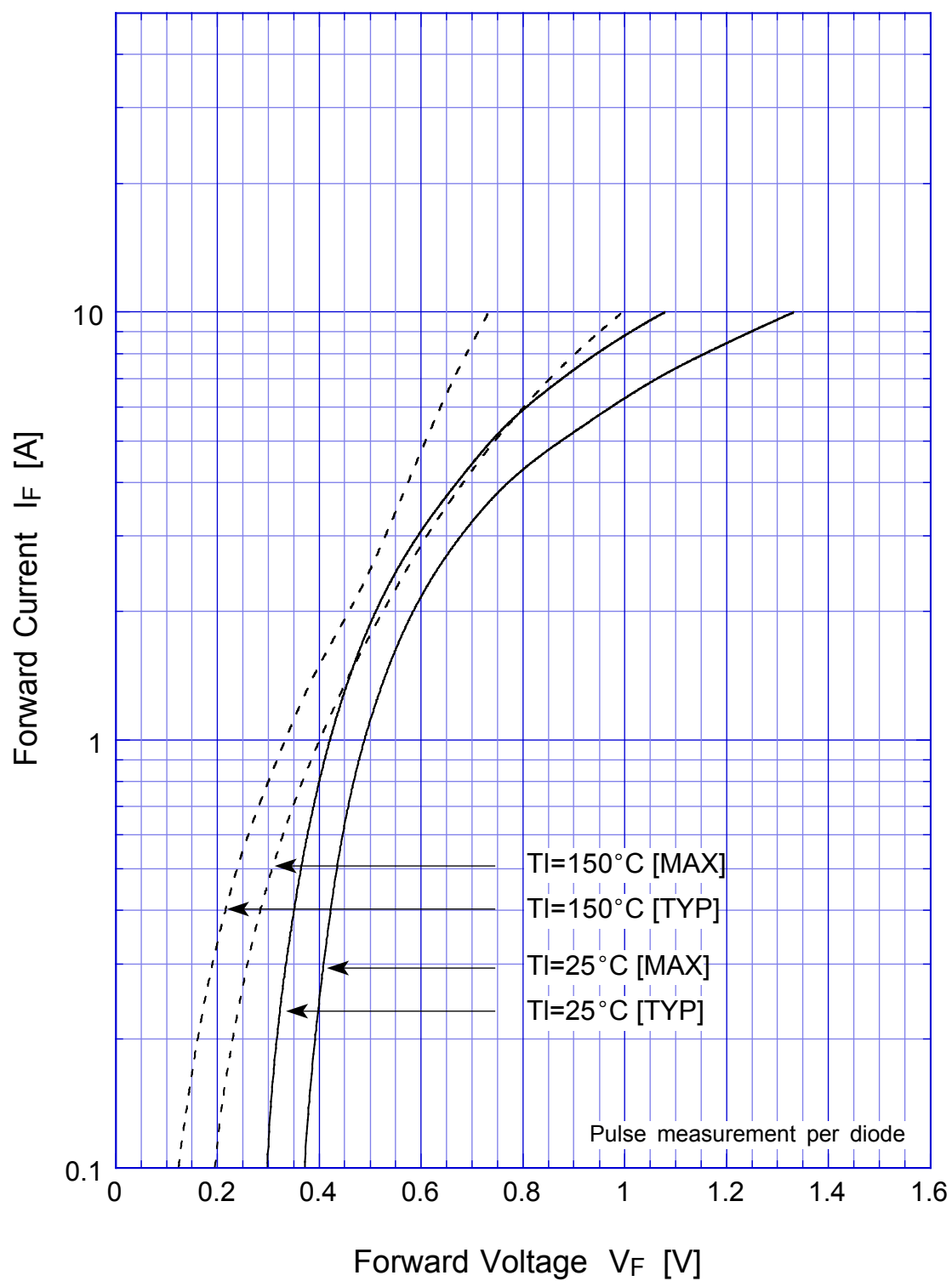
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-40 ~ 150	
Operating Junction Temperature	Tj		150	
Maximum Reverse Voltage	V <sub>RM</sub>		60	V
Repetitive Peak Surge Reverse Voltage	V <sub>RRSM</sub>	Pulse width 0.5ms, duty 1/40	65	V
Average Rectified Forward Current	I <sub>O</sub>	50Hz sine wave, R-load Ta=31 On alumina substrate	1.5	A
		50Hz sine wave, R-load Ta=26 On glass-epoxy substrate	1.1	
Peak Surge Forward Current	I <sub>FSM</sub>	50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=25	60	A
Repetitive Peak Surge Reverse Power	P <sub>RRSM</sub>	Pulse width 10 μ s, Tj=25	330	W

Electrical Characteristics (If not specified Tl=25 )

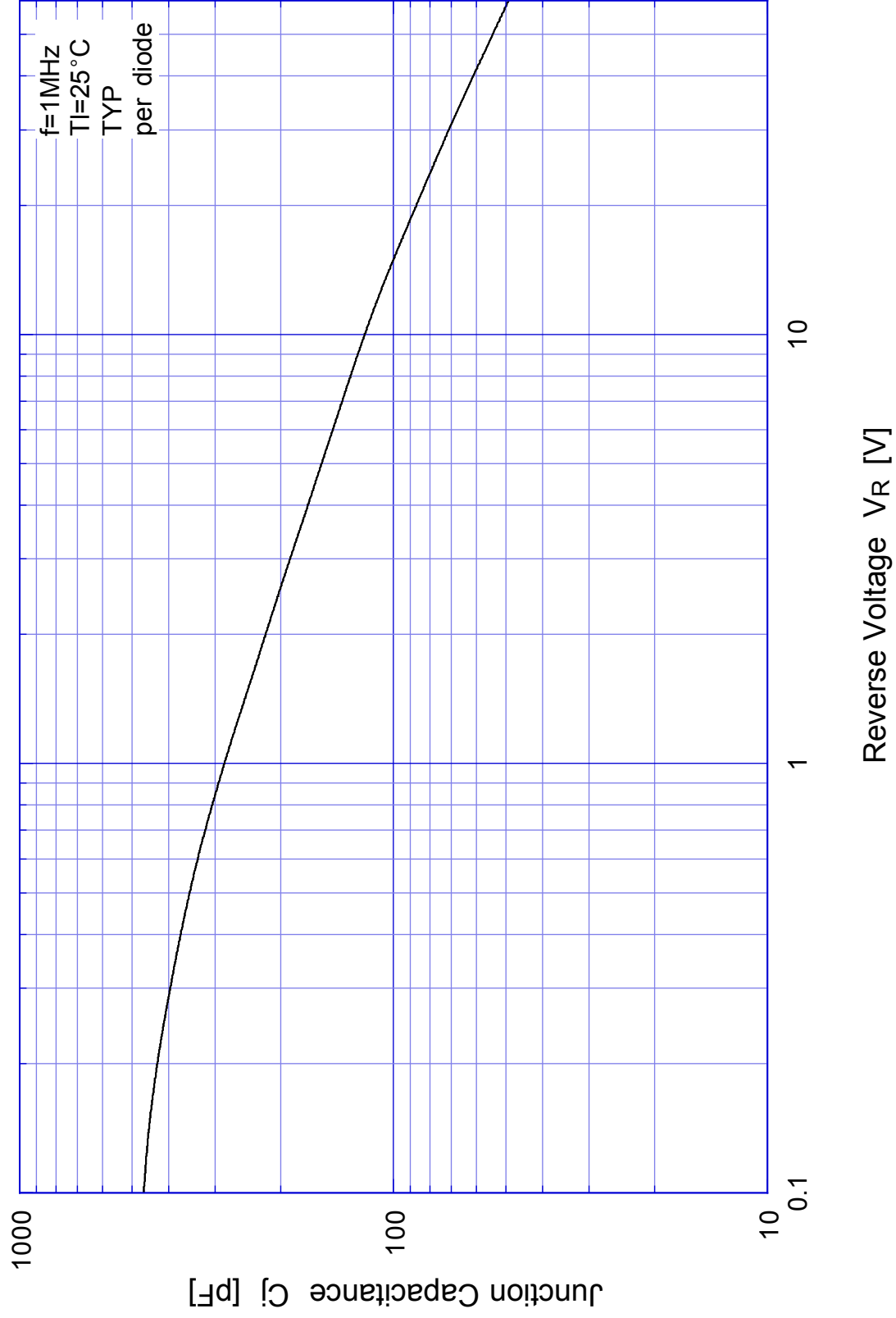
Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =1.5A, Pulse measurement	Max.0.58	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =V <sub>RM</sub> , Pulse measurement	Max.2	mA
Junction Capacitance	C <sub>j</sub>	f=1MHz, V <sub>R</sub> =10V	Typ.120	pF
Thermal Resistance	j <sub>l</sub>	junction to lead	Max.24	/W
	j <sub>a</sub>	junction to ambient On alumina substrate	Max.90	
	j <sub>a</sub>	junction to ambient On glass-epoxy substrate	Max.126	

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Forward Voltage

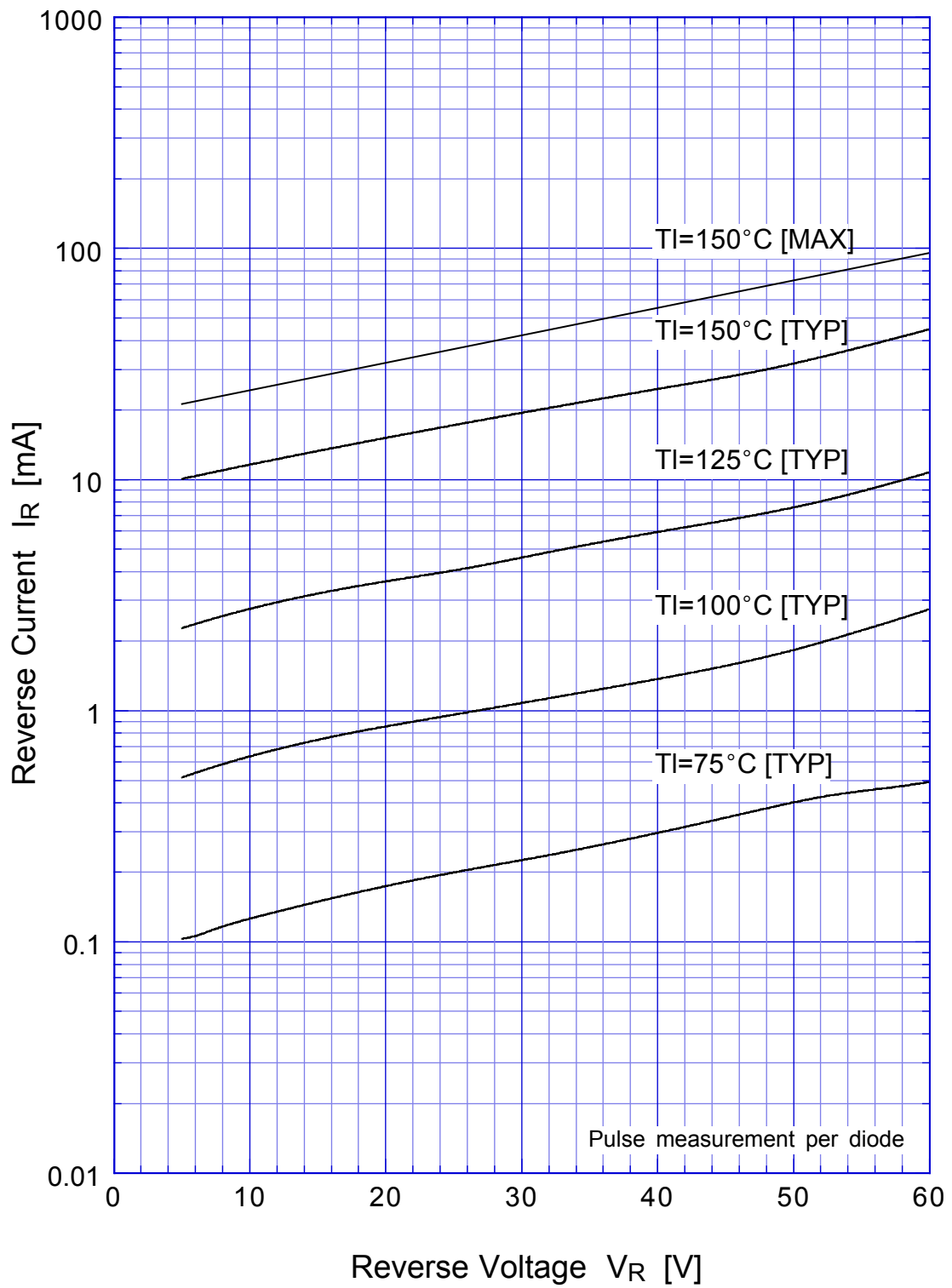


# D2FS6 Junction Capacitance



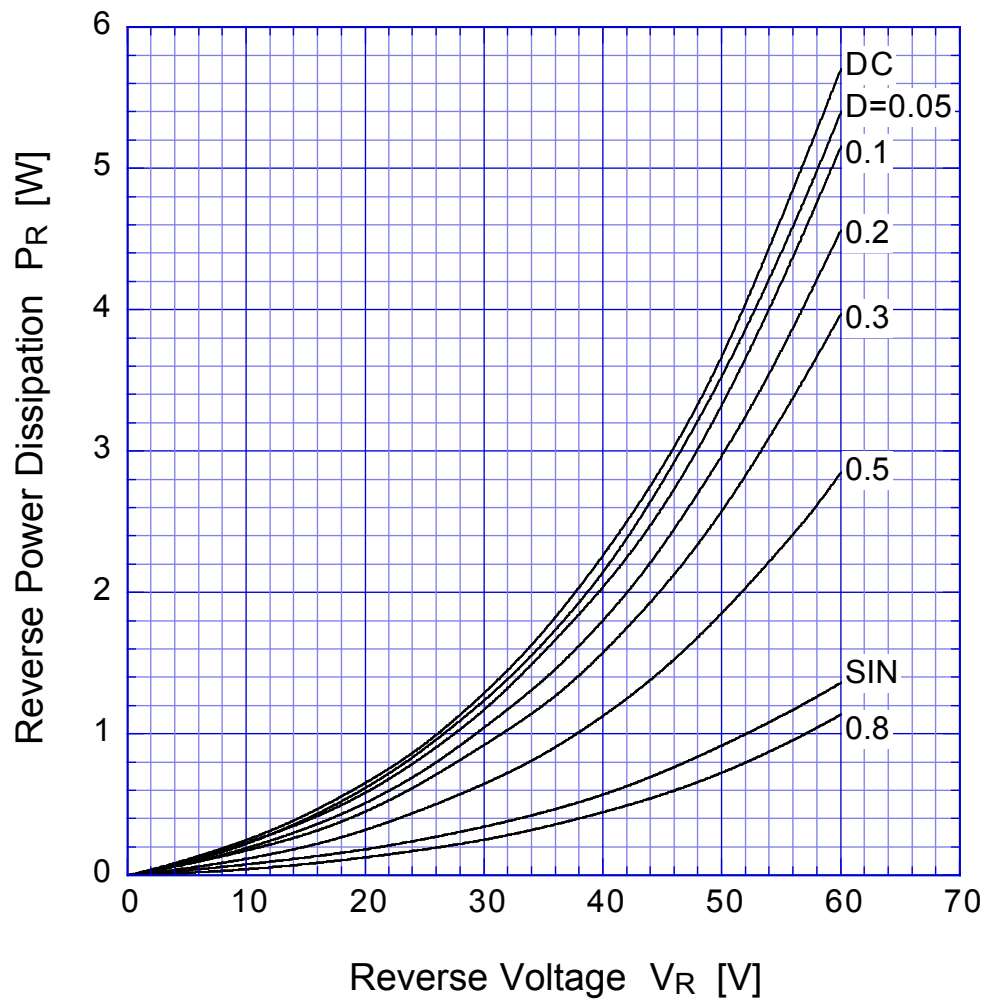
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## Reverse Current

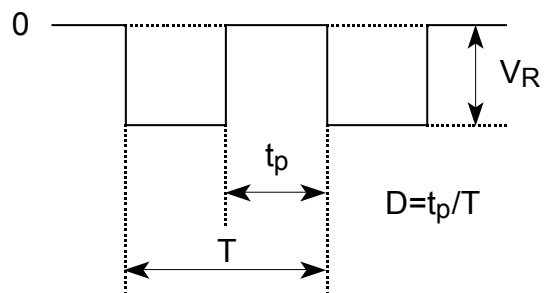


## D2FS6

## Reverse Power Dissipation

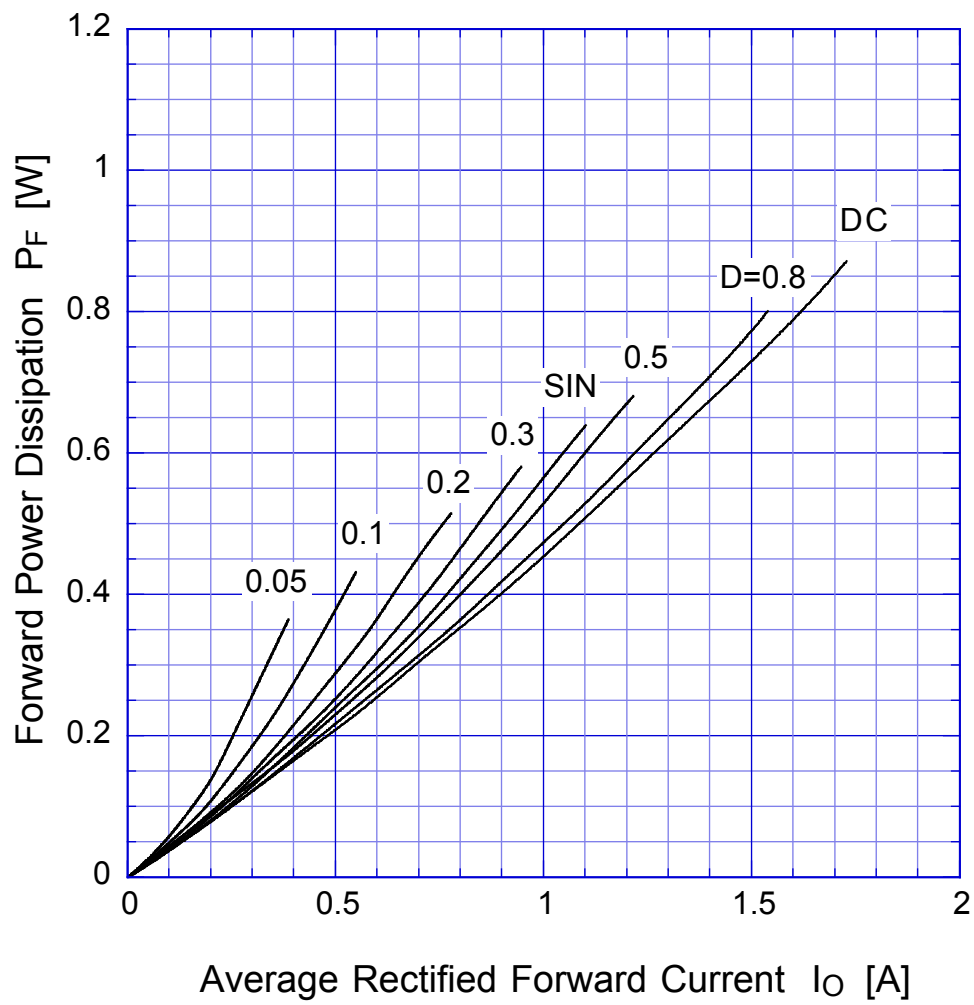


$T_j = 150^\circ\text{C}$

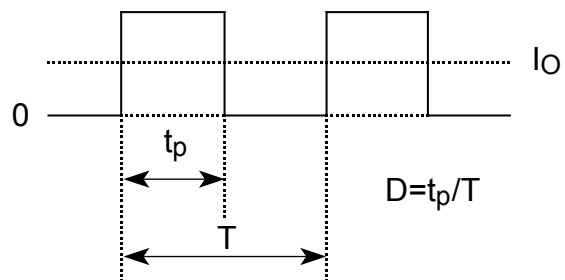


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## Forward Power Dissipation

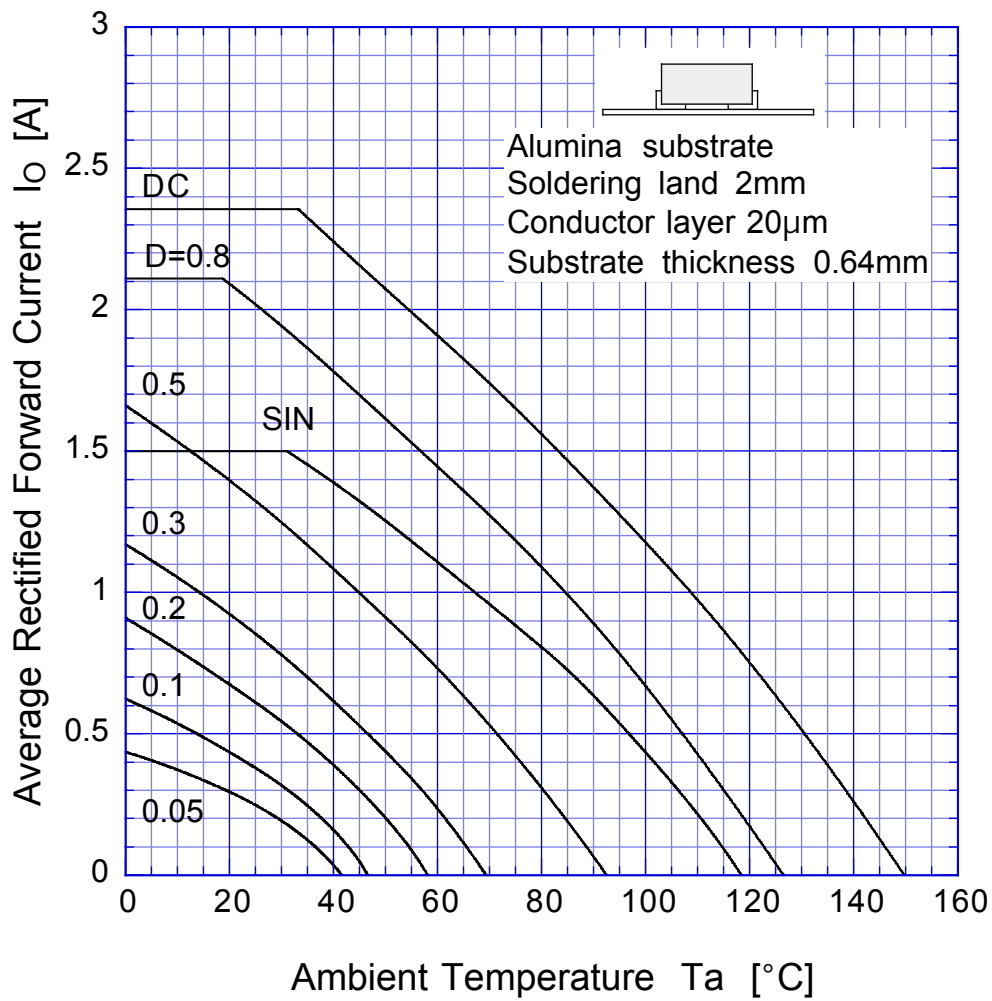


$T_j = 150^\circ\text{C}$

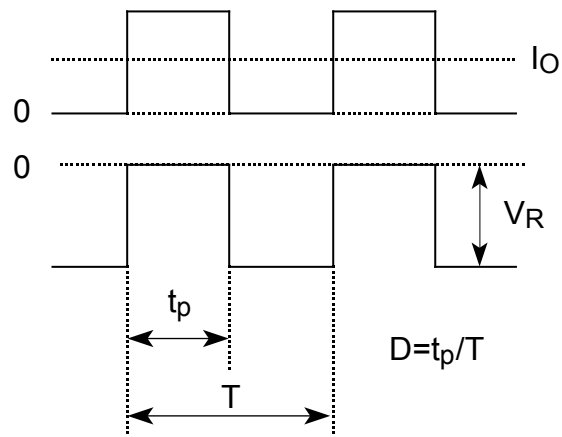


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## Derating Curve

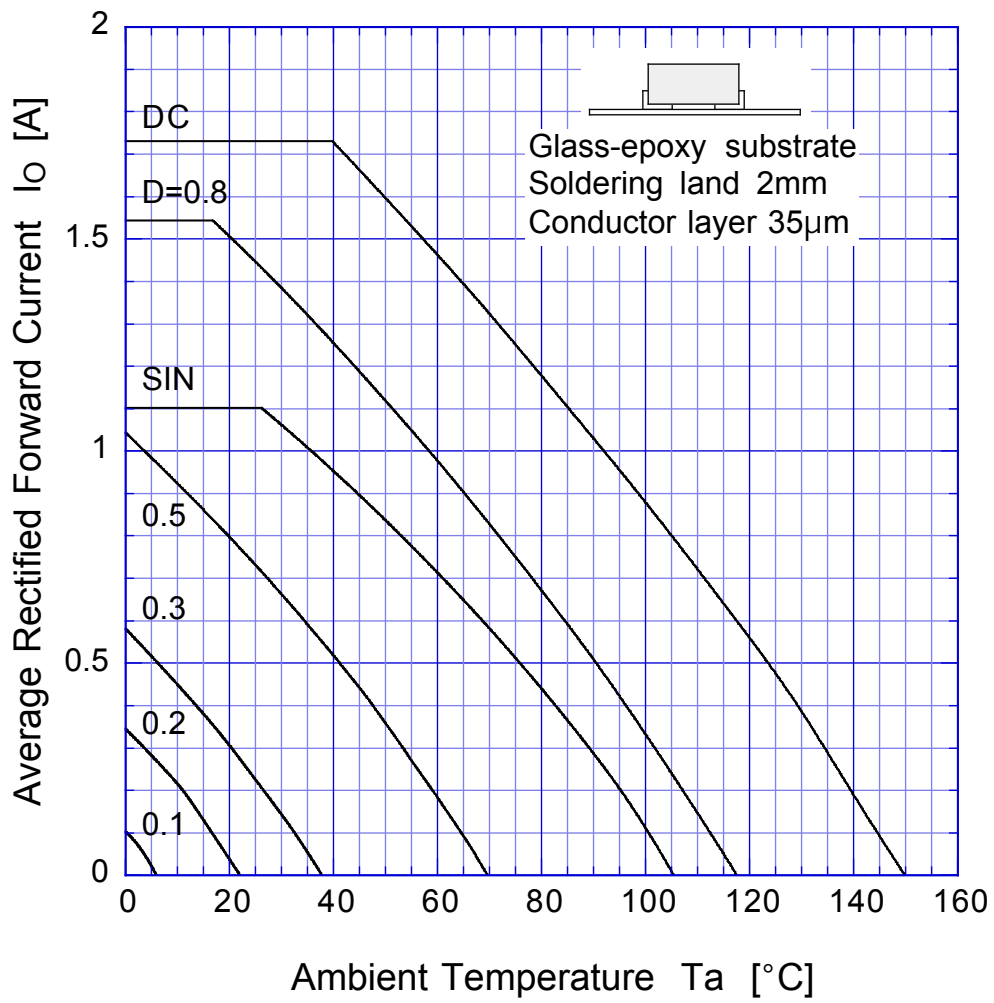


$V_R = 30V$

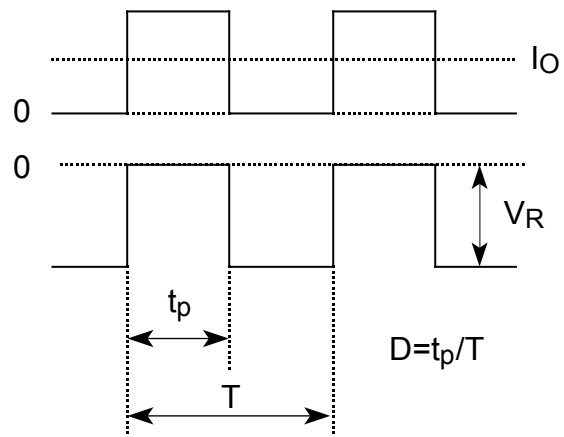


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## Derating Curve

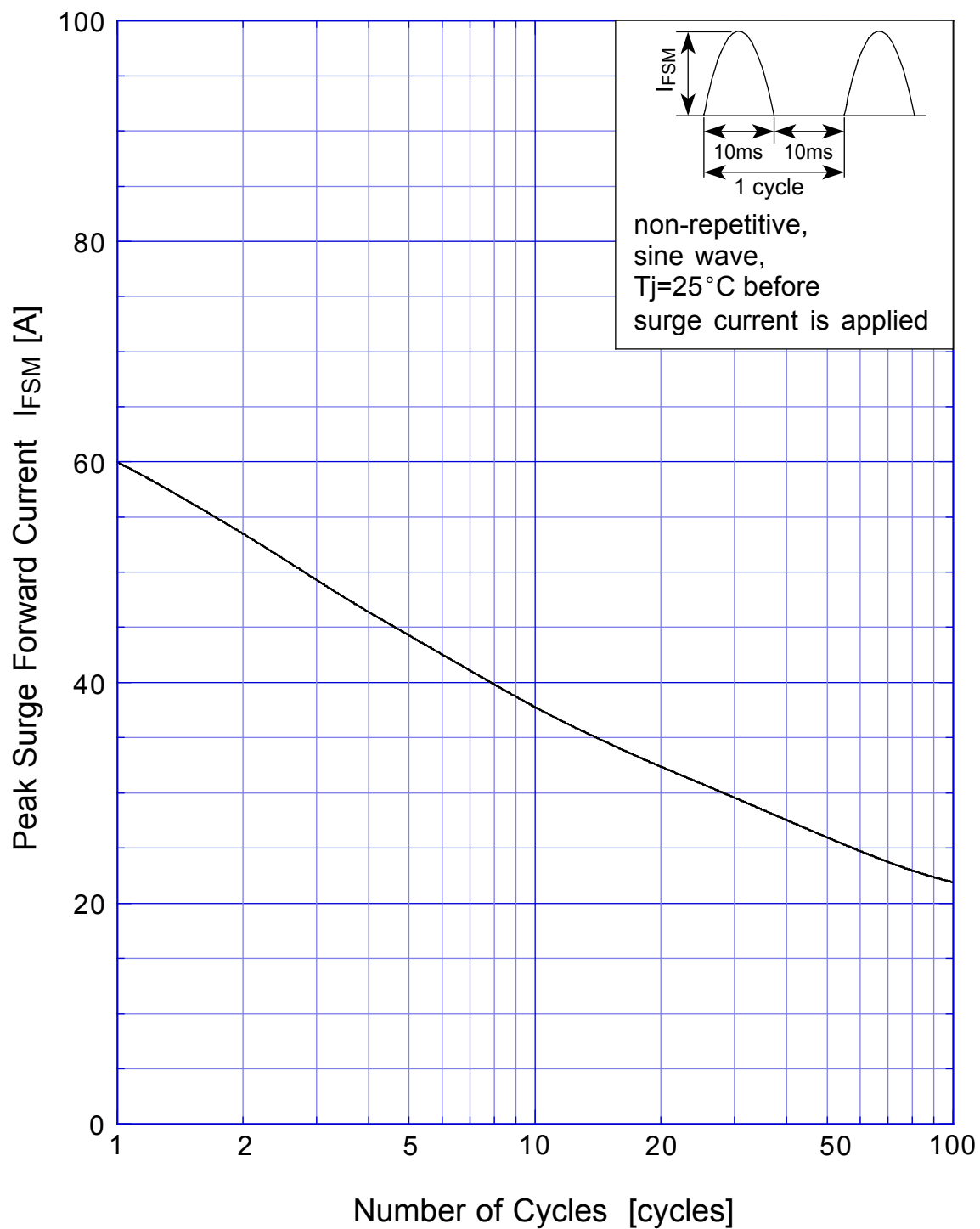


$V_R = 30V$



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## Peak Surge Forward Capability



## SBD Repetitive Surge Reverse Power Derating Curve

