

D3FP3

30V 3A

FEATURES

Small SMT
Super low $V_F=0.4V$

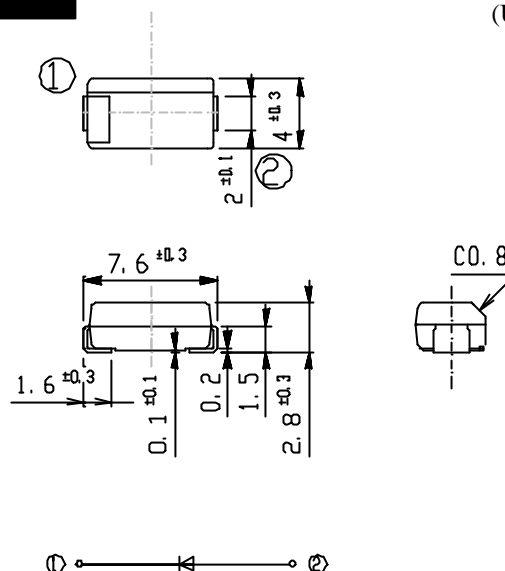
APPLICATION

Reversed Battery Connection Protection
DC OR output
DC/DC converter
Mobile telephone, personal computer

OUTLINE DIMENSIONS

Case : 2F

(Unit : mm)



RATINGS

Absolute Maximum Ratings (If not specified $T_I=25$)

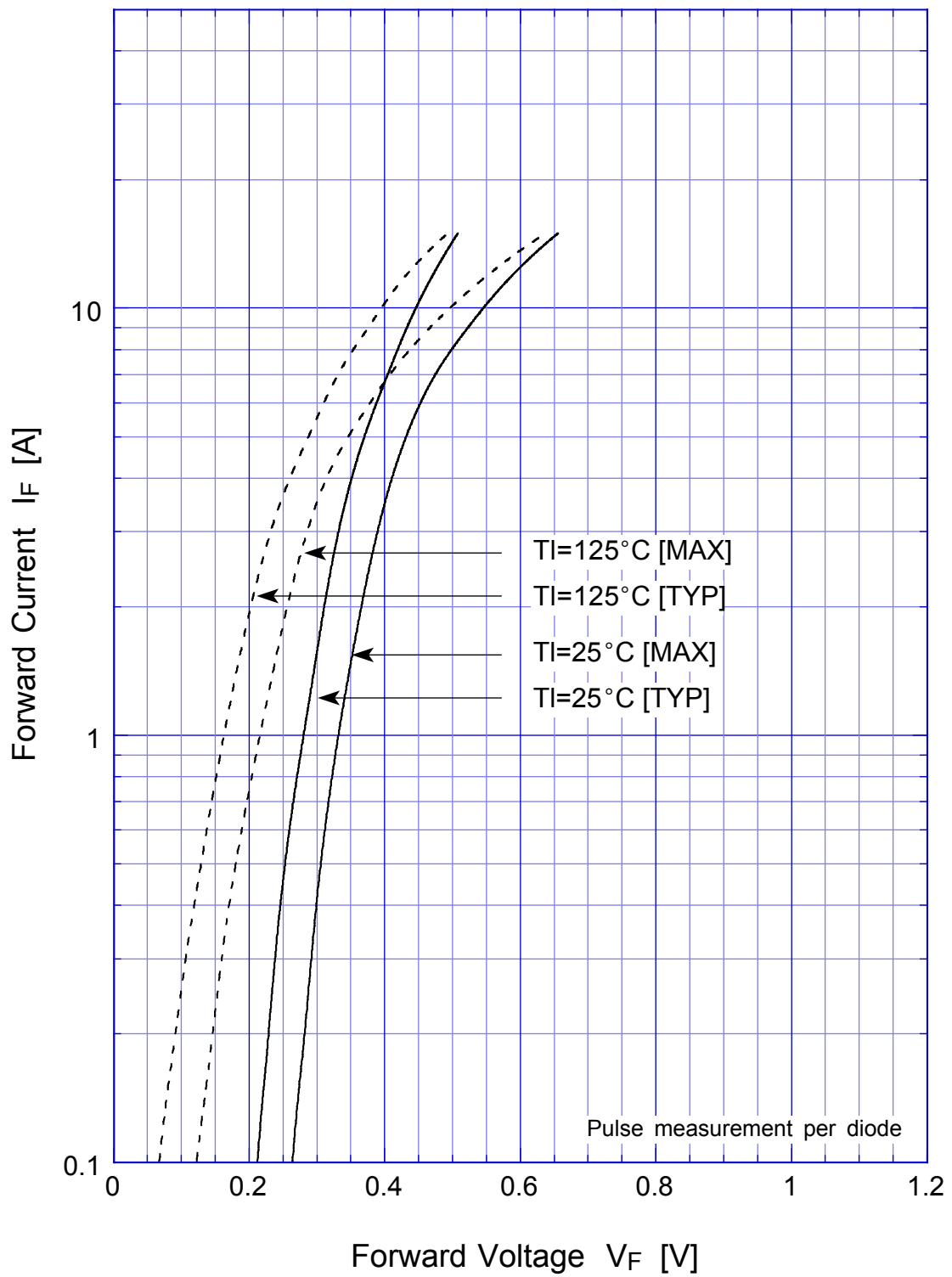
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T_{stg}		-55 ~ 125	
Operating Junction Temperature	T_j		125	
Maximum Reverse Voltage	V_{RM}		30	V
Repetitive Peak Surge Reverse Voltage	V_{RRSM}	Pulse width 0.5ms, duty 1/40	35	V
Average Rectified Forward Current	I_o	50Hz sine wave, R-load $T_I=74$	3	A
Peak Surge Forward Current	I_{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, $T_j=25$	150	A
Repetitive Peak Surge Reverse Power	P_{RRSM}	Pulse width 10 μ s, $T_I=25$	1	kW

Electrical Characteristics (If not specified $T_I=25$)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V_{F1}	$I_F=1.6A$, Pulse measurement	Max.0.35	V
	V_{F2}	$I_F=4A$, Pulse measurement	Max.0.40	V
Reverse Current	I_R	$V_R=V_{RM}$, Pulse measurement	Max.10	mA
Junction Capacitance	C_j	$f=1MHz$, $V_R=10V$	Typ.300	pF
Thermal Resistance	j_l	junction to lead	Max.24	/W
	j_a	junction to ambient On alumina substrate	Max.90	
	j_a	junction to ambient On glass-epoxy substrate	Max.120	

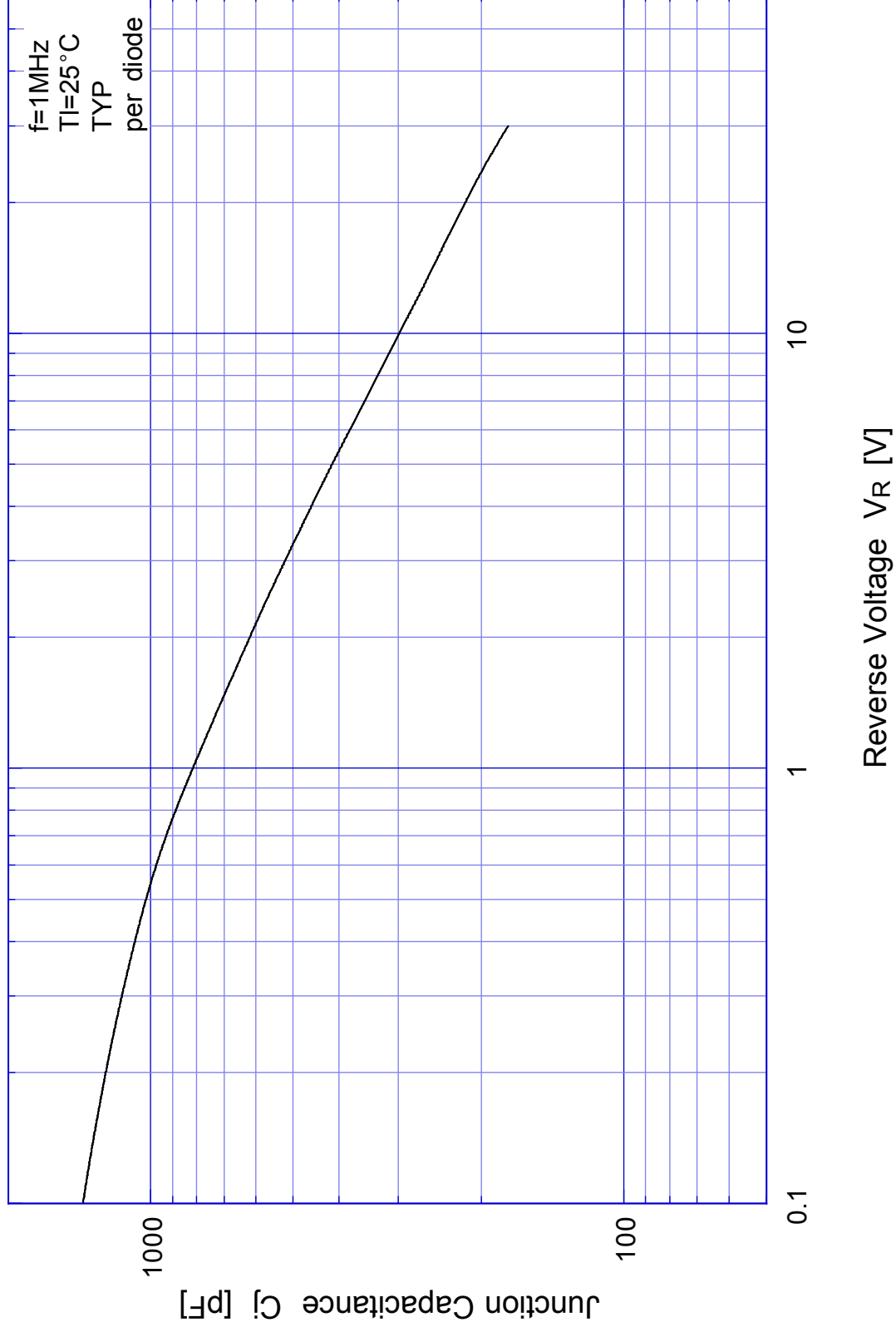
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Forward Voltage



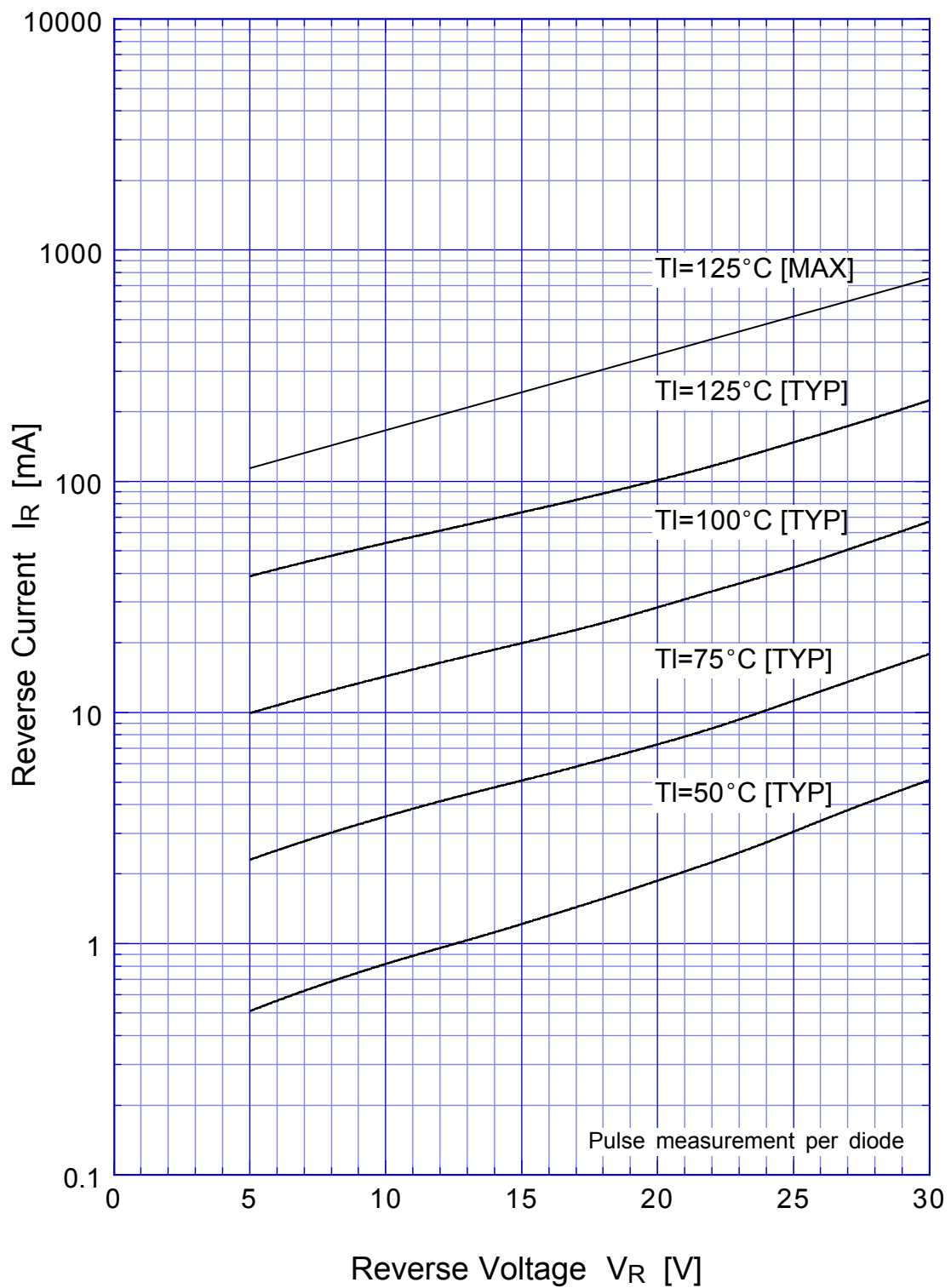
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Junction Capacitance



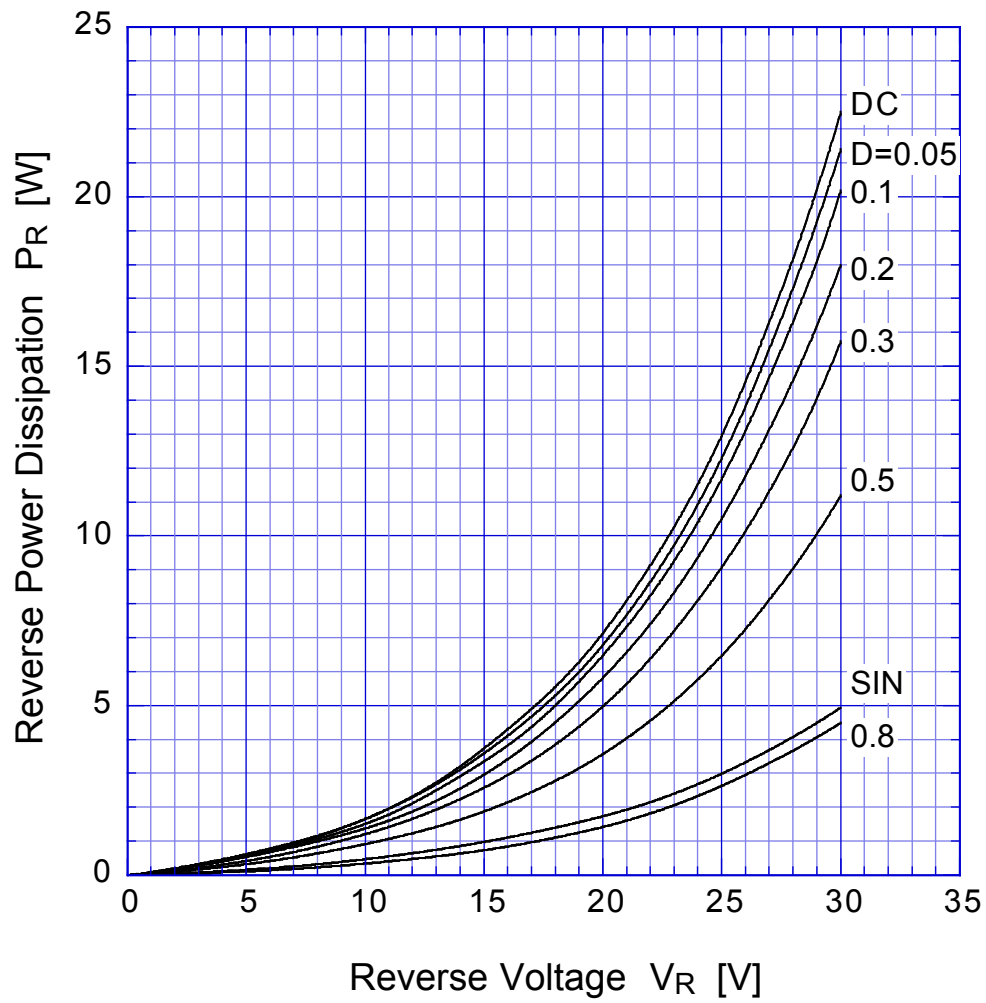
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Reverse Current

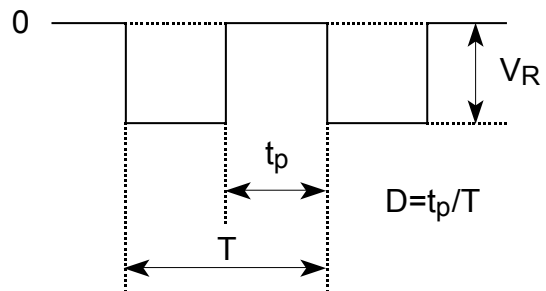


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Reverse Power Dissipation

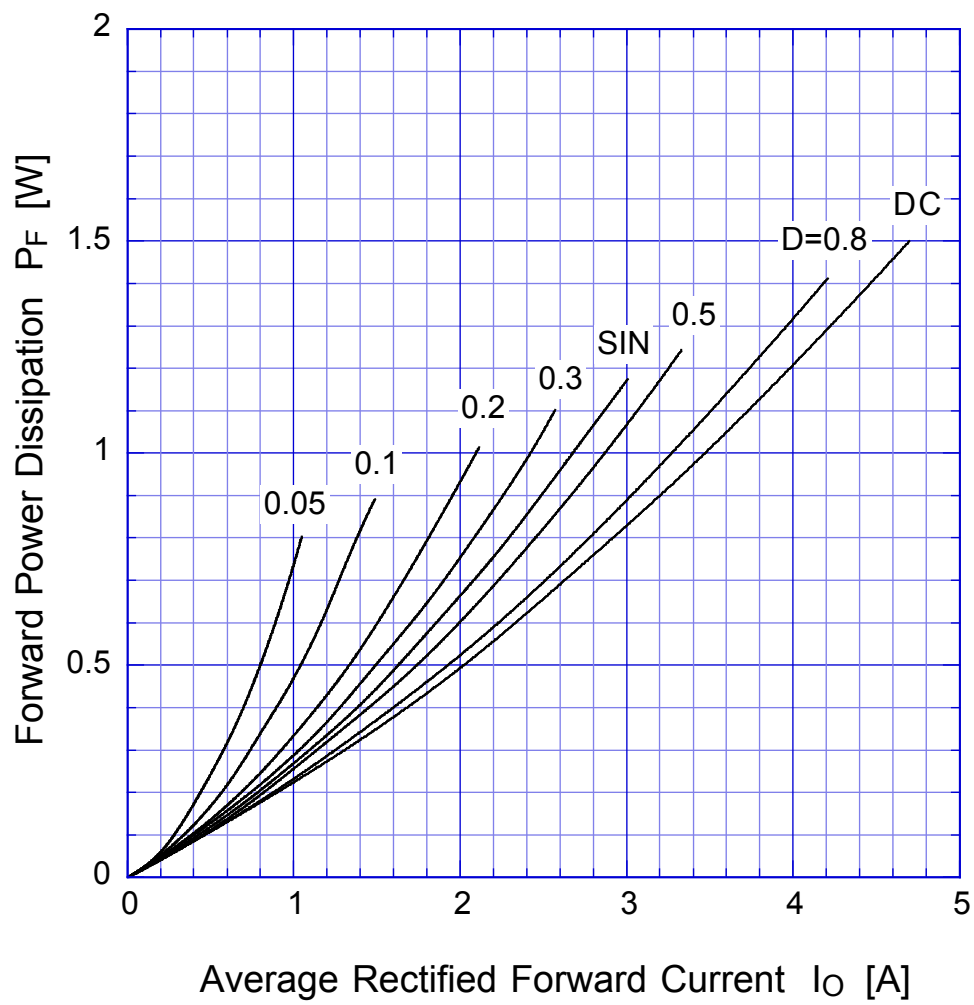


$T_j = 125^\circ\text{C}$

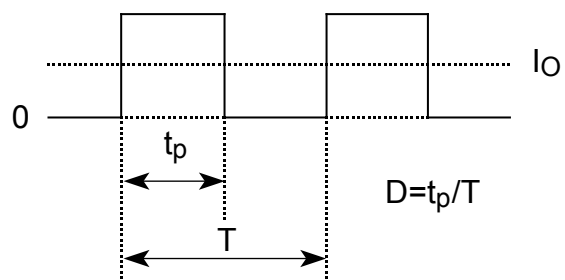


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Forward Power Dissipation

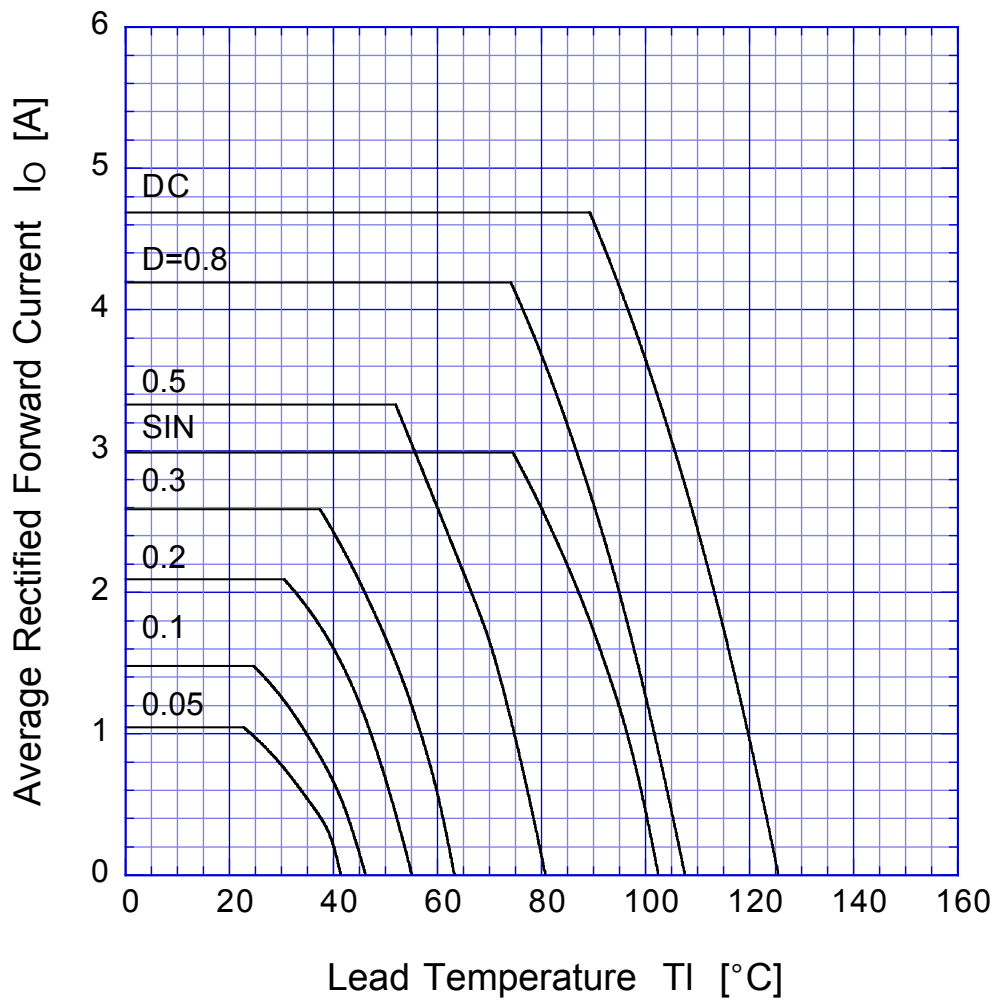


$T_j = 125^\circ\text{C}$

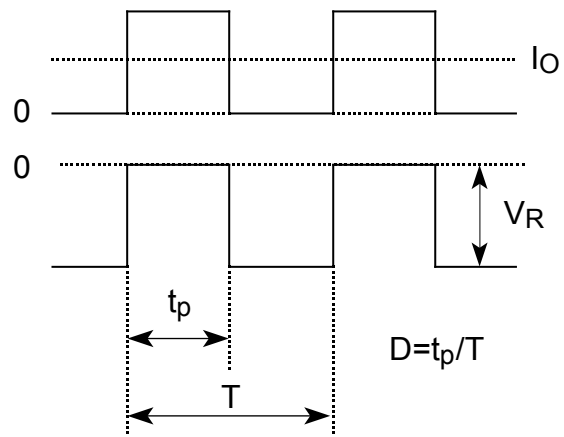


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Derating Curve



$V_R = 15V$



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Peak Surge Forward Capability

