

SHINDENGEN

Schottky Rectifiers (SBD)

Single

M1FS6

60V 1.2A

FEATURES

Small SMT

T_j150

Low V_F=0.45V

P_{RRSM} avalanche guaranteed

APPLICATION

Switching power supply

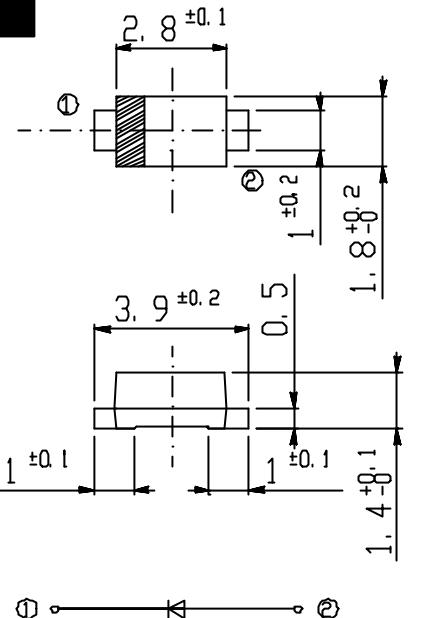
DC/DC converter

Home Appliances, Office Equipment

Telecommuncition

Case : M1F

Unit : mm



RATINGS

Absolute Maximum Ratings (If not specified T_I=25)

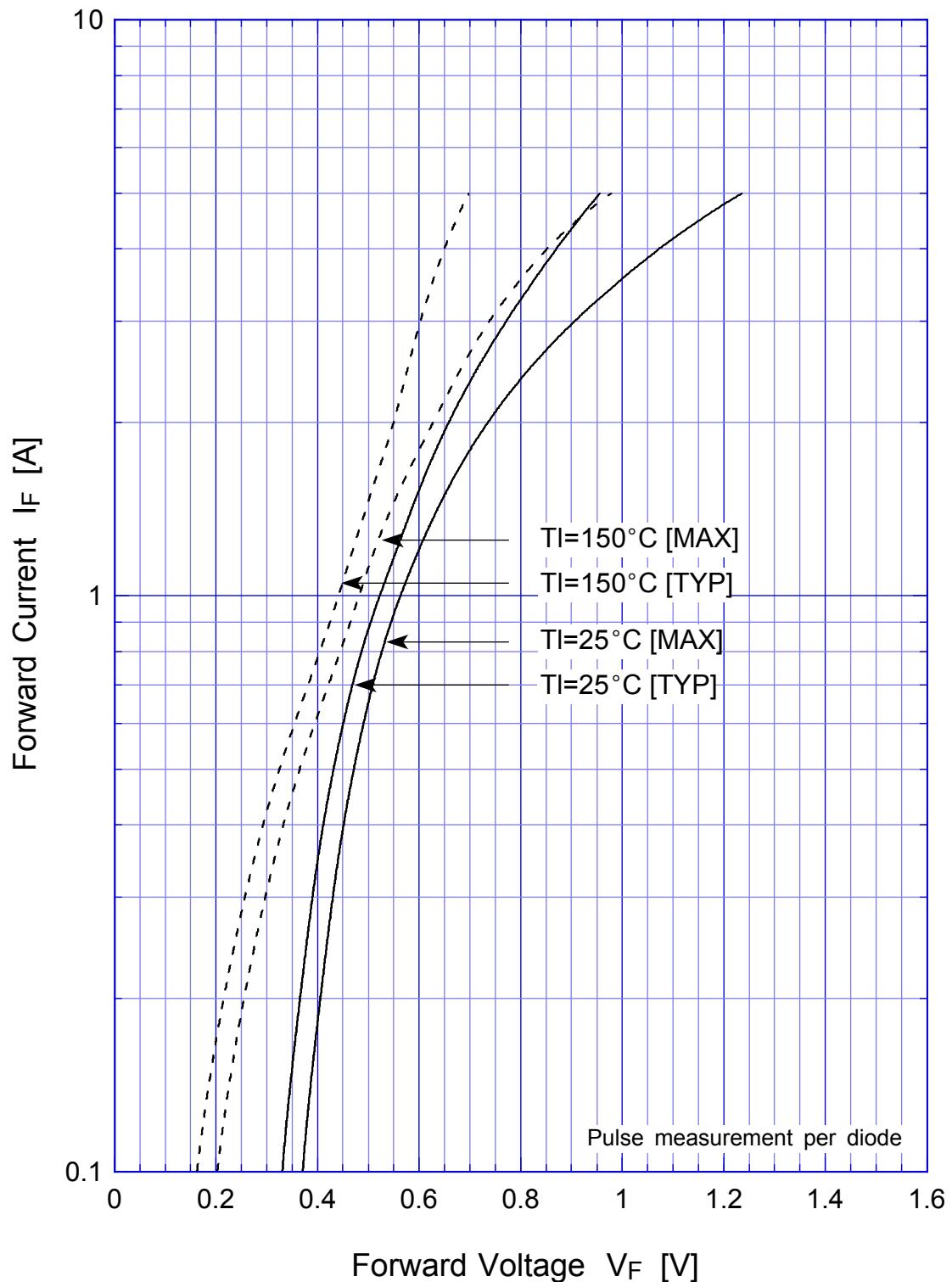
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T _{stg}		-55 ~ 150	
Operating Junction Temperature	T _j		150	
Maximum Reverse Voltage	V _{RM}		60	V
Repetitive Peak Surge Reverse Voltage	V _{RRSM}	Pulse width 0.5ms, duty 1/40	65	V
Average Rectified Forward Current	I _o	50Hz sine wave, R-load Ta=25 On alumina substrate	1.2	A
		50Hz sine wave, R-load Ta=25 On glass-epoxy substrate	0.75	
Peak Surge Forward Current	I _{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, T _j =25	40	A
Repetitive Peak Surge Reverse Power	P _{RRSM}	Pulse width 10 μ s, T _j =25	60	W

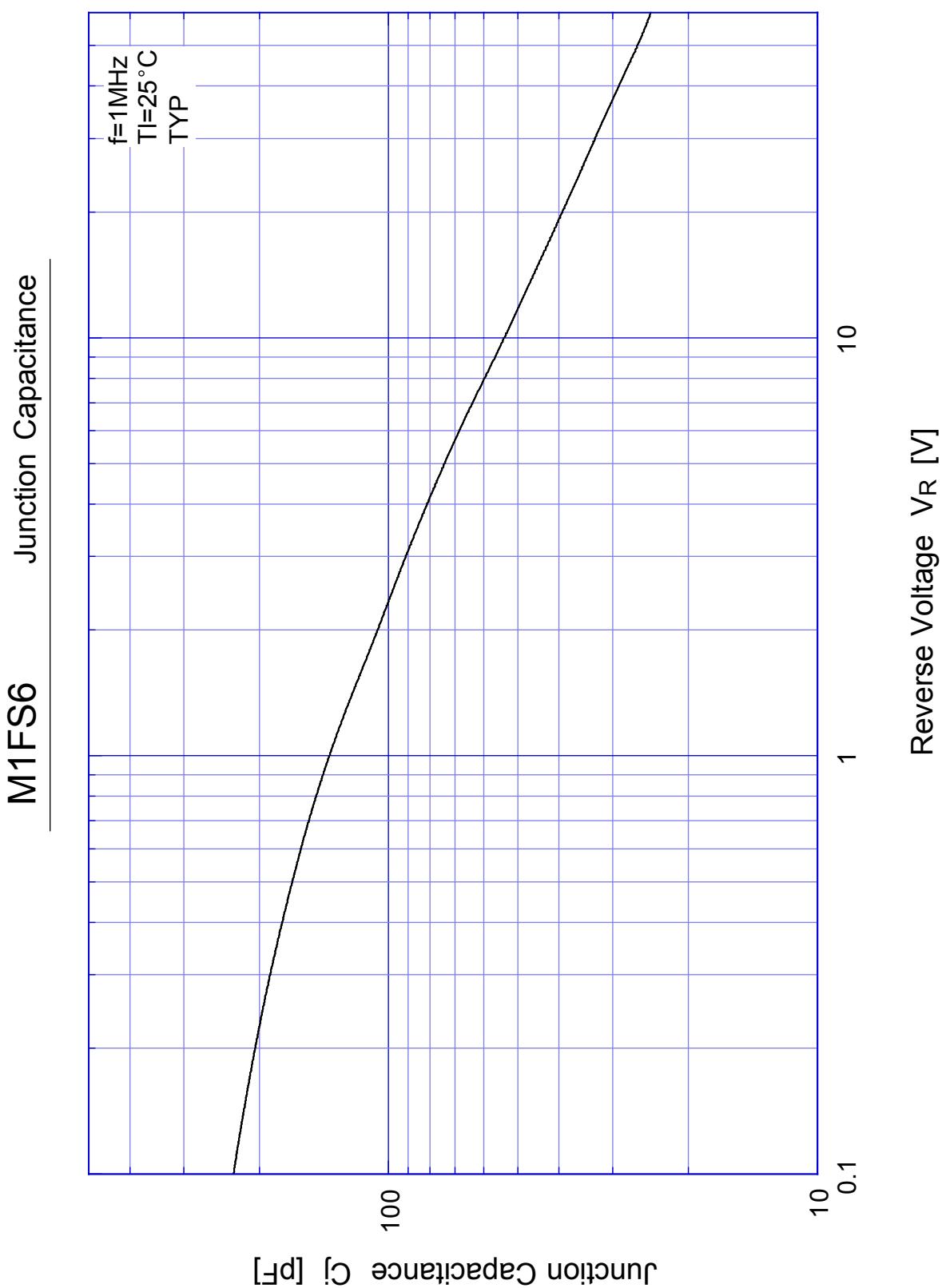
Electrical Characteristics (If not specified T_I=25)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V _F	I _F =1.1A, Pulse measurement	Max.0.58	V
Reverse Current	I _R	V _R =60V, Pulse measurement	Max.1.0	mA
Junction Capacitance	C _j	f=1MHz, V _R =10V	Typ.53	pF
Thermal Resistance	j _l	junction to lead	Max.20	/W
	j _a	junction to ambient On alumina substrate	Max.108	
		junction to ambient On glass-epoxy substrate	Max.186	

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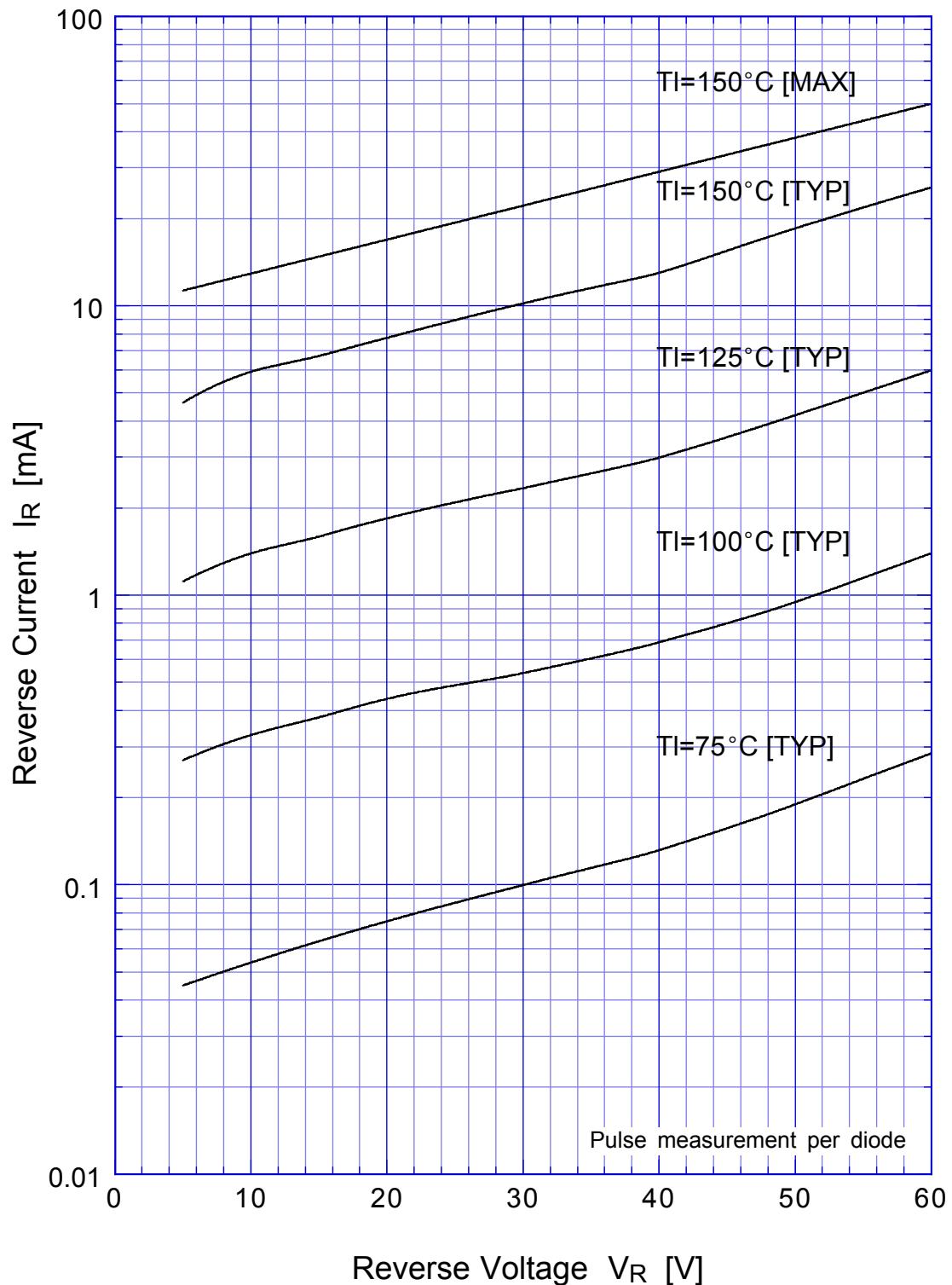
Forward Voltage





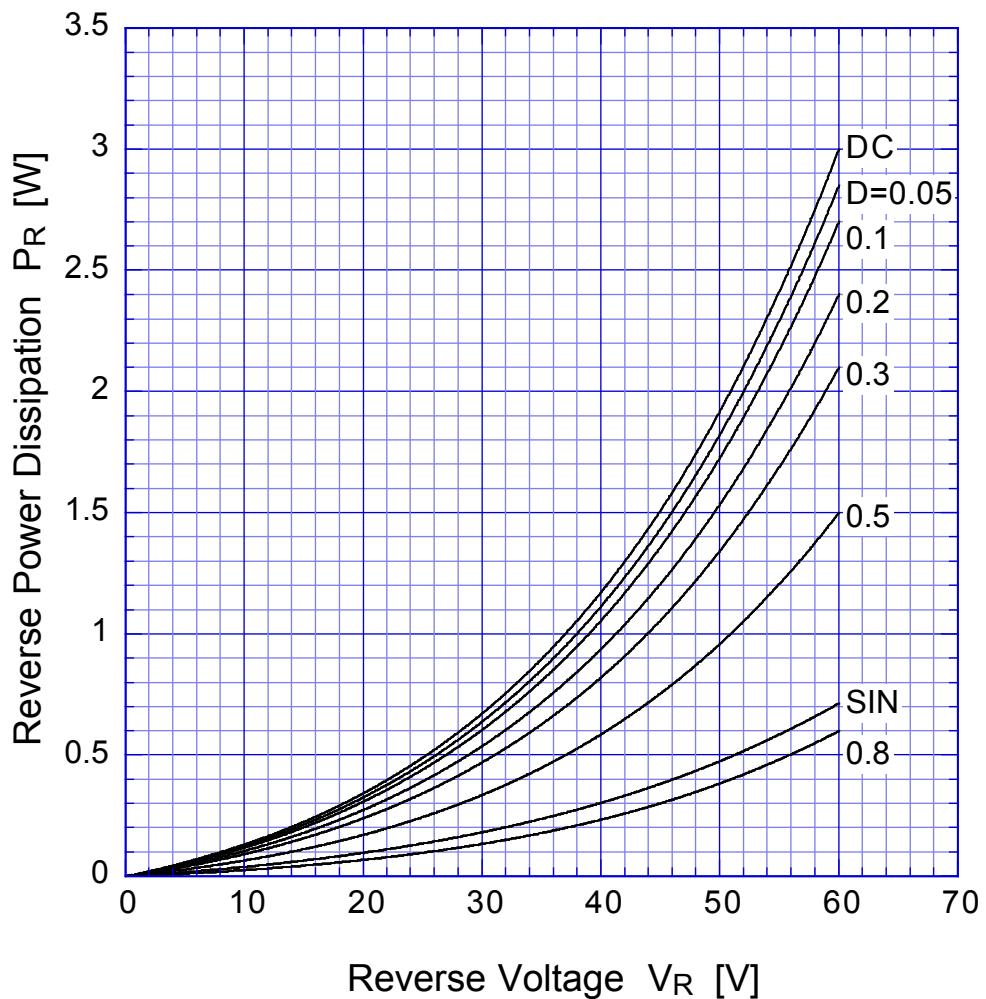
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Reverse Current

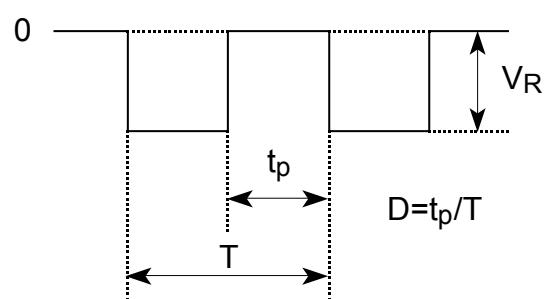


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Reverse Power Dissipation

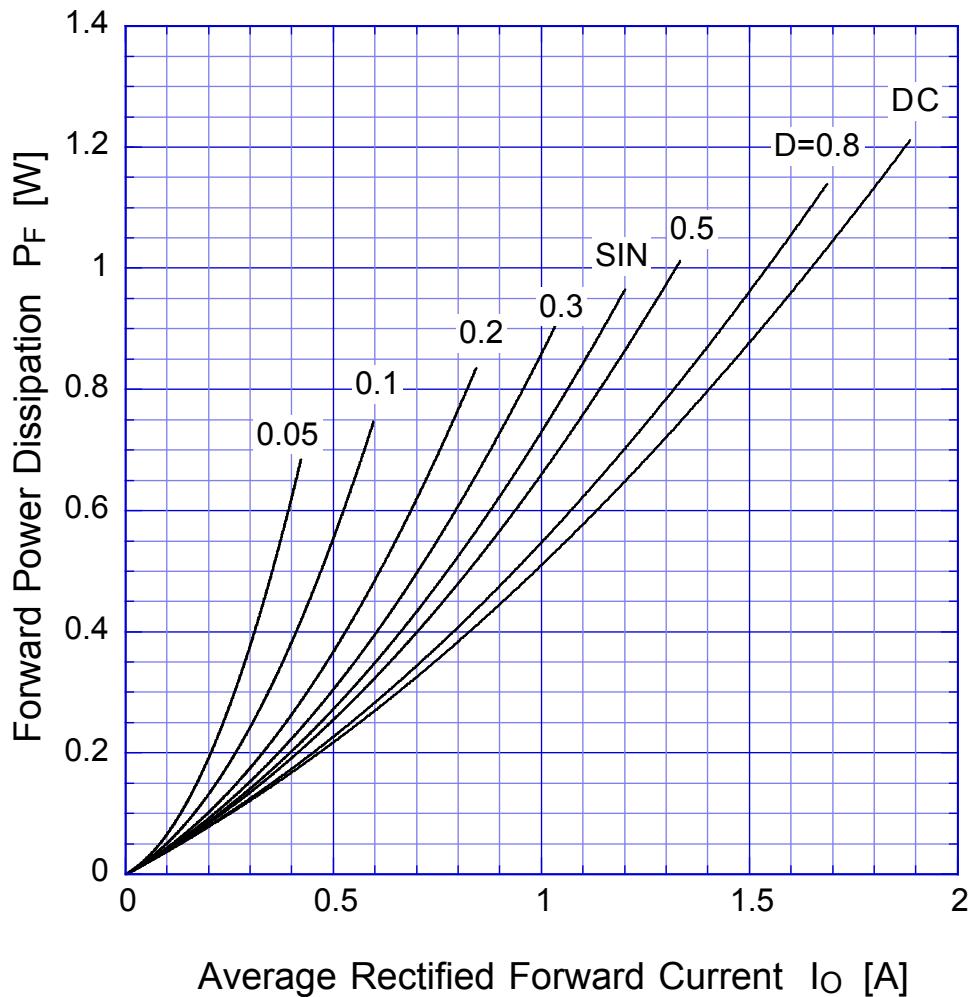


$T_j = 150^\circ\text{C}$

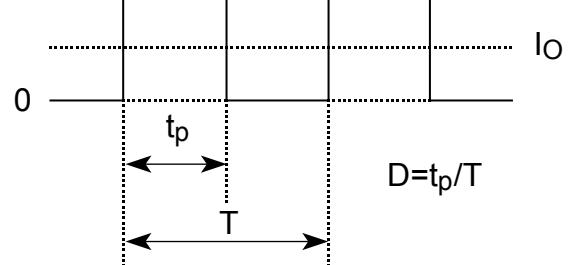


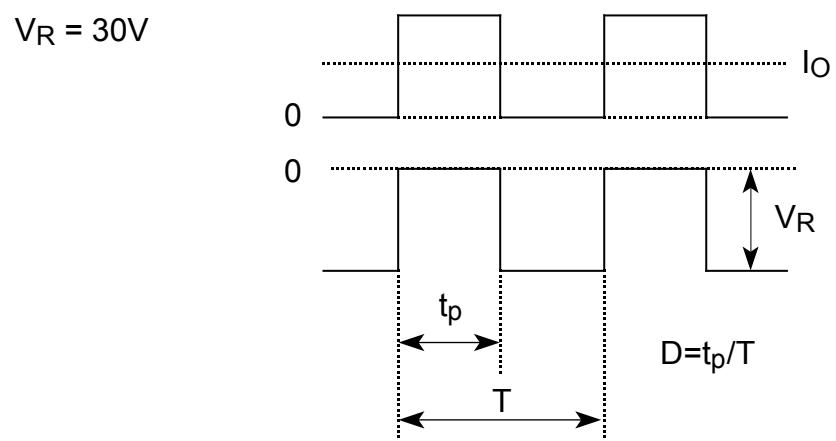
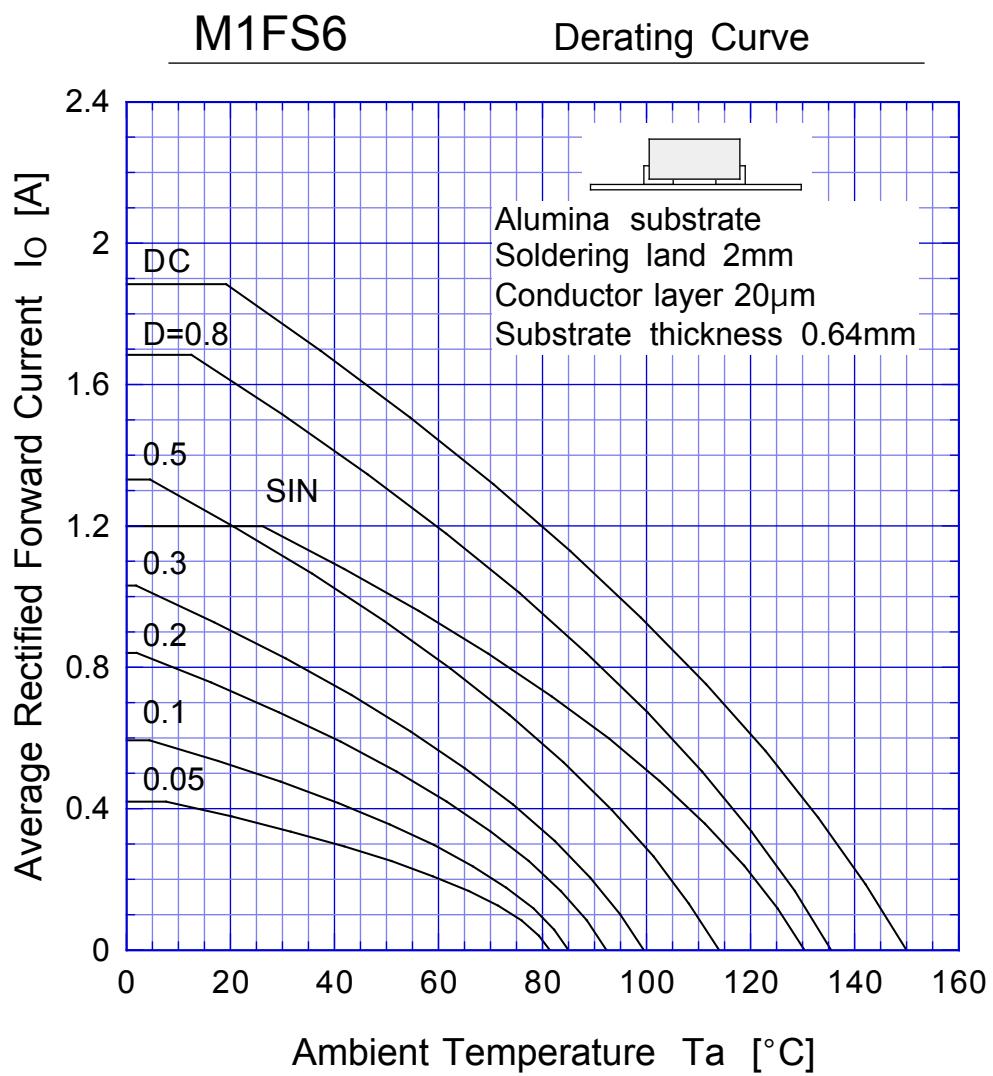
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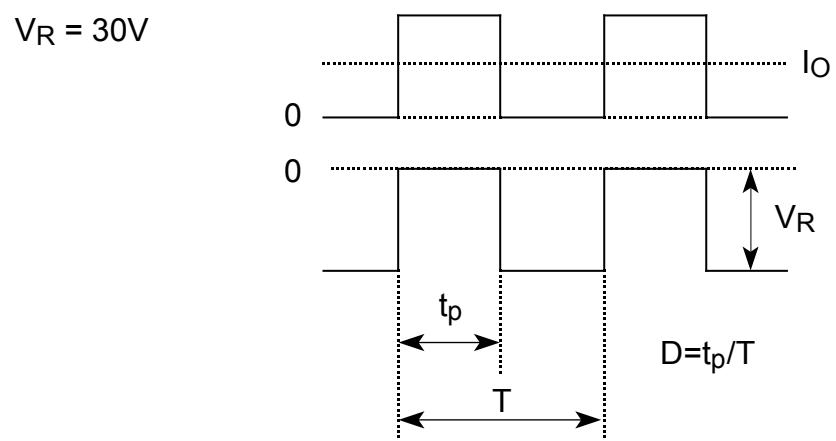
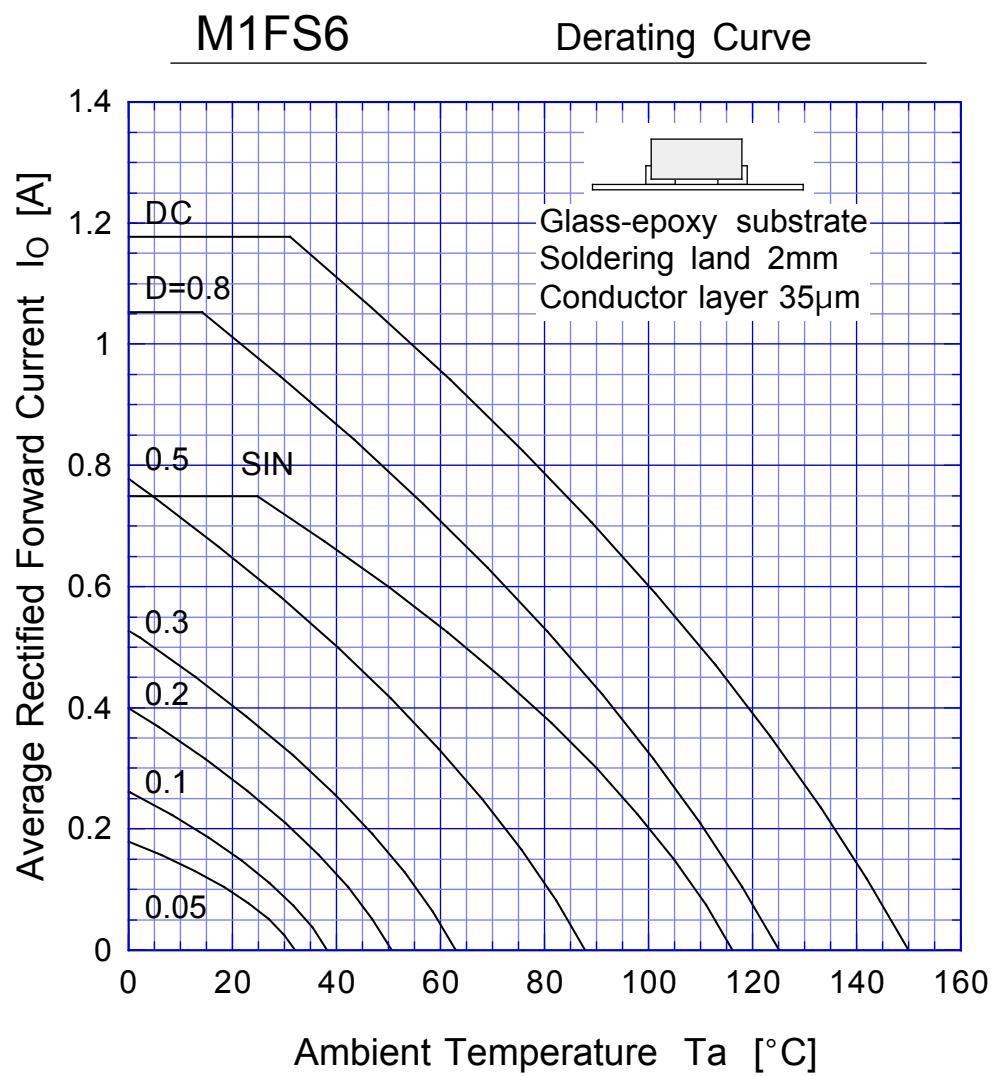
Forward Power Dissipation



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

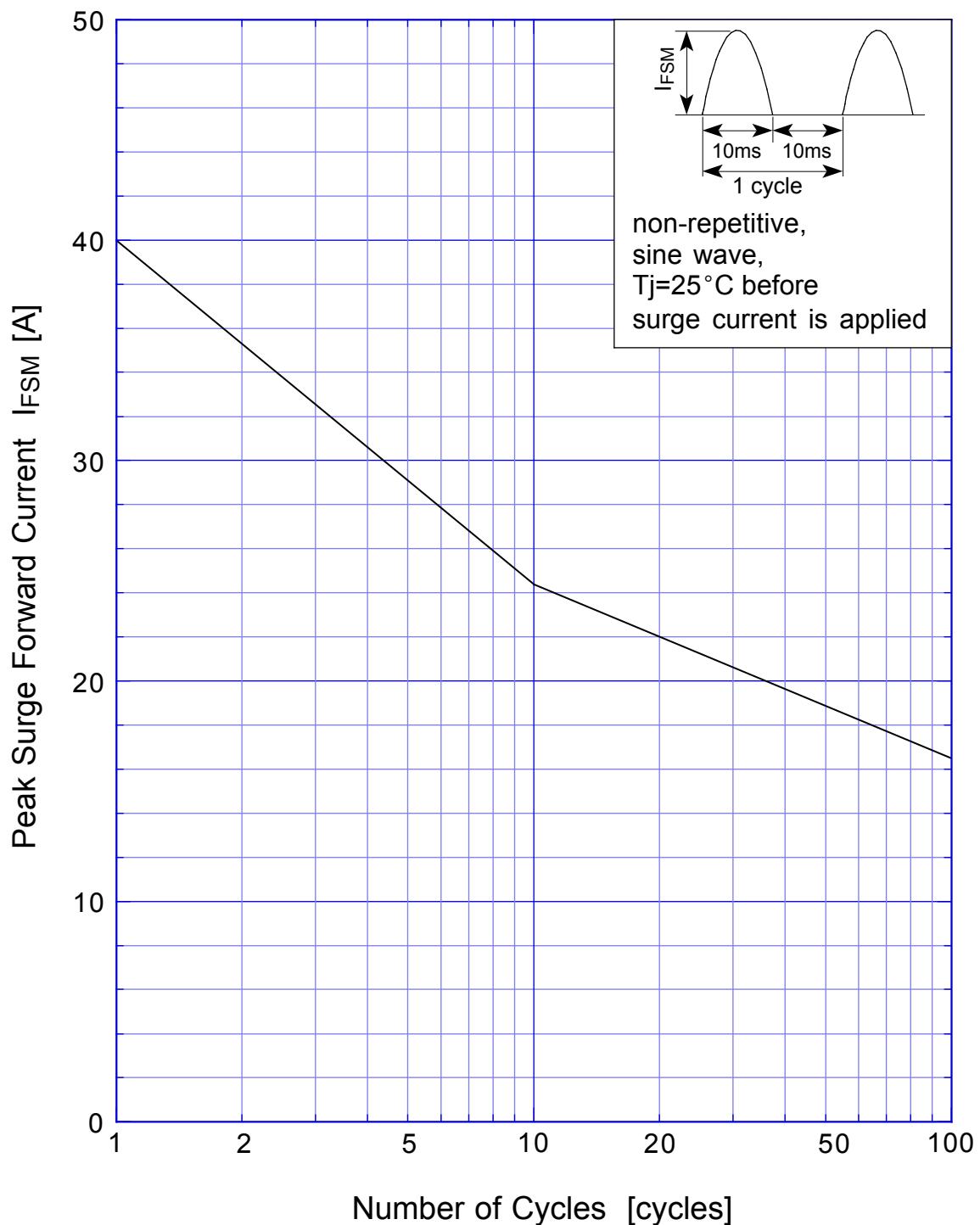




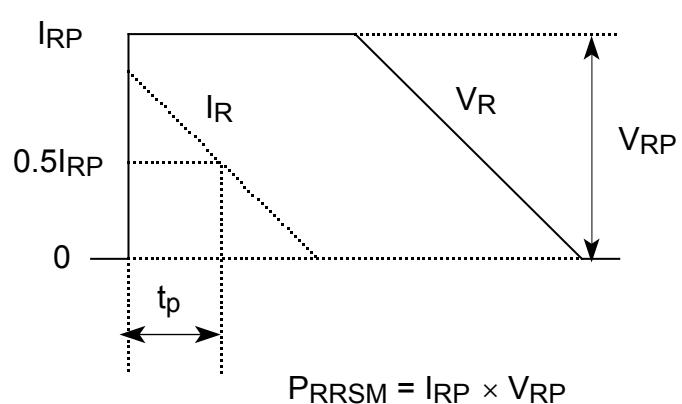
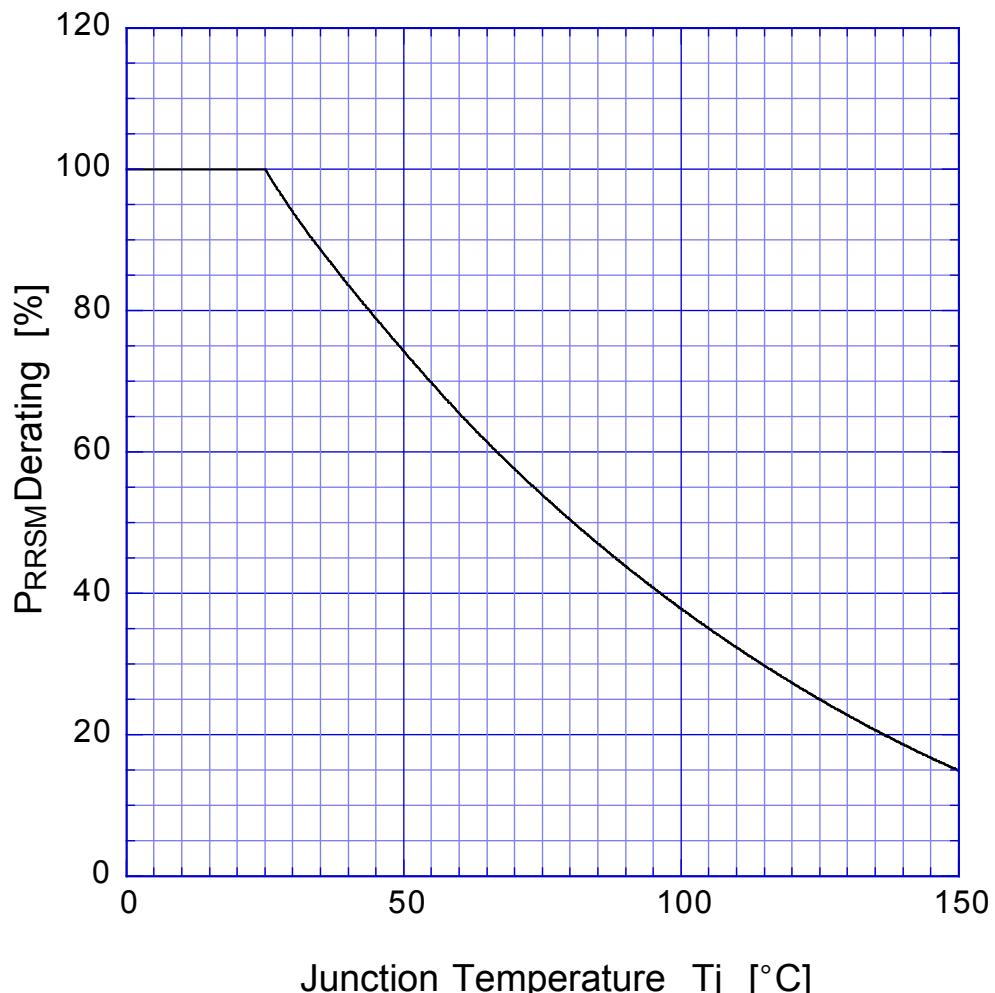


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Peak Surge Forward Capability



SBD Repetitive Surge Reverse Power Derating Curve



SBD Repetitive Surge Reverse Power Capability

