

SHINDENGEN

Schottky Rectifiers (SBD)

Single

DE3S6M

60V 3A

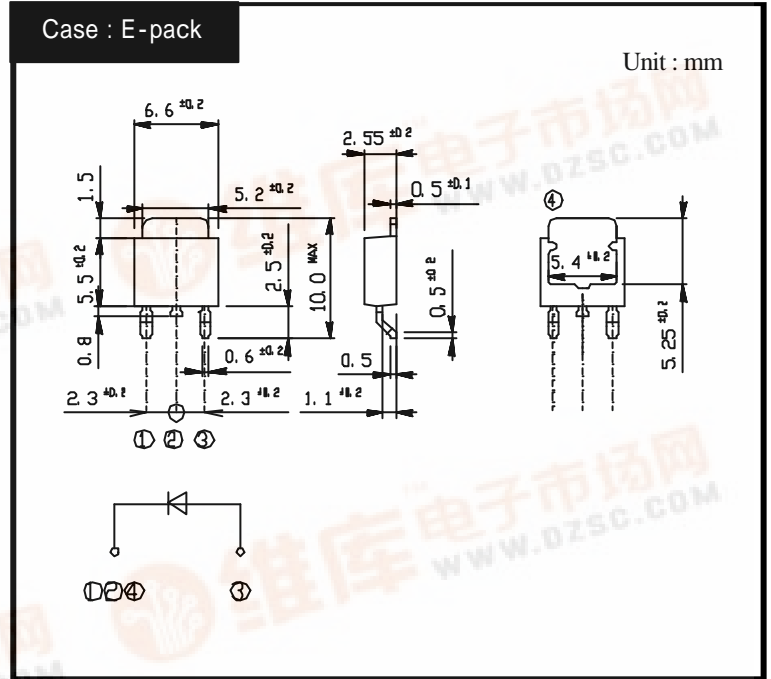
FEATURES

- SMT
- Tj150
- P_{RRSM} avalanche guaranteed
- High current capacity with Small Package

APPLICATION

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

OUTLINE DIMENSIONS



RATINGS

Absolute Maximum Ratings (If not specified T_c=25)

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T _{stg}		-40 ~ 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=31 On alumina substrate	2.5	A
		50Hz sine wave, R-load Tc=117	3	
Peak Surge Forward Current	I _{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=125	80	A
Repetitive Peak Surge Reverse Power	P _{RRSM}	Pulse width 10 μs, Tj=25	330	W

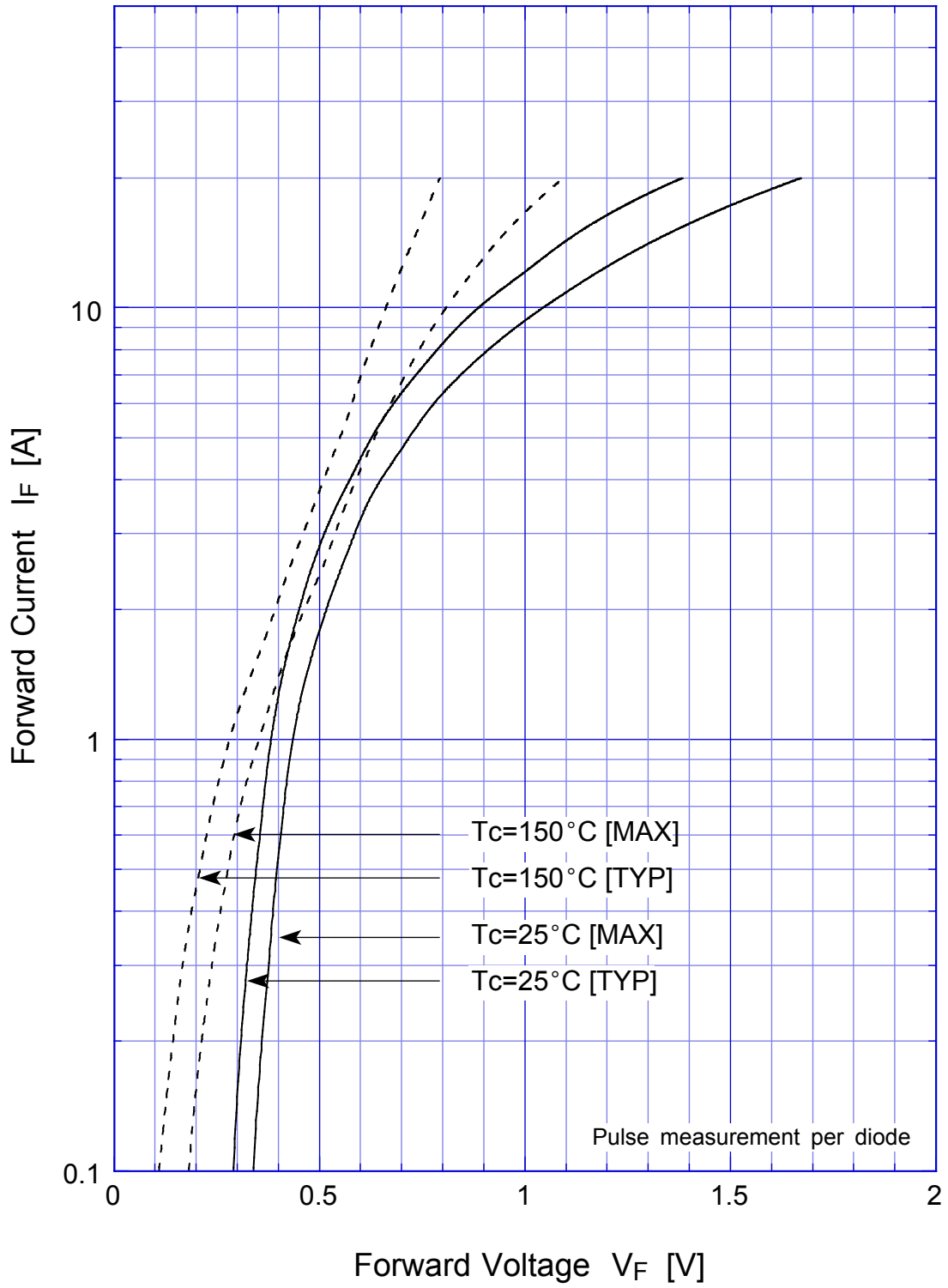
Electrical Characteristics (If not specified T_c=25)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V _F	I _F =3A, Pulse measurement	Max.0.58	V
Reverse Current	I _R	V _R =V _{RM} , Pulse measurement	Max.2.5	mA
Junction Capacitance	C _j	f=1MHz, V _R =10V	Typ.130	pF
Thermal Resistance	j-c	junction to case	Max.12	/W
	j-a	junction to ambient	Max.55	



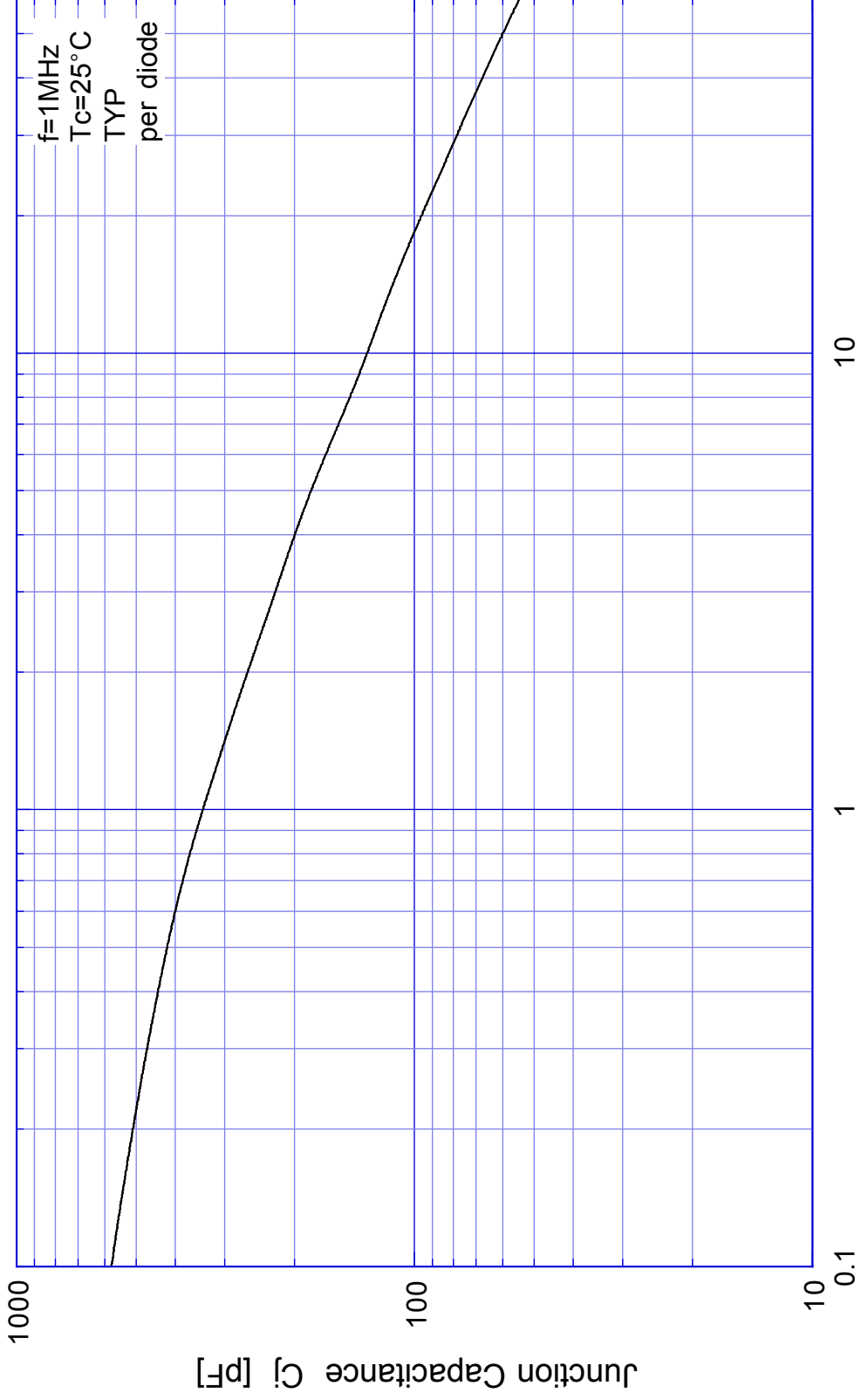
DE3S6M

Forward Voltage



DE3S6M

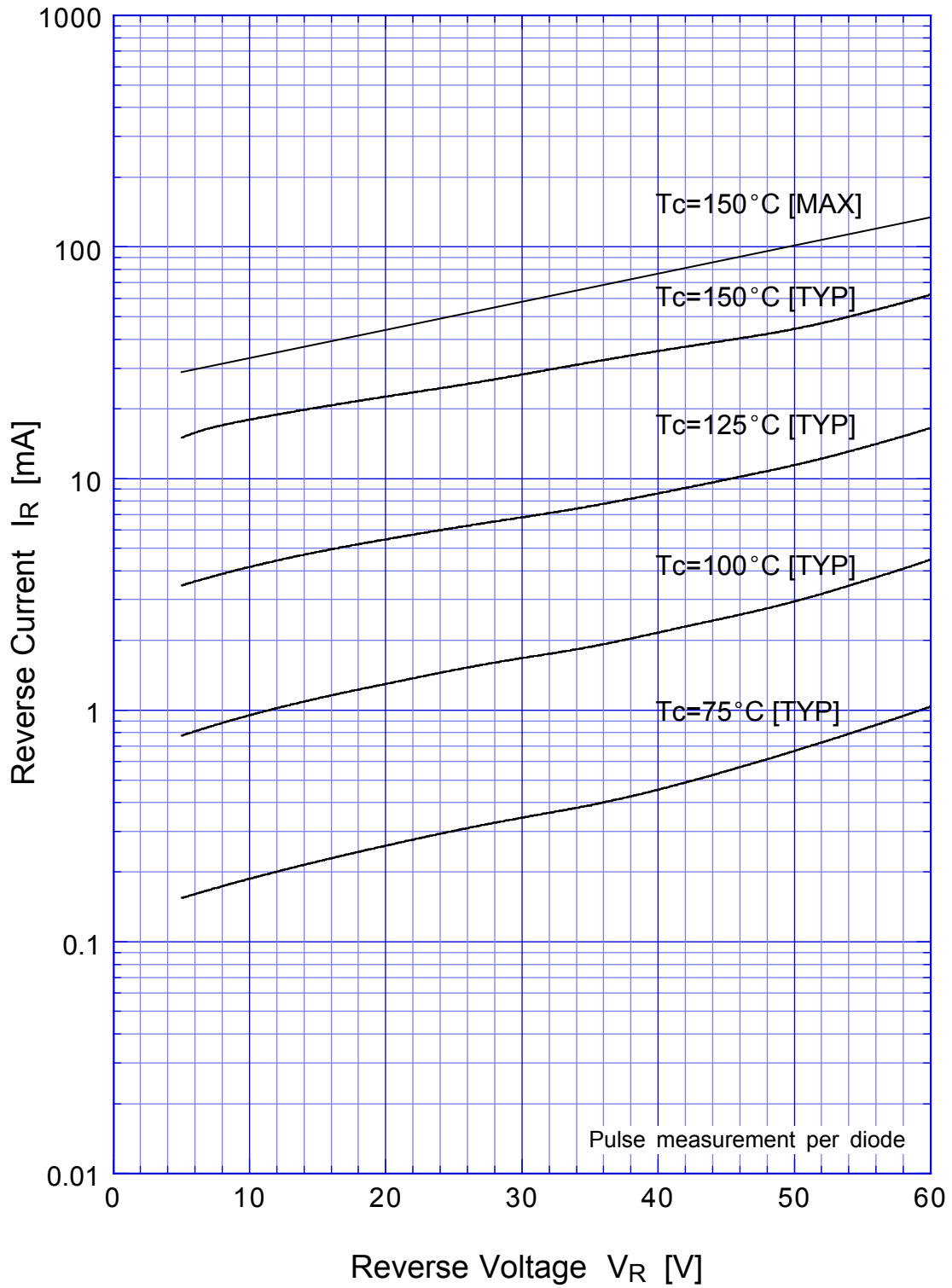
Junction Capacitance



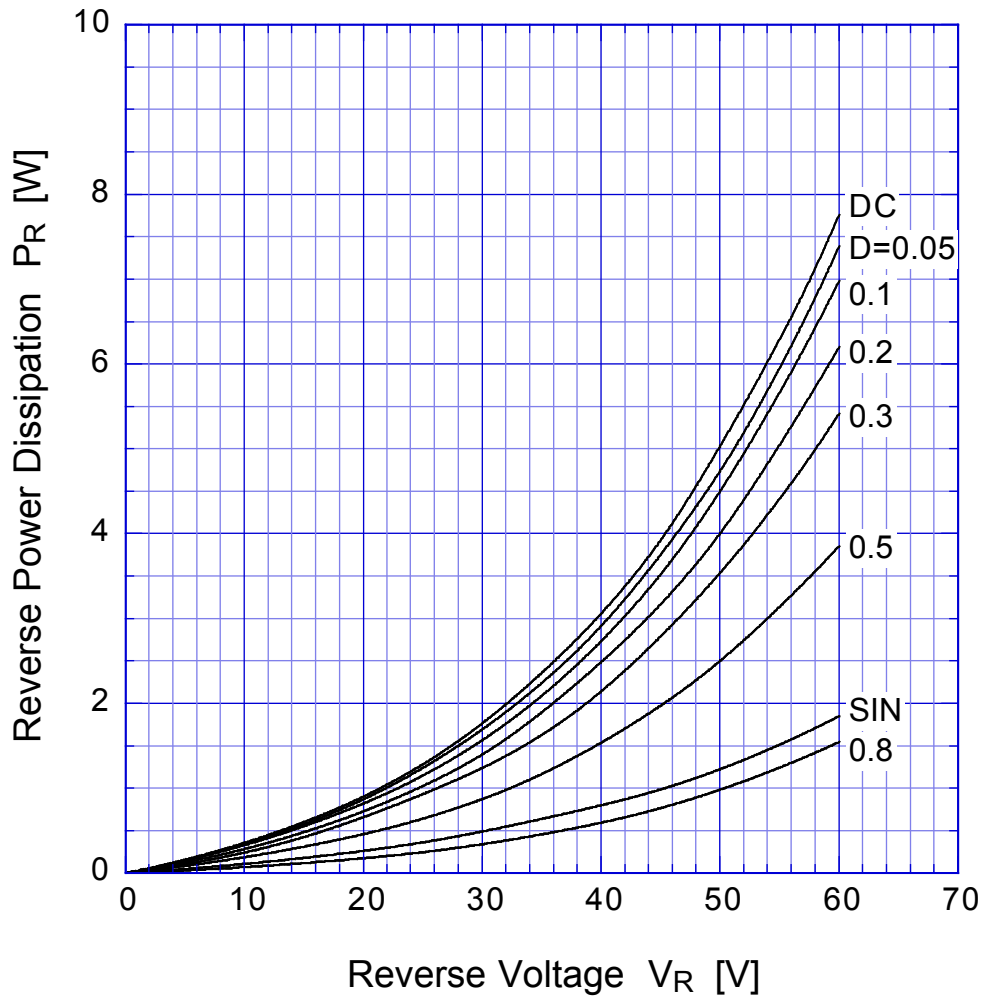
Reverse Voltage V_R [V]

DE3S6M

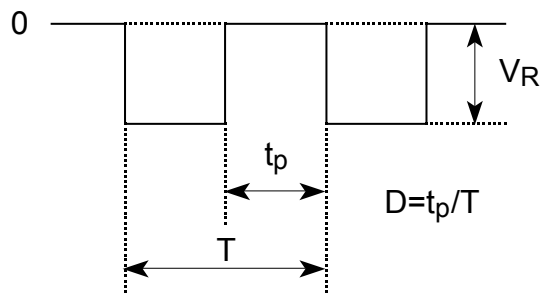
Reverse Current



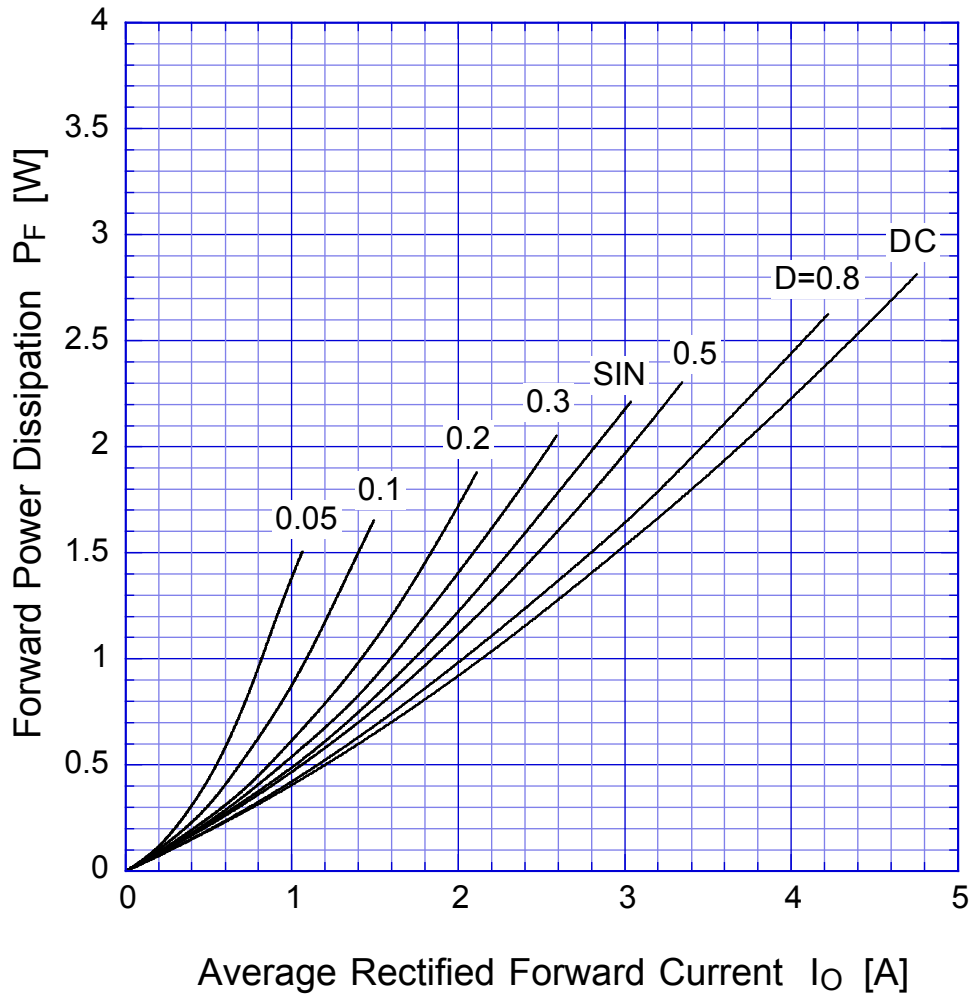
DE3S6M Reverse Power Dissipation



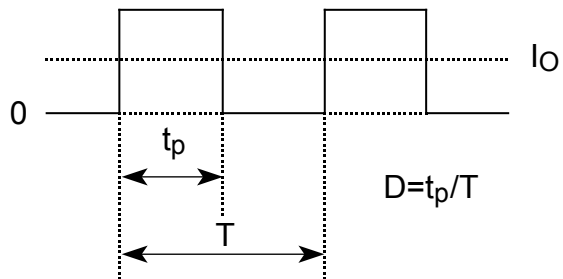
$T_j = 150^\circ\text{C}$



DE3S6M Forward Power Dissipation

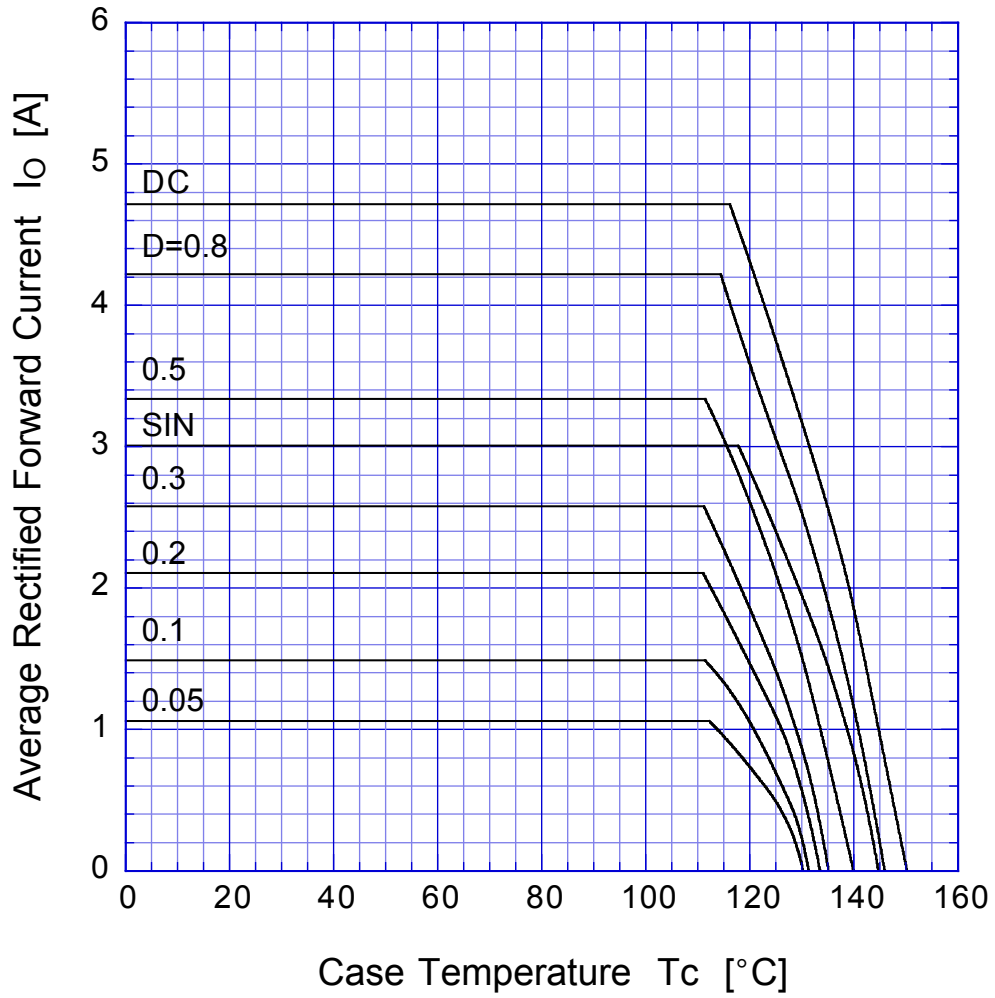


$T_j = 150^\circ\text{C}$

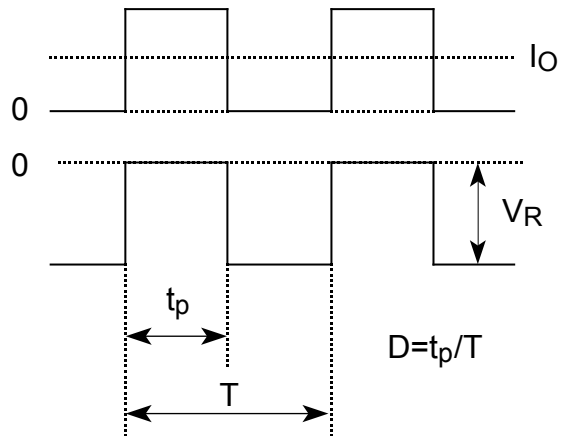


DE3S6M

Derating Curve

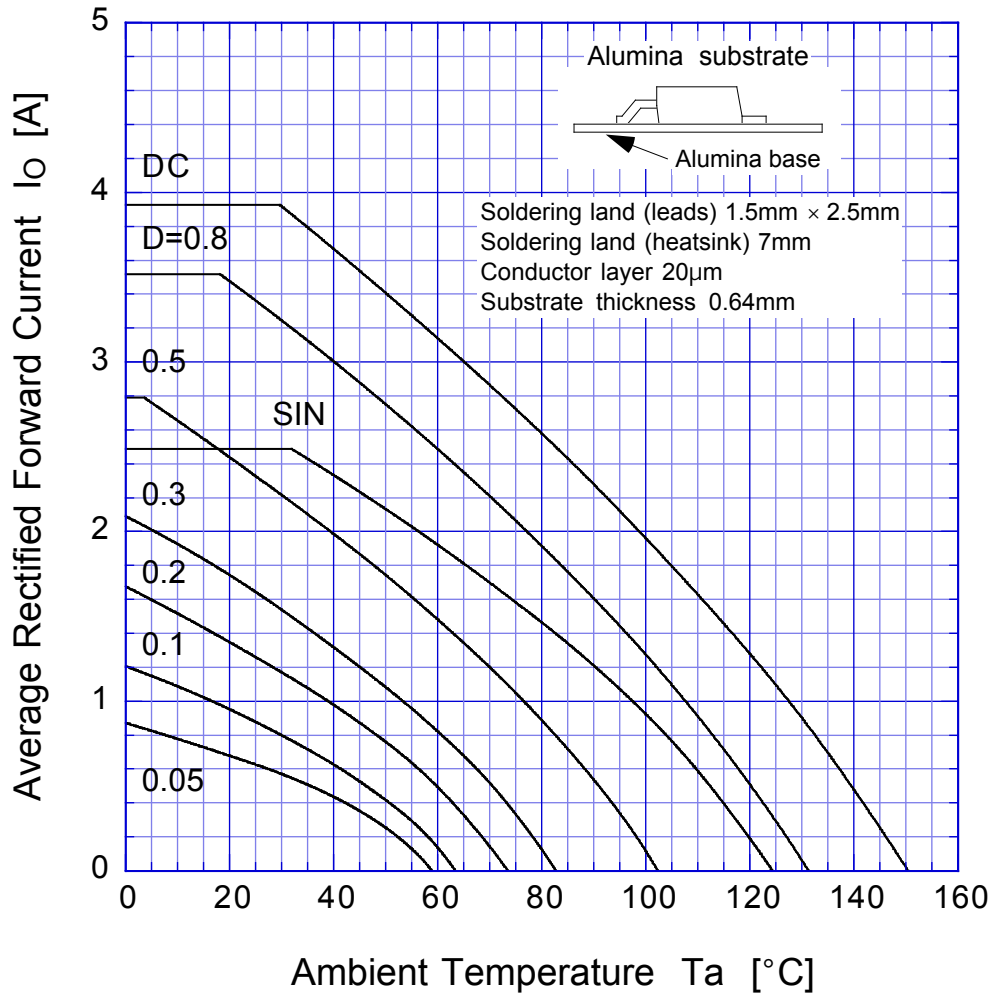


$V_R = 30V$

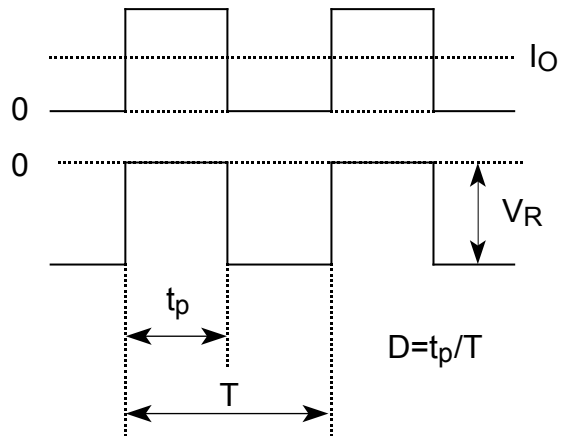


DE3S6M

Derating Curve

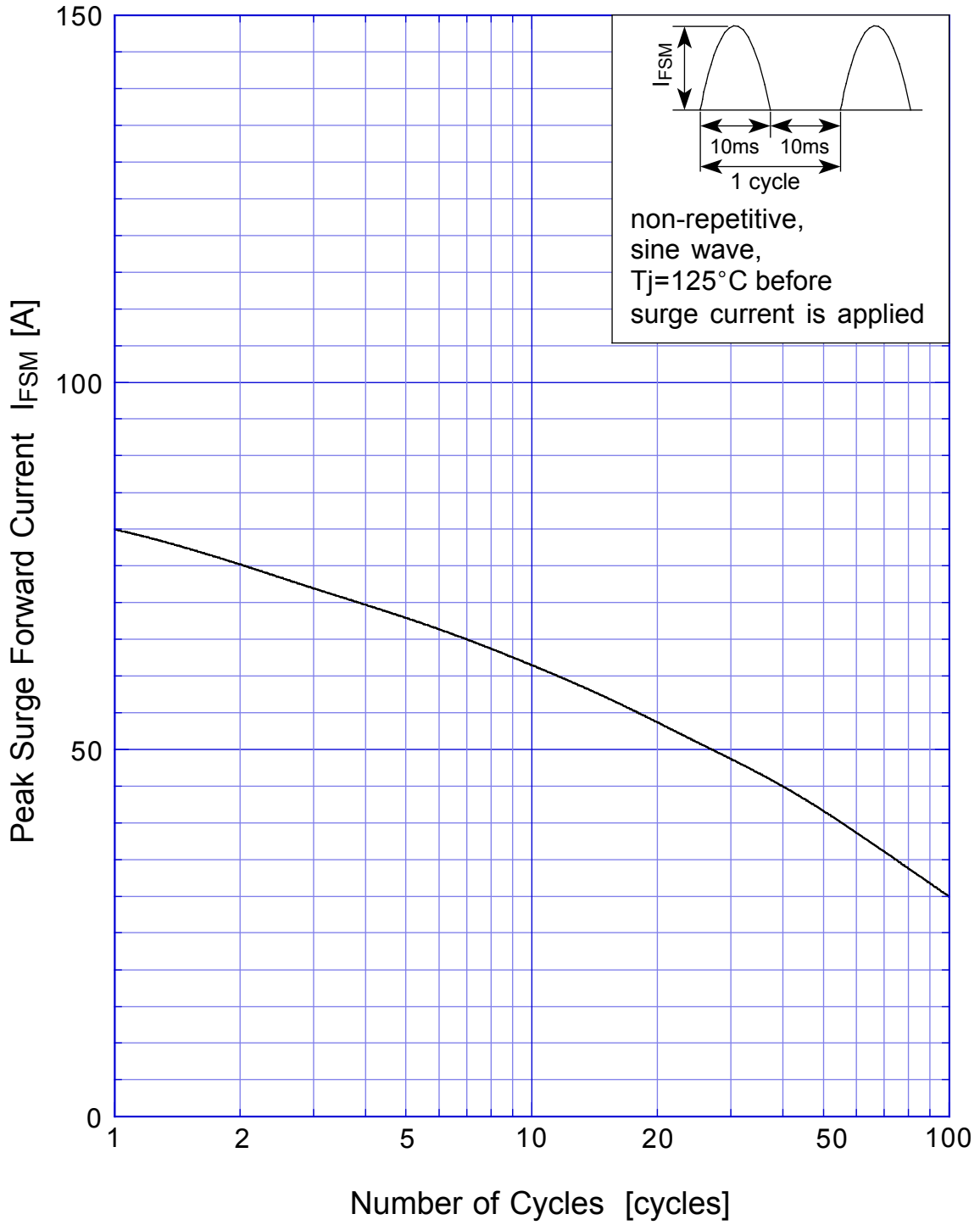


$V_R = 30V$

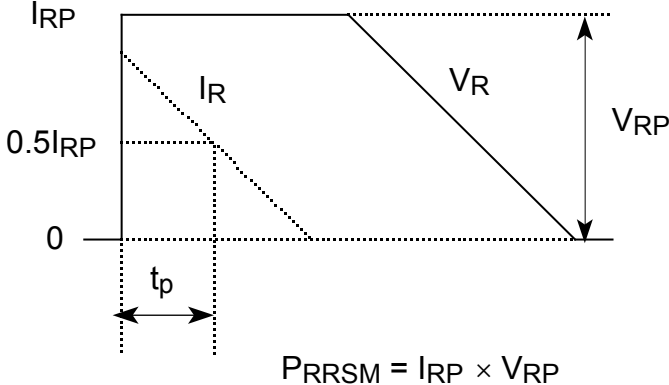
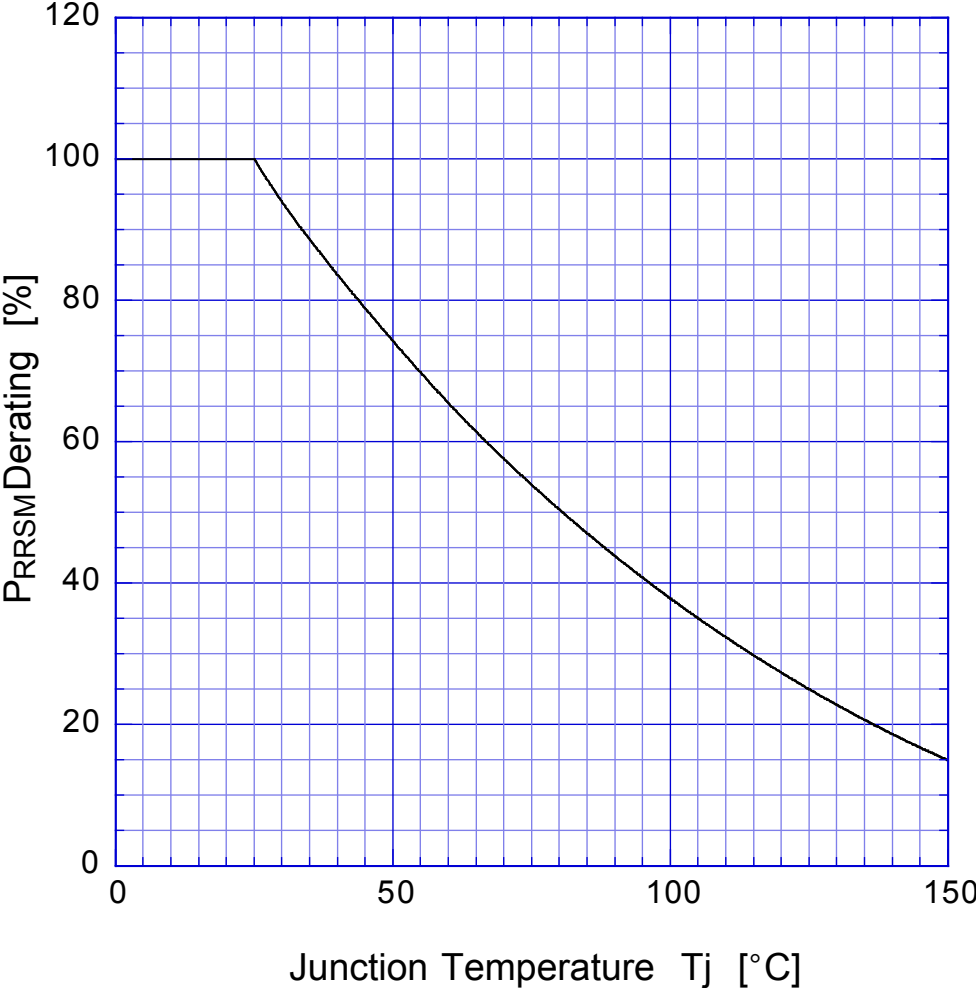


DE3S6M

Peak Surge Forward Capability



SBD Repetitive Surge Reverse Power Derating Curve



SBD

Repetitive Surge Reverse Power Capability

