

SHINDENGEN

Schottky Rectifiers (SBD)

Dual

D25SC6M

60V 25A

FEATURES

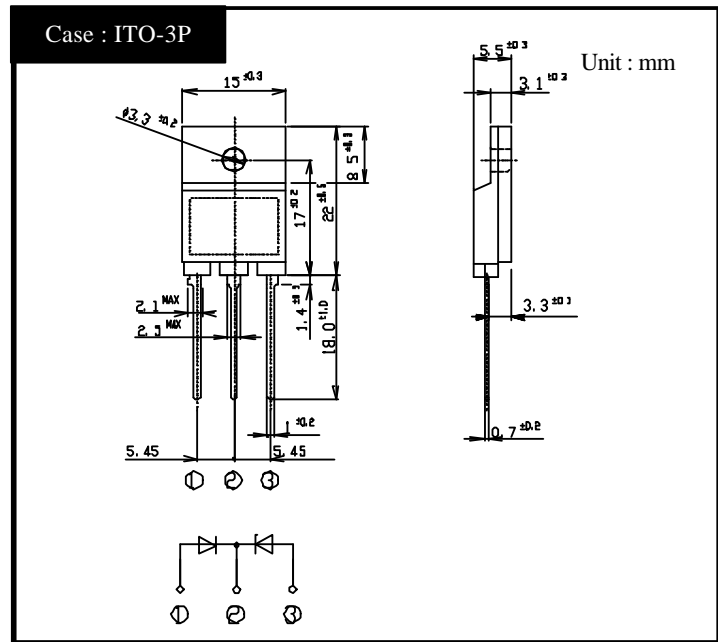
- Tj150
- P_{RRSM} avalanche guaranteed
- High current capacity
- Fully Isolated Molding

APPLICATION

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

OUTLINE DIMENSIONS

Case : ITO-3P



RATINGS

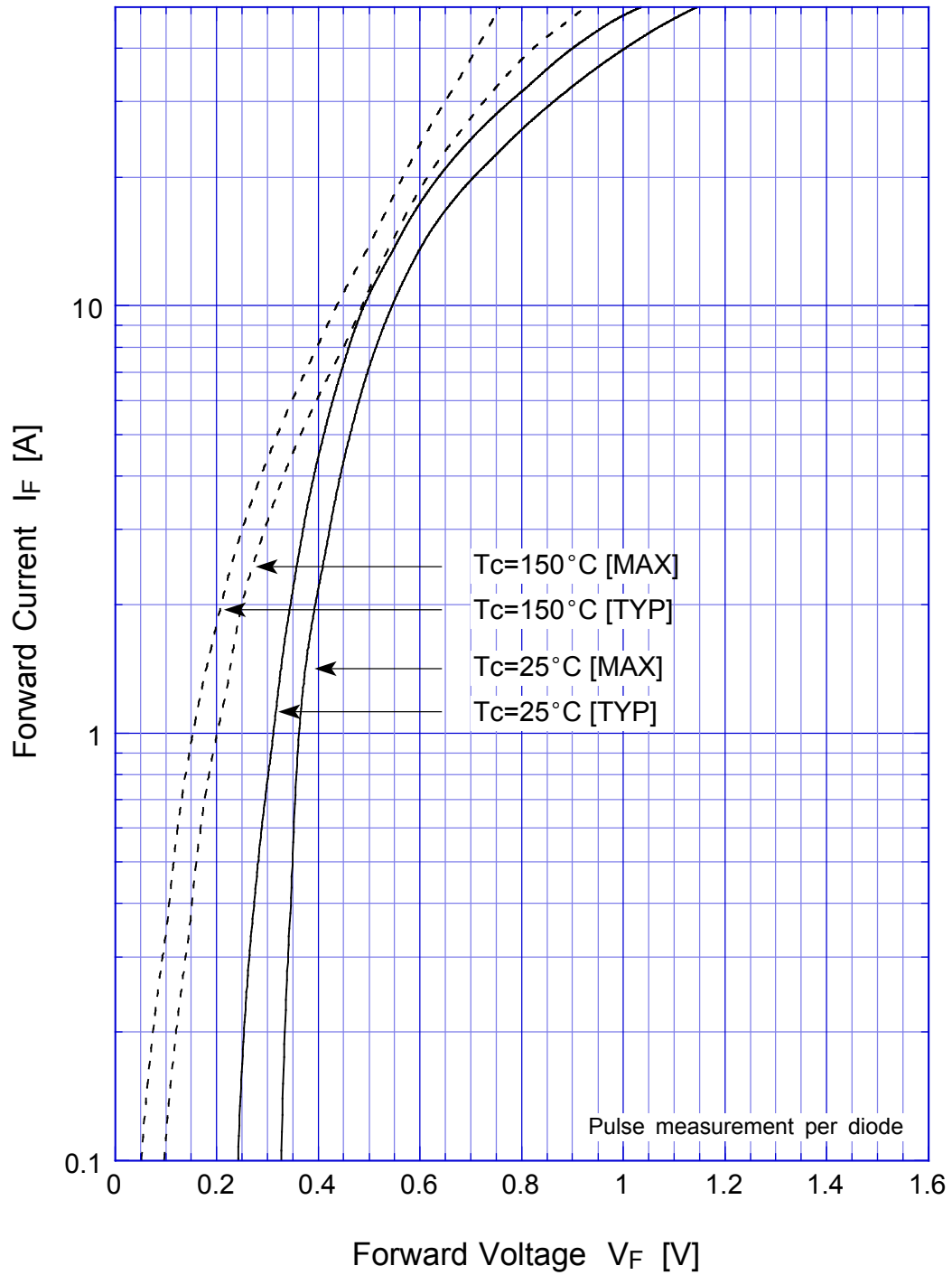
Absolute Maximum Ratings (If not specified Tc=25)

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-40 ~ 150	
Operating Junction Temperature	Tj		150	
Maximum Reverse Voltage	V _{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, Rating for each diode I _o /2, Tc=117	25	A
Peak Surge Forward Current	I _{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=125	300	A
Repetitive Peak Surge Reverse Power	P _{RRSM}	Pulse width 10 μ s, Rating of per diode, Tj=25	660	W
Dielectric Strength	V _{dis}	Terminals to case, AC 1 minute	1.5	kV
Mounting Torque	TOR	(Recommended torque :0.5N·m)	0.8	N·m

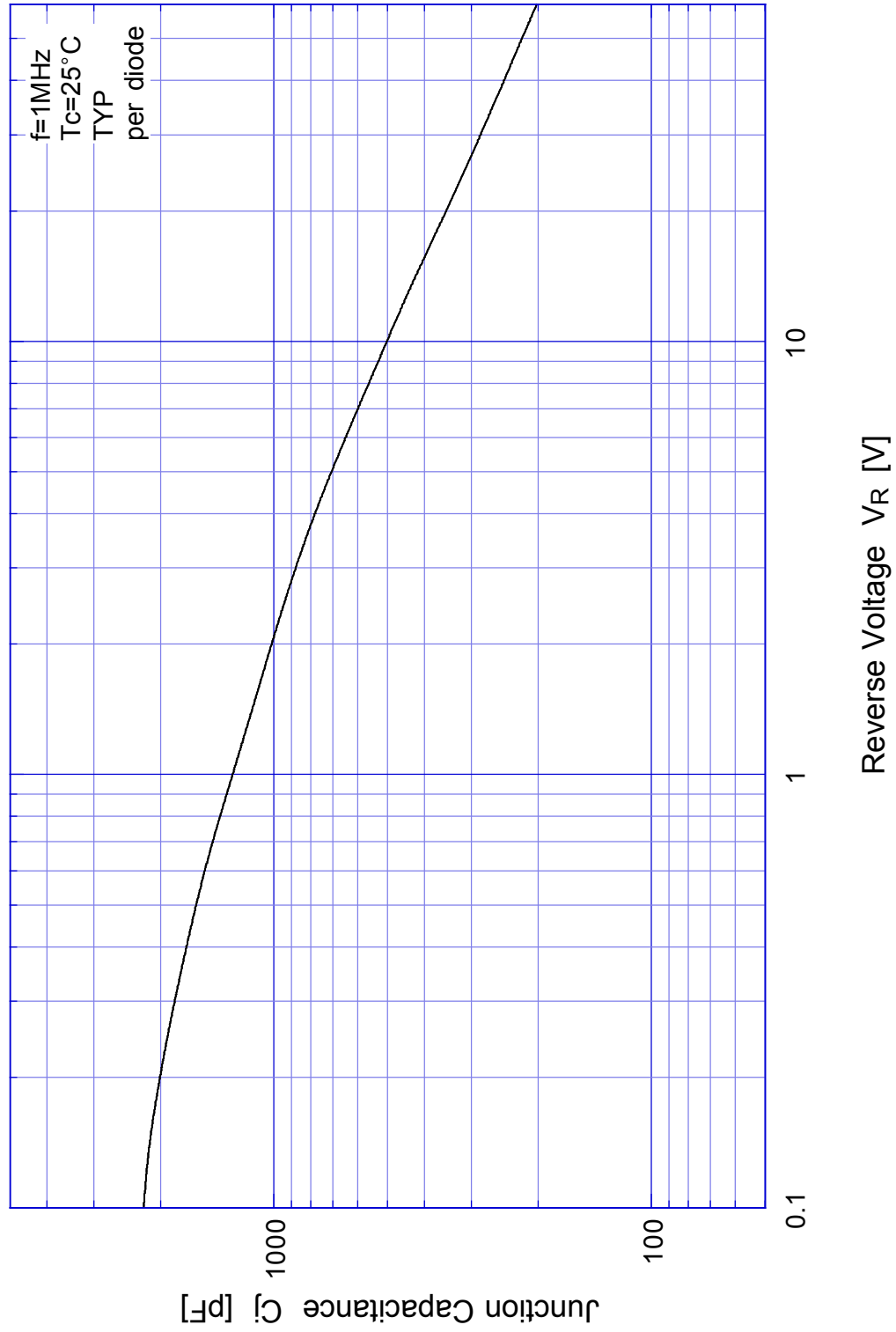
Electrical Characteristics (If not specified Tc=25)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V _F	I _F =12.5A, Pulse measurement, Rating of per diode	Max.0.58	V
Reverse Current	I _R	V _R =V _{RM} , Pulse measurement, Rating of per diode	Max. 10	mA
Junction Capacitance	C _j	f=1MHz, V _R =10V, Rating of per diode	Typ.490	pF
Thermal Resistance	θ _C	junction to case	Max.1.5	/W

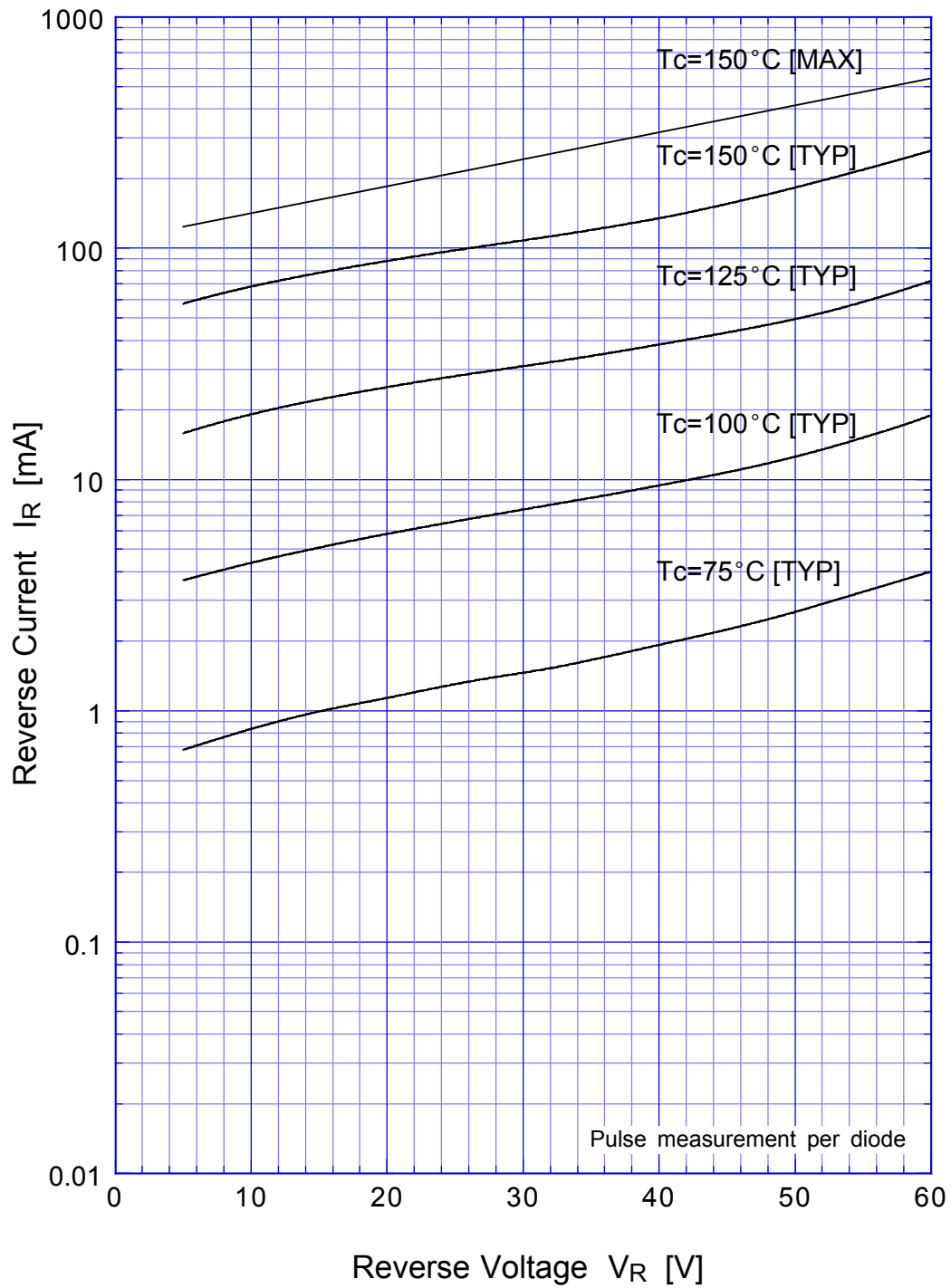
D25SC6M Forward Voltage



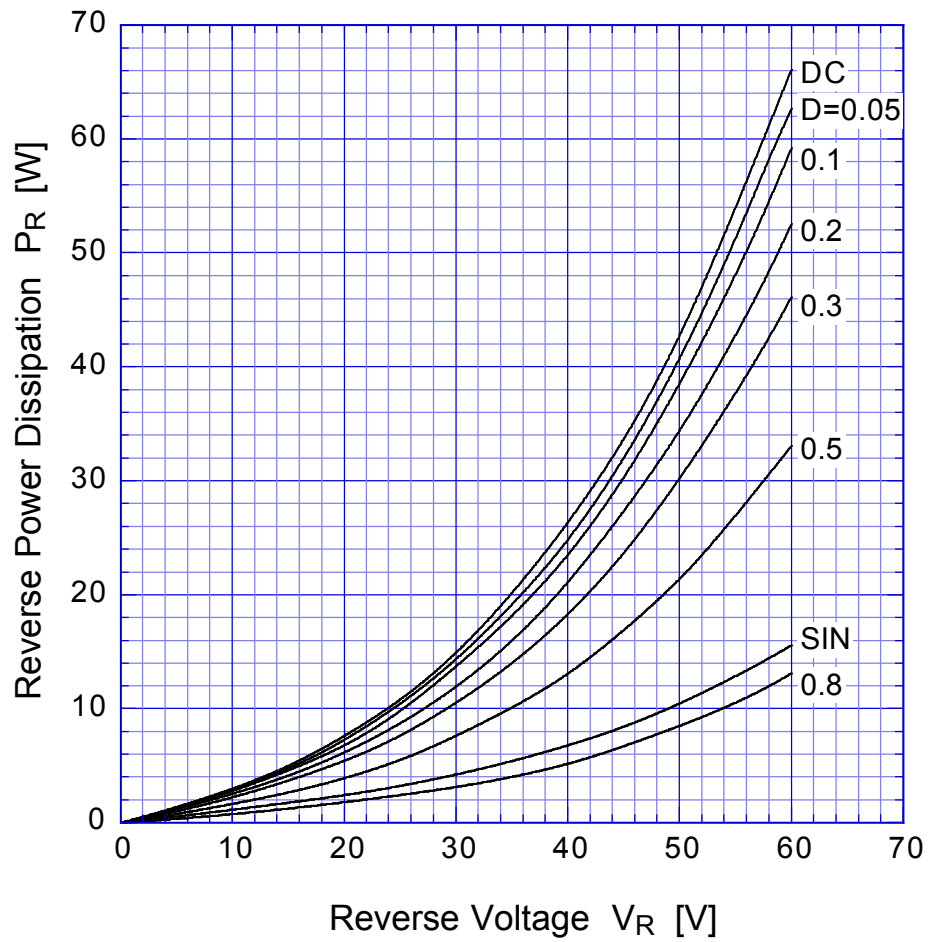
D25SC6M Junction Capacitance



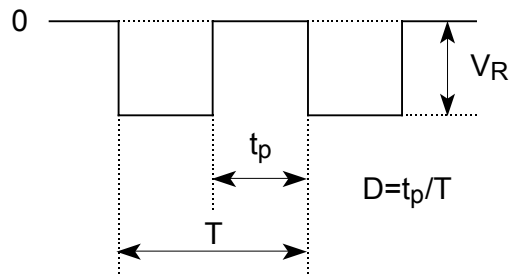
D25SC6M Reverse Current



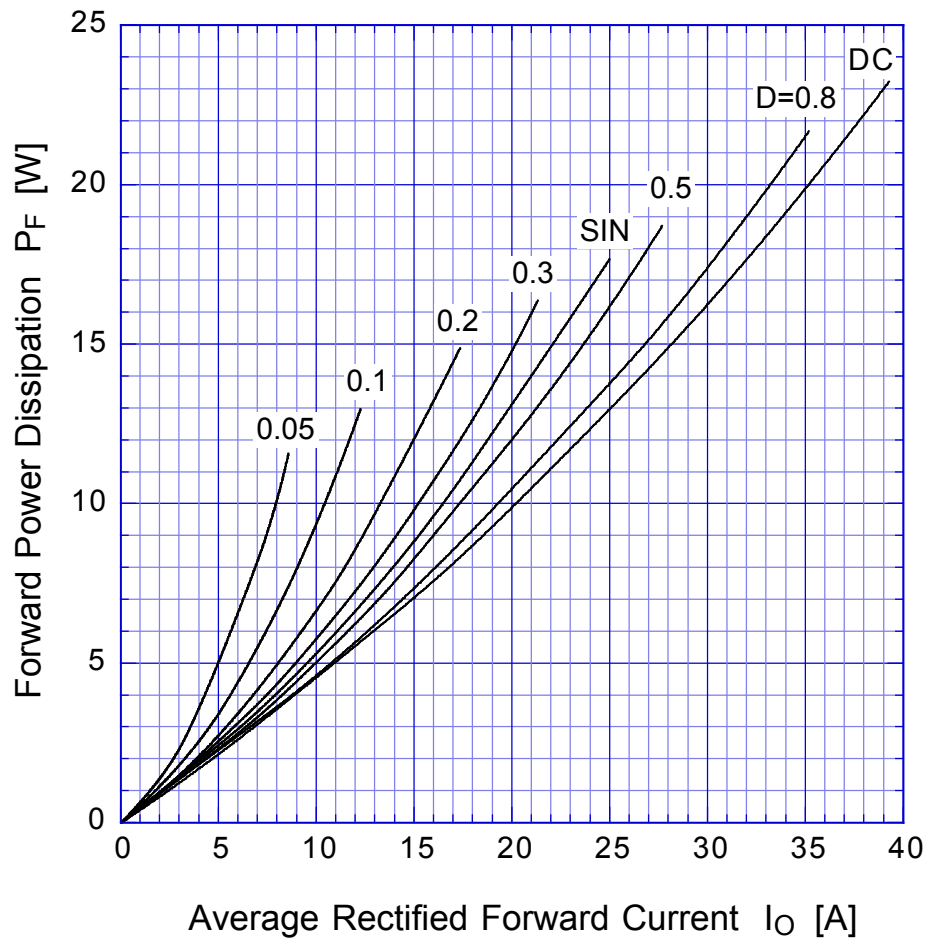
D25SC6M Reverse Power Dissipation



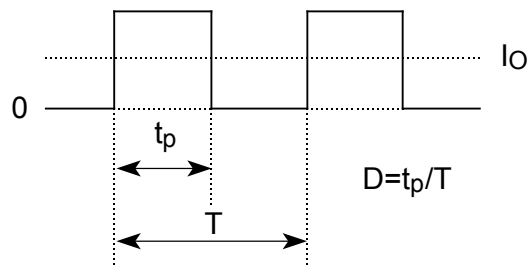
$T_j = 150^\circ\text{C}$



D25SC6M Forward Power Dissipation

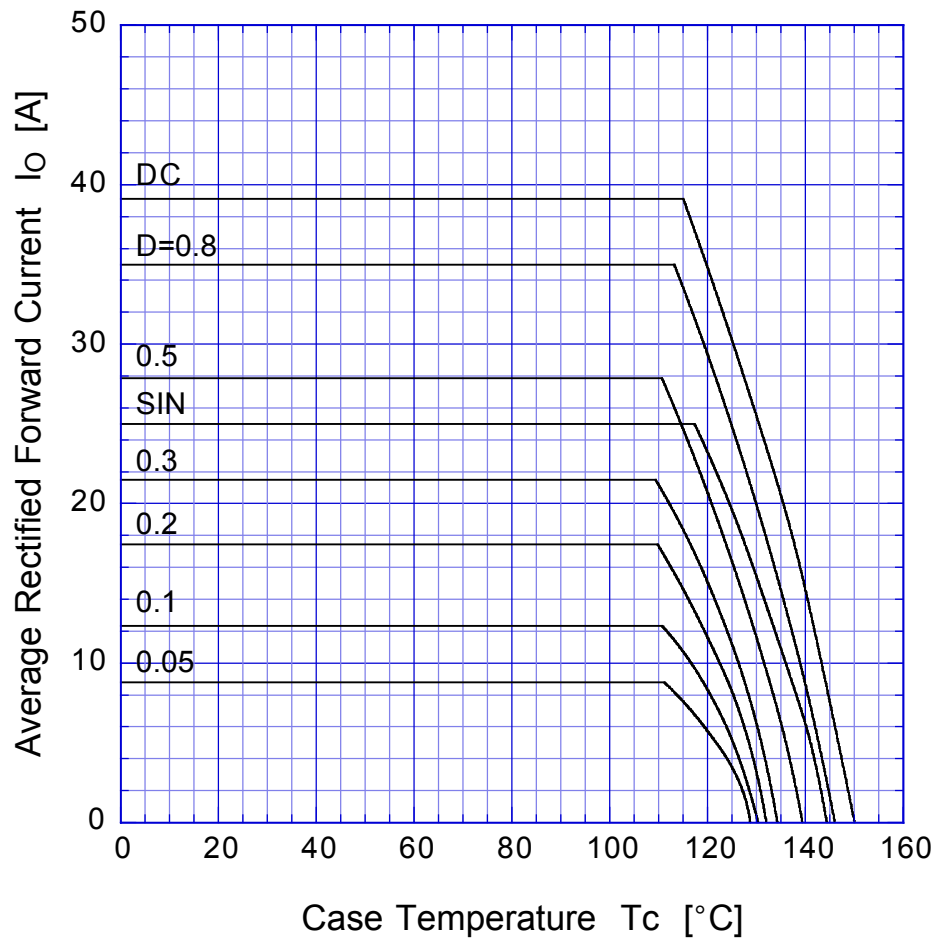


$T_j = 150^\circ\text{C}$

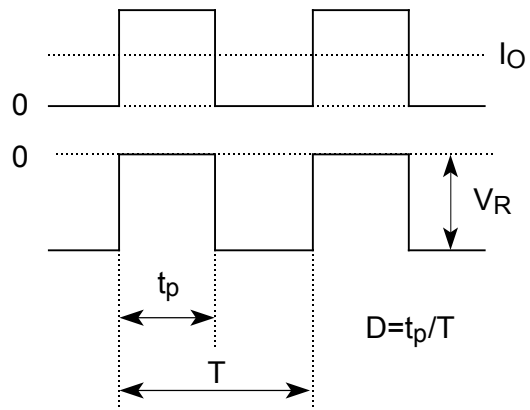


D25SC6M

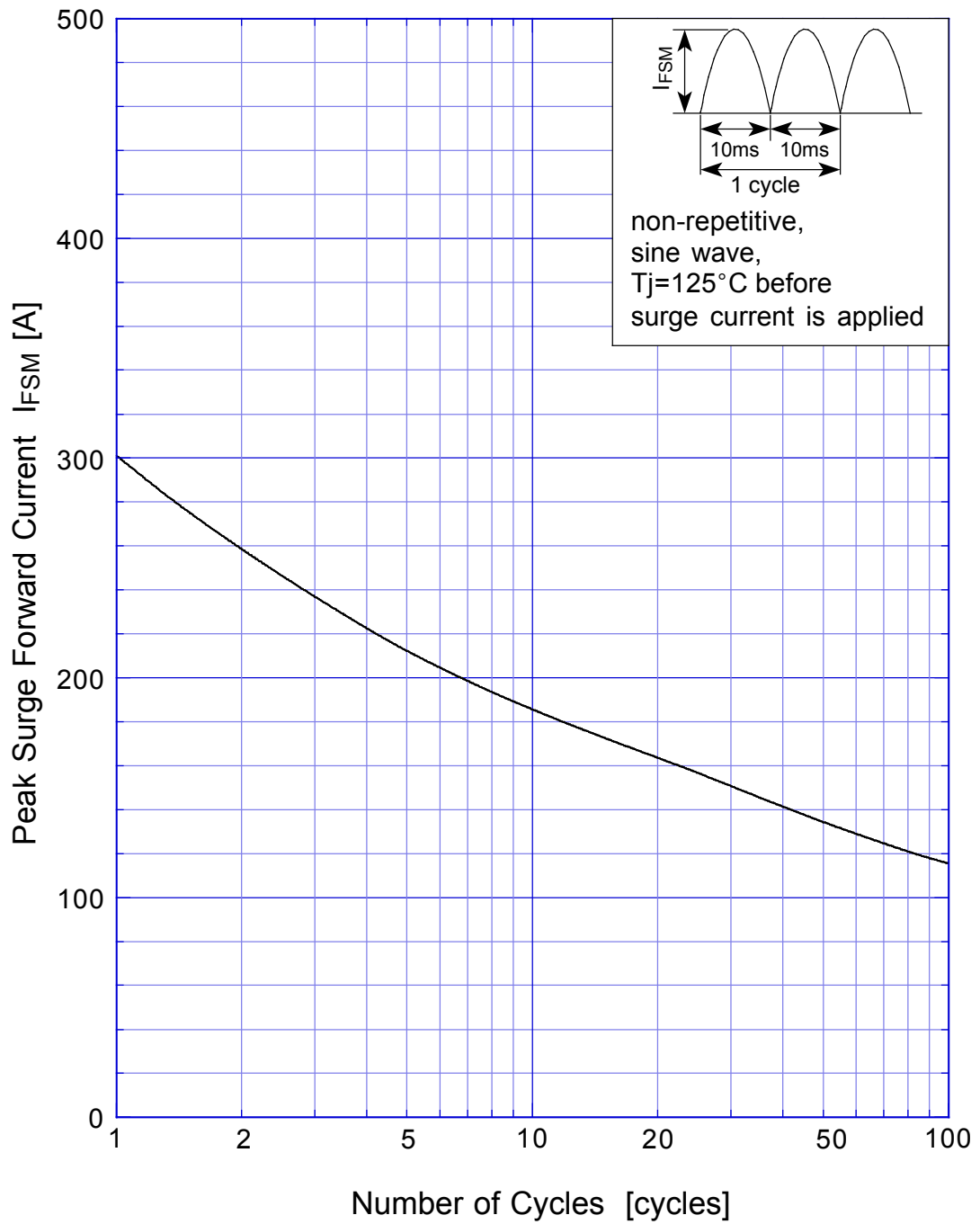
Derating Curve



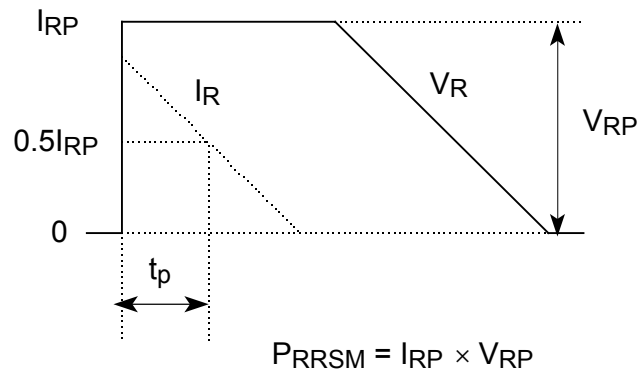
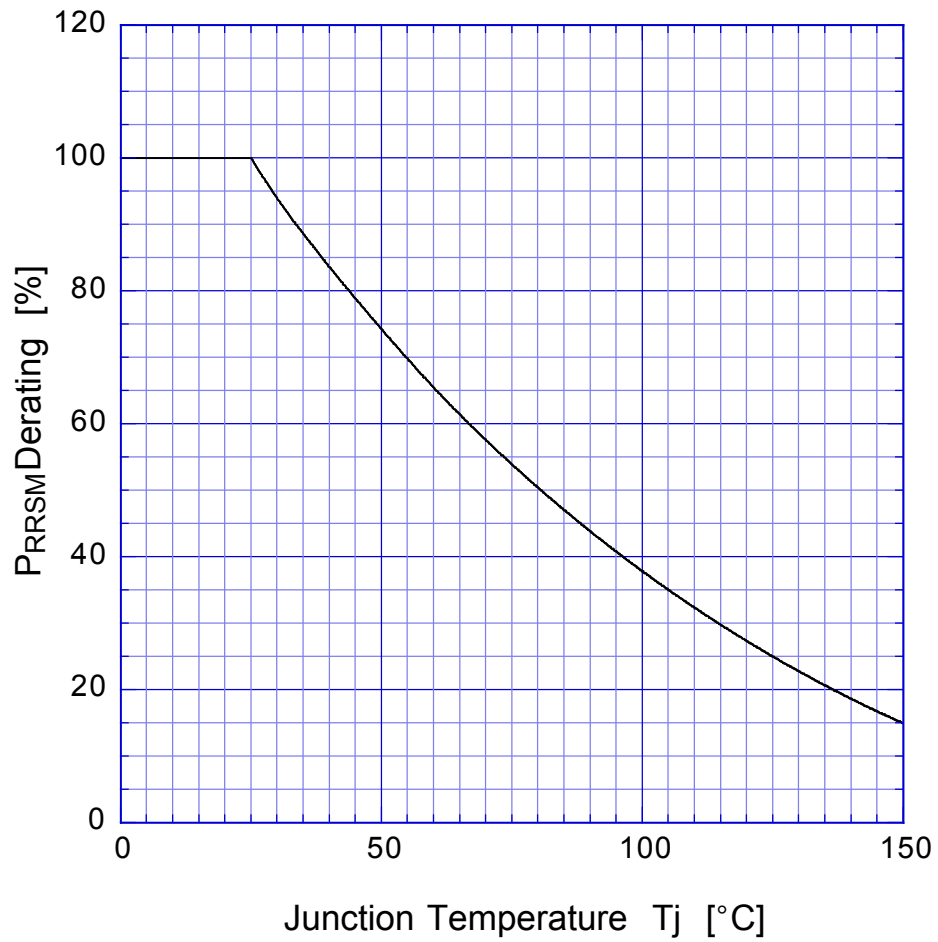
$V_R = 30V$



D25SC6M Peak Surge Forward Capability



SBD Repetitive Surge Reverse Power Derating Curve



SBD

Repetitive Surge Reverse Power Capability

