

SHINDENGEN

Schottky Rectifiers (SBD)

Dual

DF40SC3L

30V 40A

FEATURES

- SMT
- Tj150
- Low $V_F=0.45V$
- P_{RRSM} avalanche guaranteed
- High current capacity with Small Package

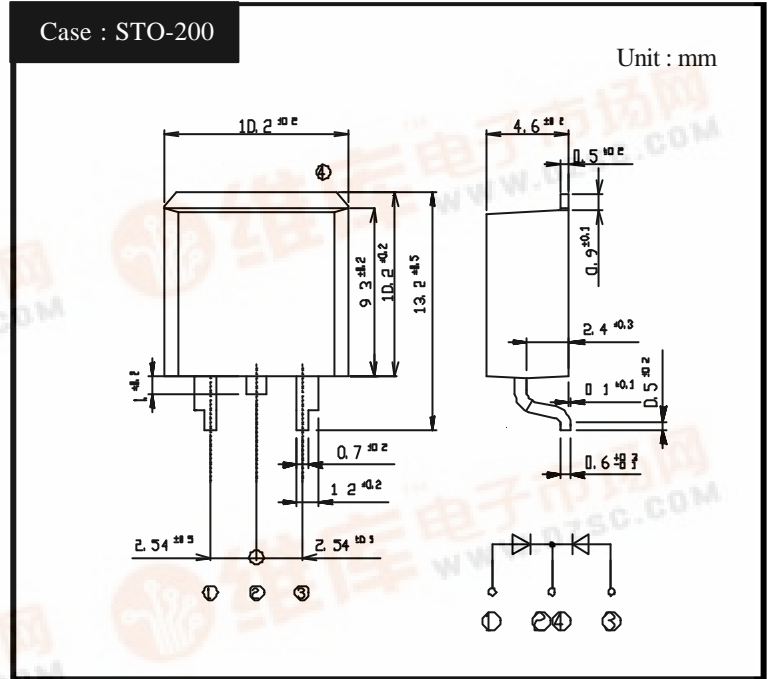
APPLICATION

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

OUTLINE DIMENSIONS

Case : STO-200

Unit : mm



RATINGS

Absolute Maximum Ratings (If not specified Tc=25)

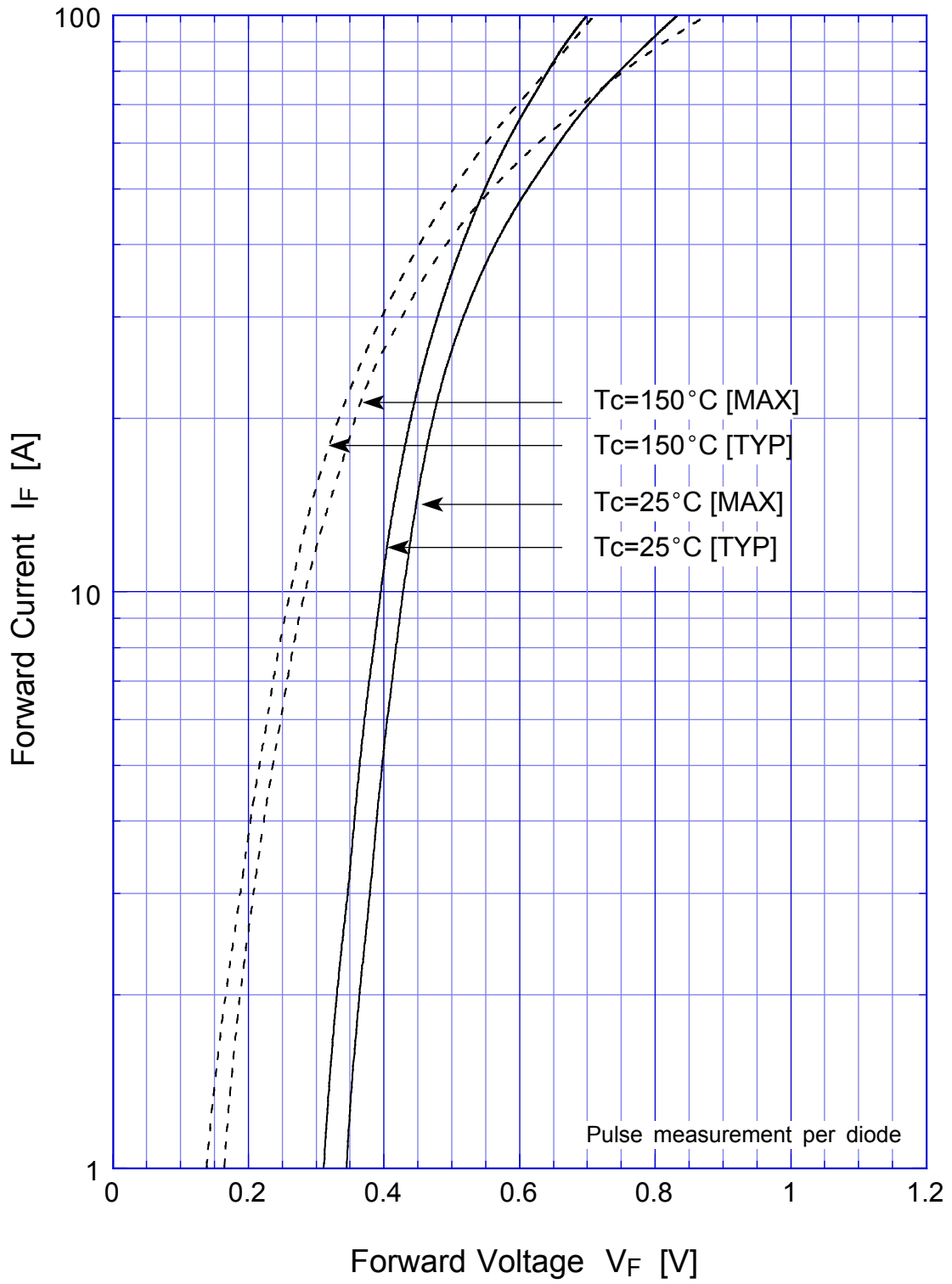
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-55 ~ 150	
Operating Junction Temperature	Tj		150	
Maximum Reverse Voltage	V _{RM}		30	V
Repetitive Peak Surge Reverse Voltage	V _{RRSM}	Pulse width 0.5ms, duty 1/40	35	V
Average Rectified Forward Current	I _O	50Hz sine wave, R-load, Rating for each diode I _O /2, Tc=112	40	A
Peak Surge Forward Current	I _{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, Rating of per diode, Tj=25	400	A
Repetitive Peak Surge Reverse Power	P _{RRSM}	Pulse width 10 μs, Rating of per diode, Tj=25	1000	W

Electrical Characteristics (If not specified Tc=25)

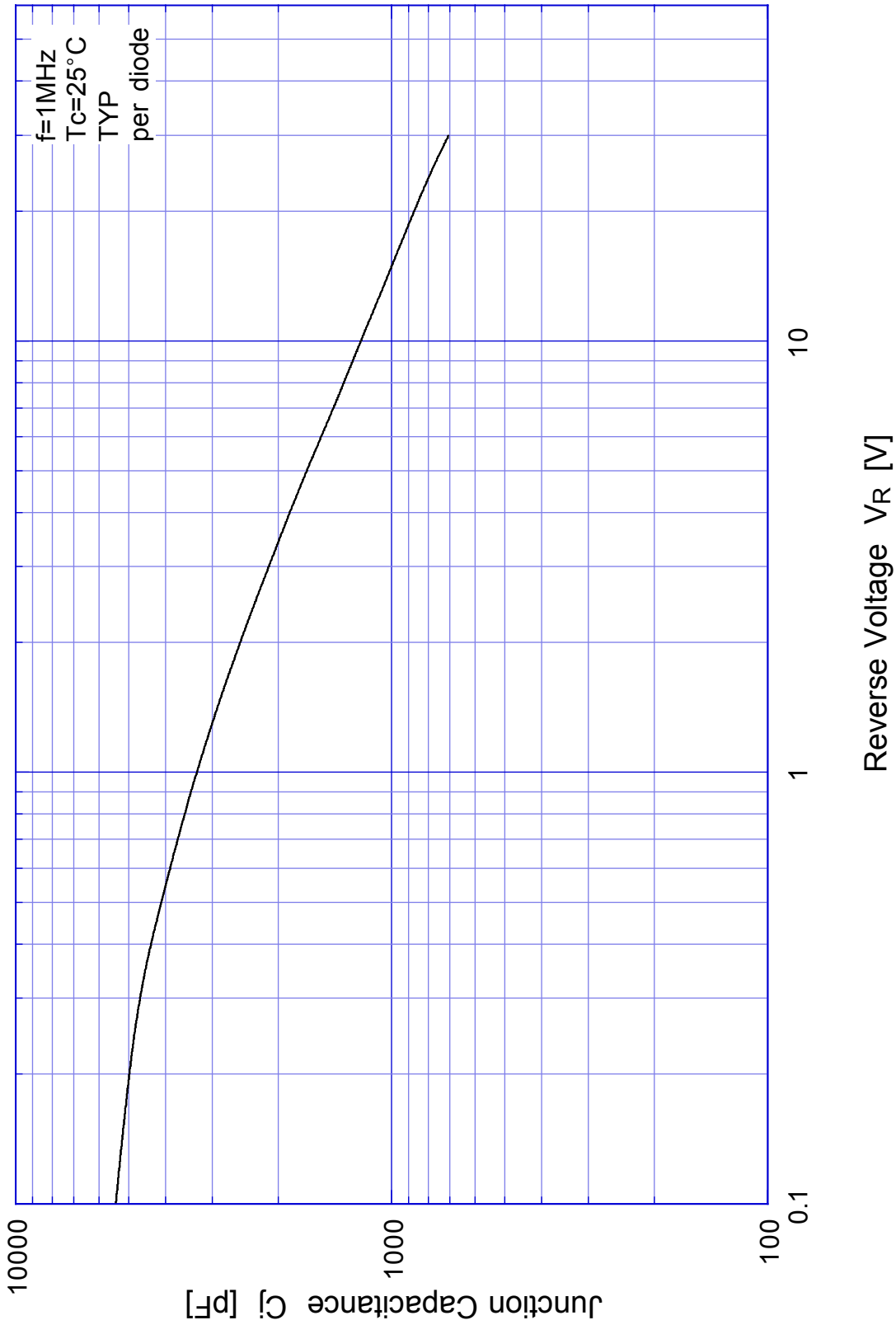
Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V _F	I _F =15A, Pulse measurement, Rating of per diode	Max.0.45	V
Reverse Current	I _R	V _R =V _{RM} , Pulse measurement, Rating of per diode	Max.17	mA
Junction Capacitance	C _j	f=1MHz, V _R =10V, Rating of per diode	Typ.1200	pF
Thermal Resistance	θ _{JC}	junction to case	Max.1.5	/W



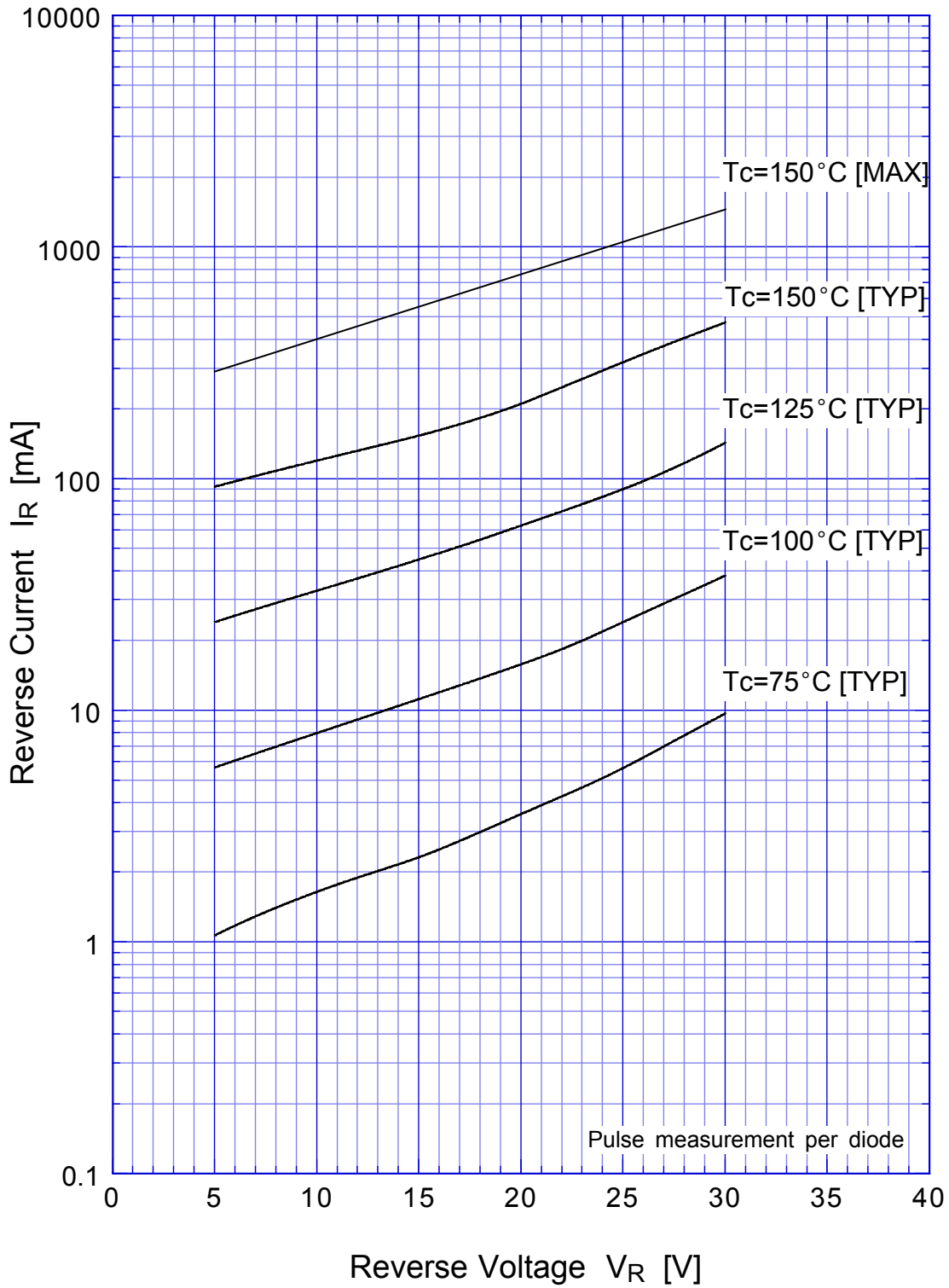
DF40SC3L Forward Voltage



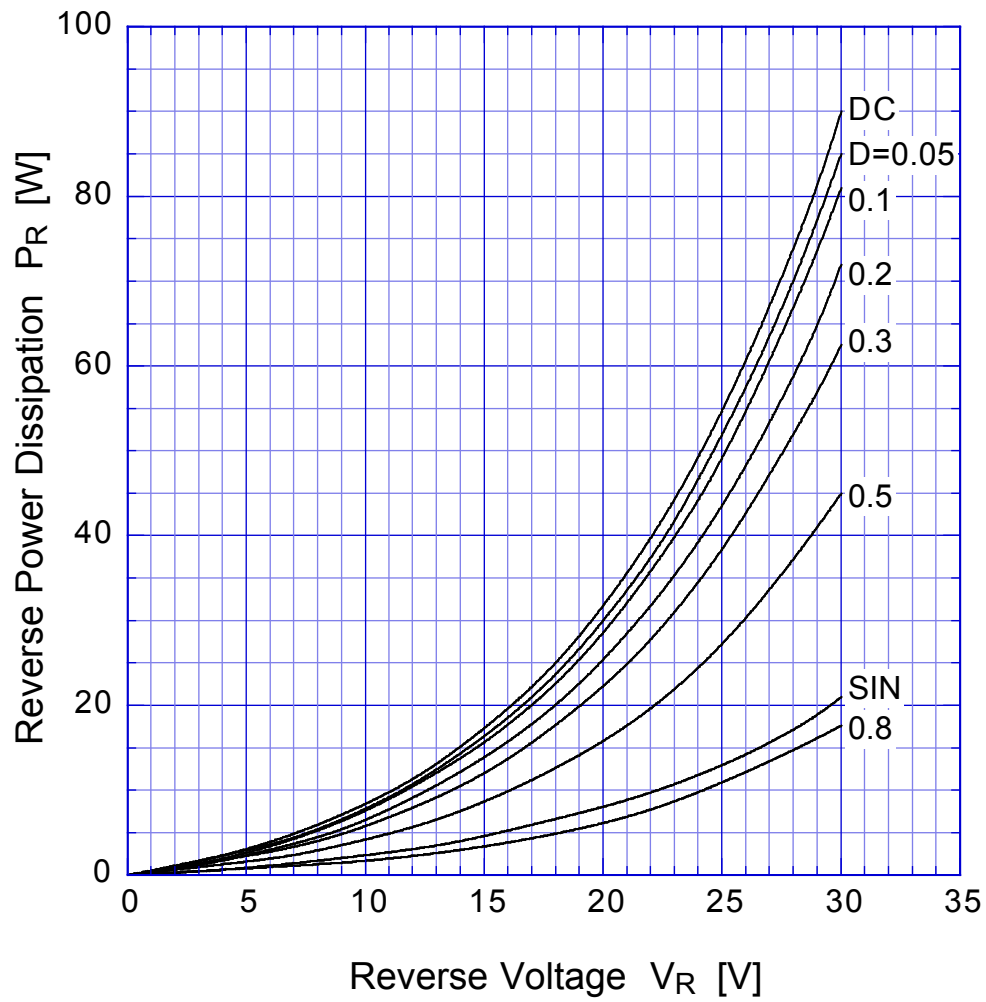
DF40SC3L Junction Capacitance



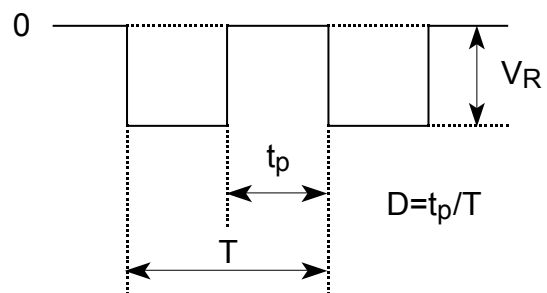
DF40SC3L Reverse Current



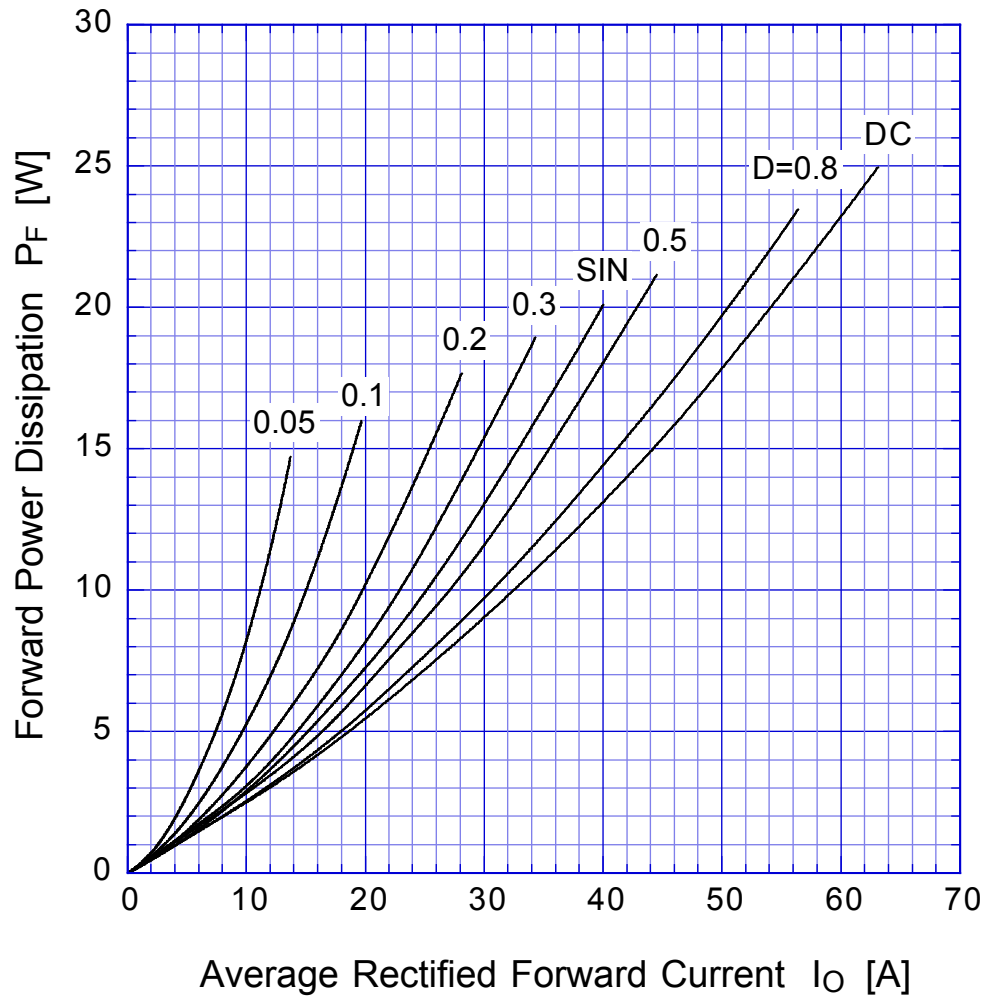
DF40SC3L Reverse Power Dissipation



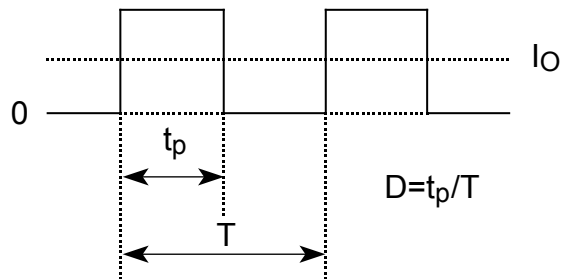
$T_j = 150^\circ\text{C}$



DF40SC3L Forward Power Dissipation

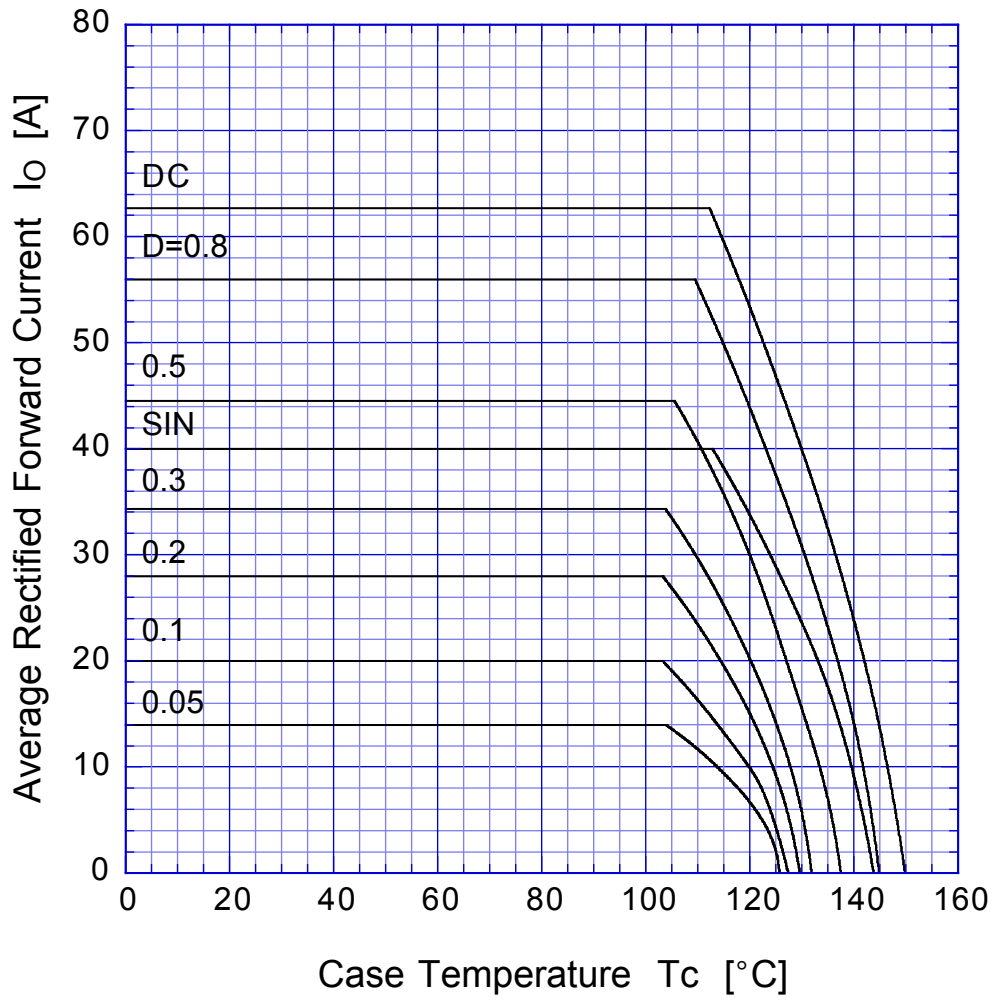


$T_j = 150^\circ\text{C}$

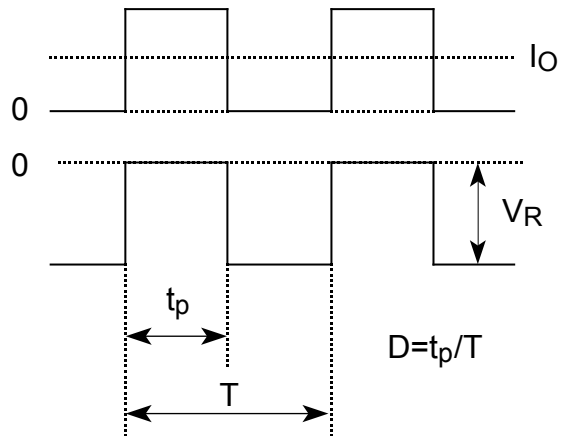


DF40SC3L

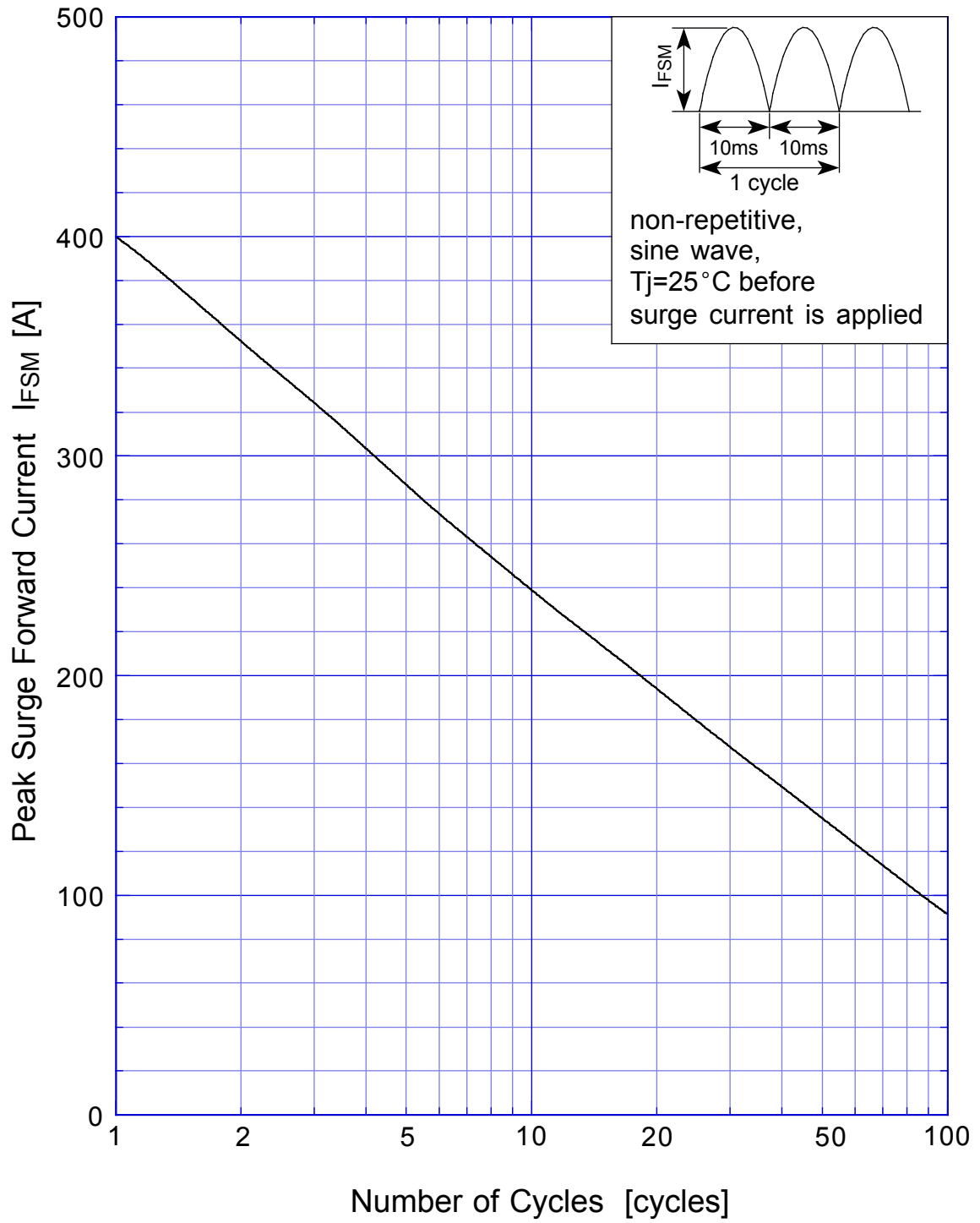
Derating Curve



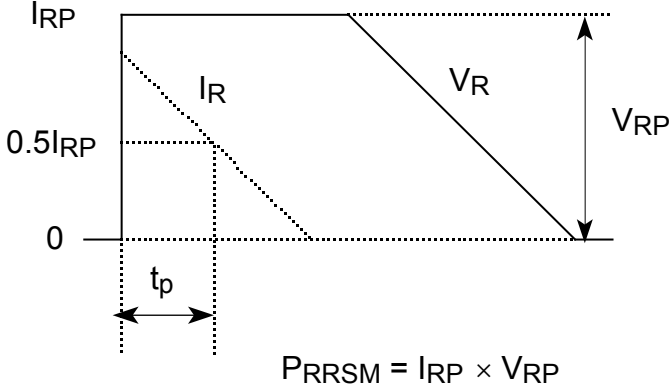
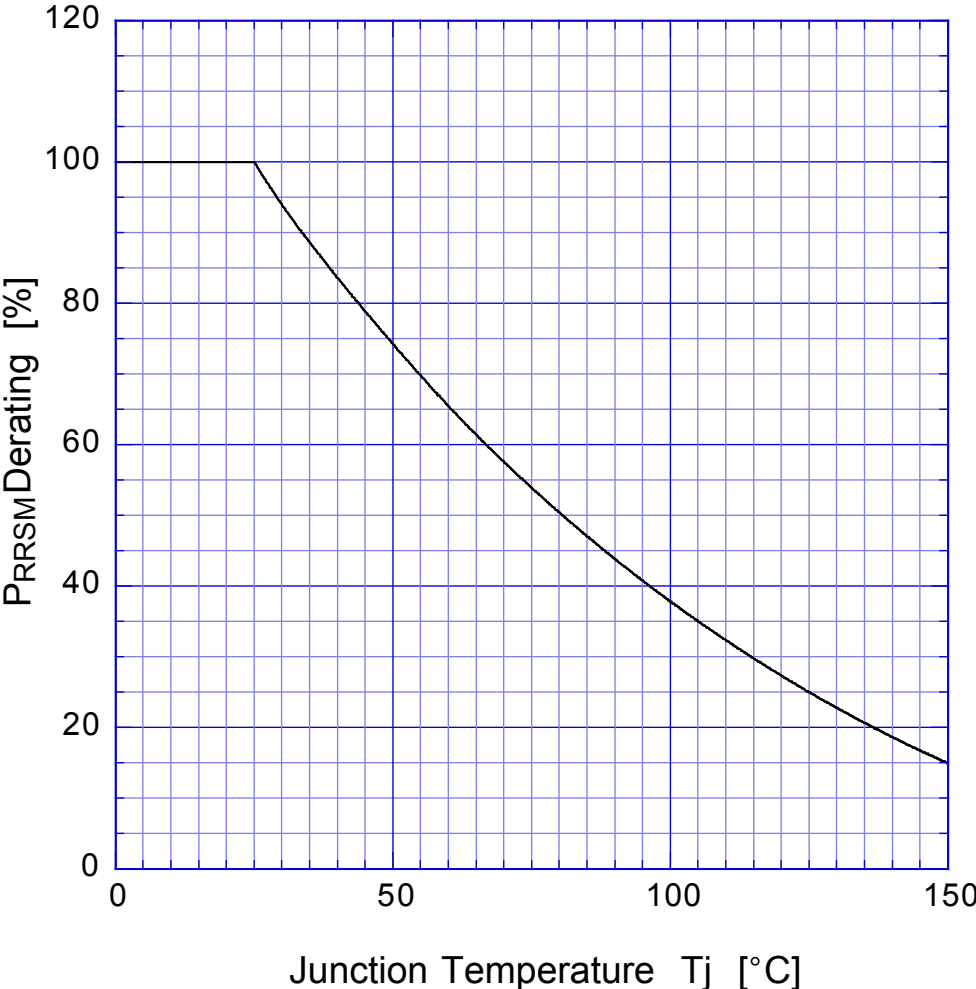
$V_R = 15V$



DF40SC3L Peak Surge Forward Capability



SBD Repetitive Surge Reverse Power Derating Curve



SBD

Repetitive Surge Reverse Power Capability

