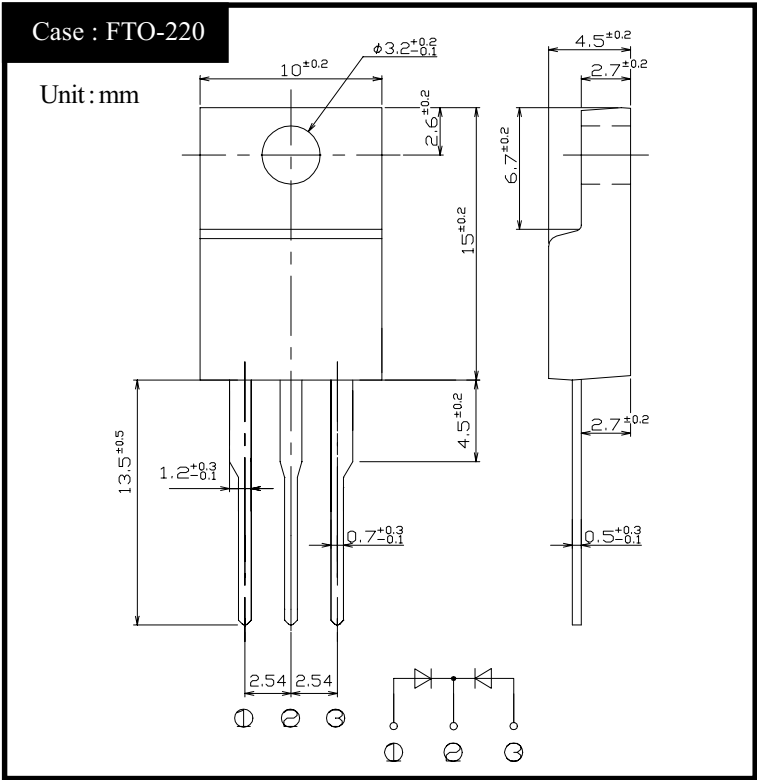


SF15SC4

40V 15A

OUTLINE DIMENSIONS



RATINGS

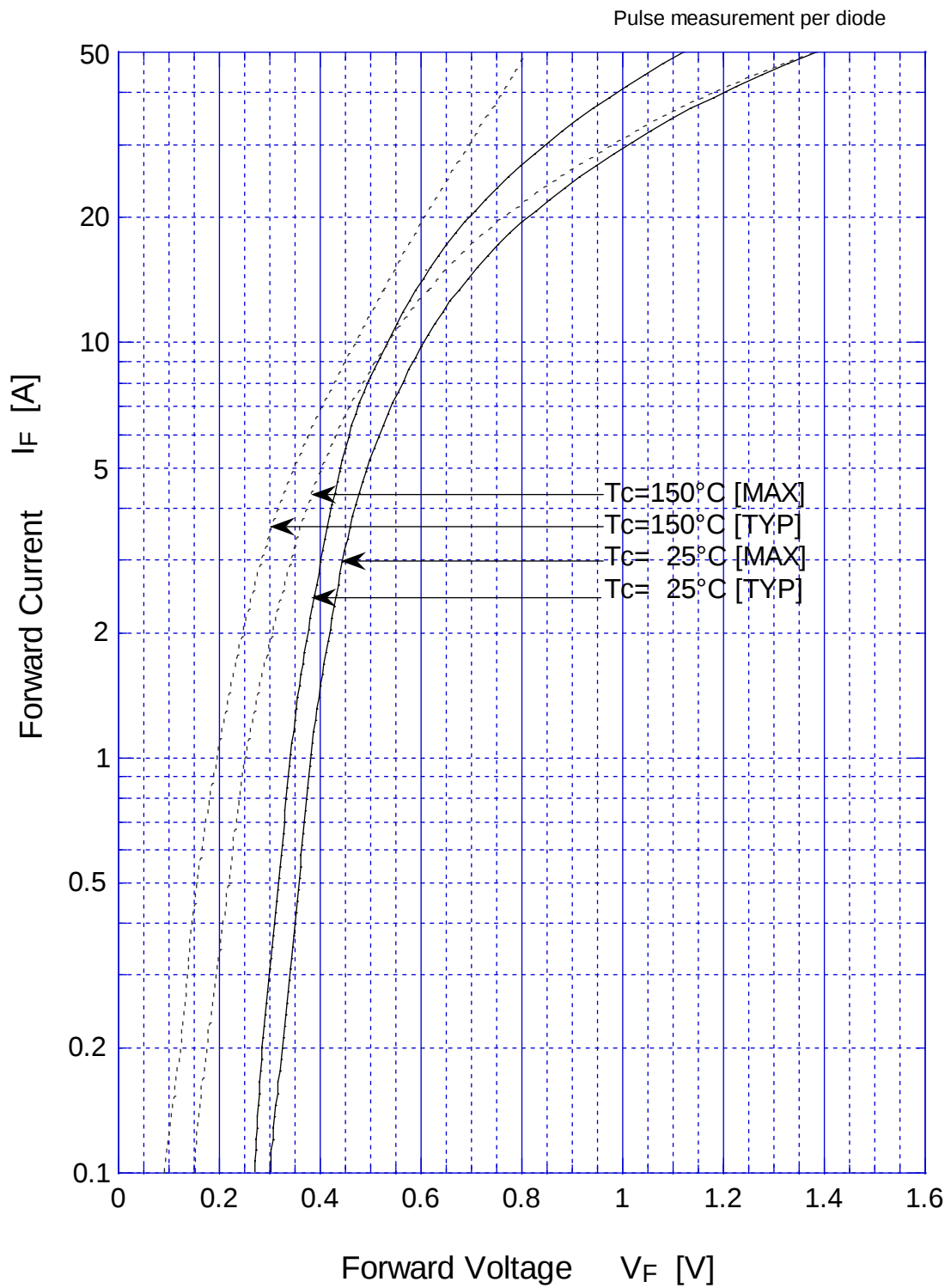
●Absolute Maximum Ratings (Unless otherwise specified, Tc=25°C)

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-55~150	°C
Operating Junction Temperature	Tj		150	°C
Maximum Reverse Voltage	VRM		40	V
Repetitive Peak Surge Reverse Voltage	VRRSM	Pulse width 0.5ms, duty 1/40	45	V
Average Rectified Forward Current	IO	50Hz sine wave, R-load, Rating for each diode Io/2, Tc=125°C	15	A
Peak Surge Forward Current	IFSM	50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=25°C	200	A
Repetitive Peak Surge Reverse Power	PRRSM	Pulse width 10 is, Rating of per diode, Tj=25°C	330	W
Dielectric Strength	Vdis	Terminals to case, AC 1 minute	2	kV
Mounting Torque	TOR	(Recommended torque: 0.3N·m)	0.5	N·m

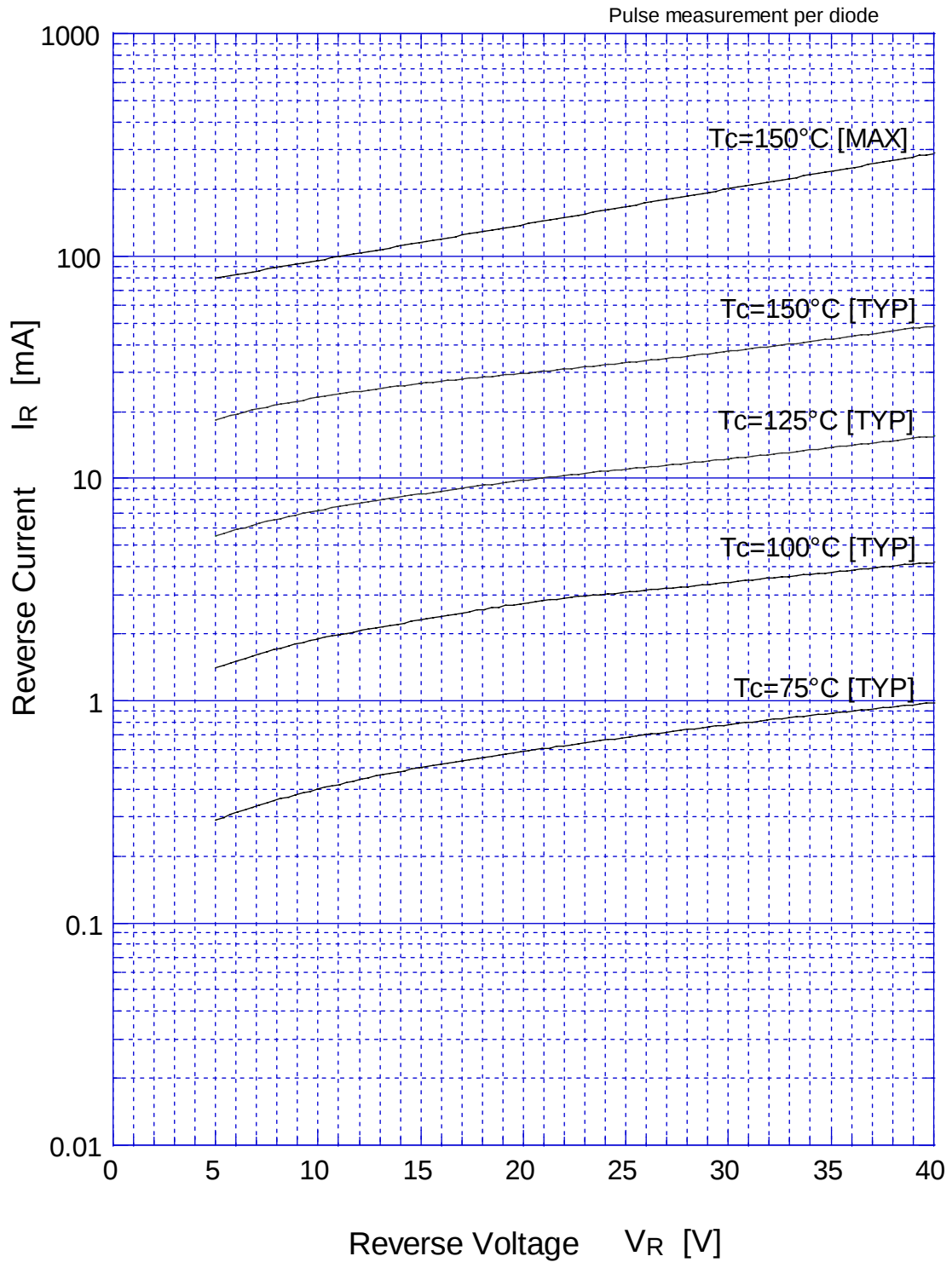
●Electrical Characteristics (Unless otherwise specified, Tc=25°C)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	VF	IF=7.5A, Pulse measurement, Rating of per diode	Max 0.55	V
Reverse Current	IR	VR=VRM, Pulse measurement, Rating of per diode	Max 5.0	mA
Junction Capacitance	Cj	f=1MHz, VR=10V, Rating of per diode	Typ 340	pF
Thermal Resistance	θ jc	junction to case	Max 2.0	°C/W
	θ jf	junction to heatsink	Max 4.5	°C/W
	θ cf	case to heatsink	Max 2.5	°C/W

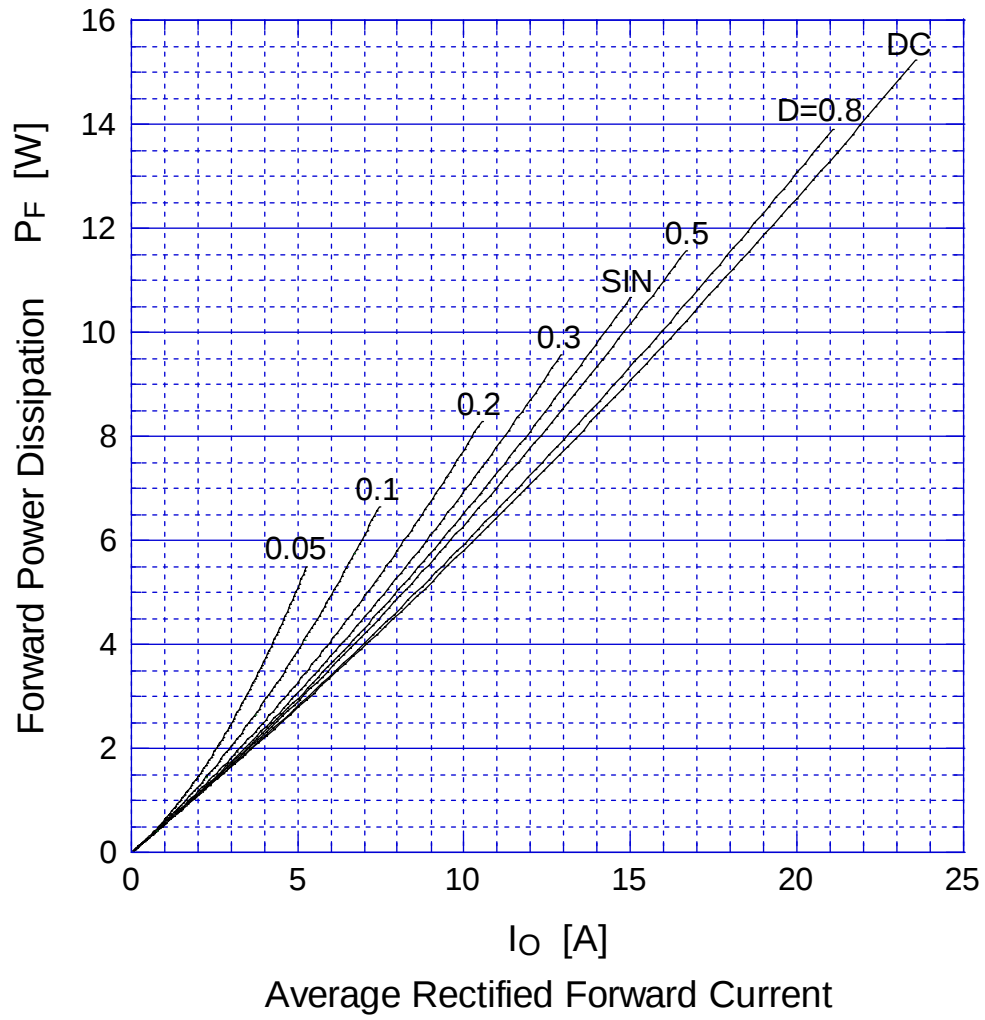
SF15SC4 Forward Voltage



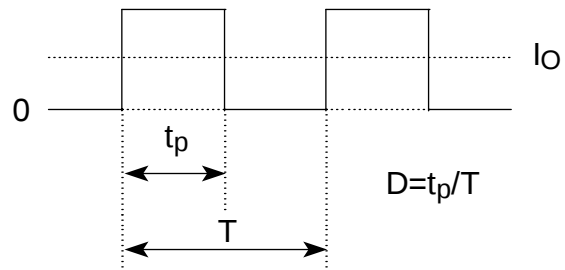
SF15SC4 Reverse Current



SF15SC4 Forward Power Dissipation

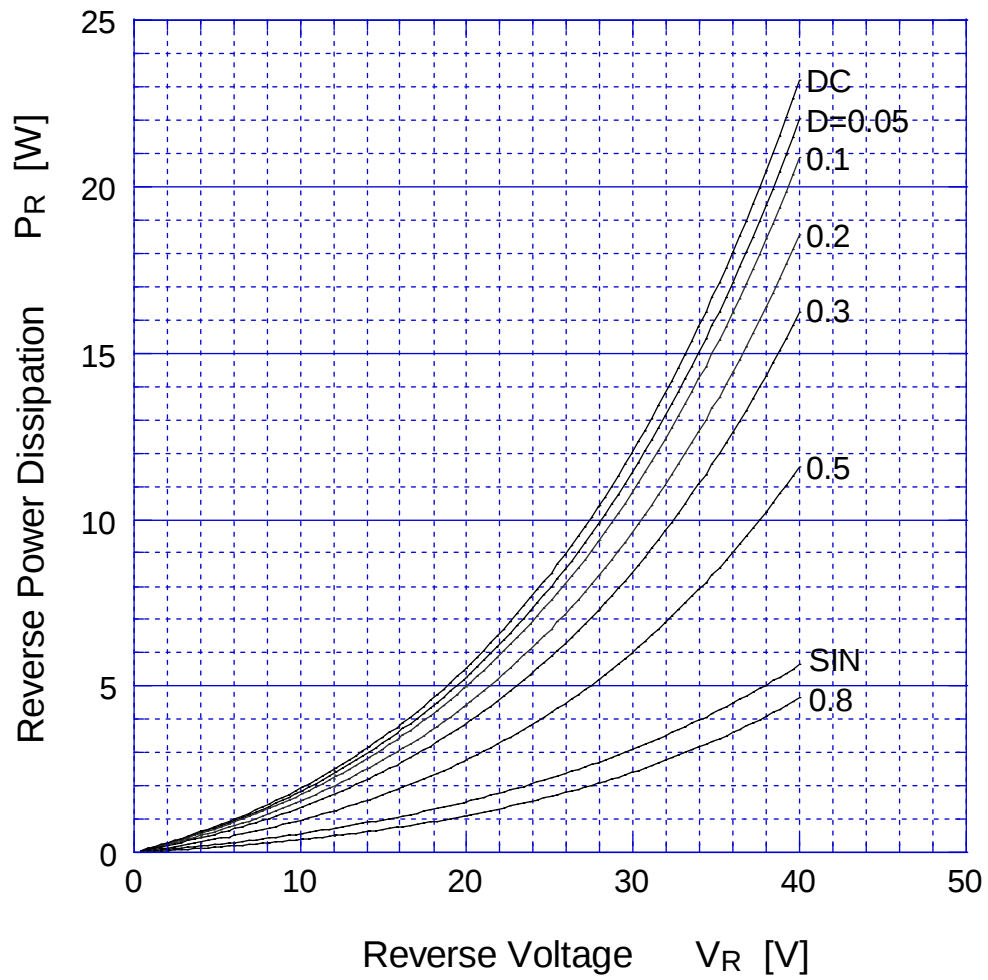


$T_j = 150^\circ\text{C}$

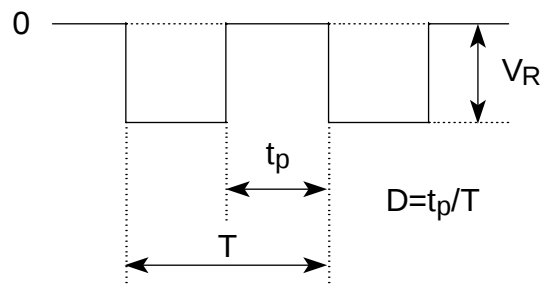


SF15SC4

Reverse Power Dissipation

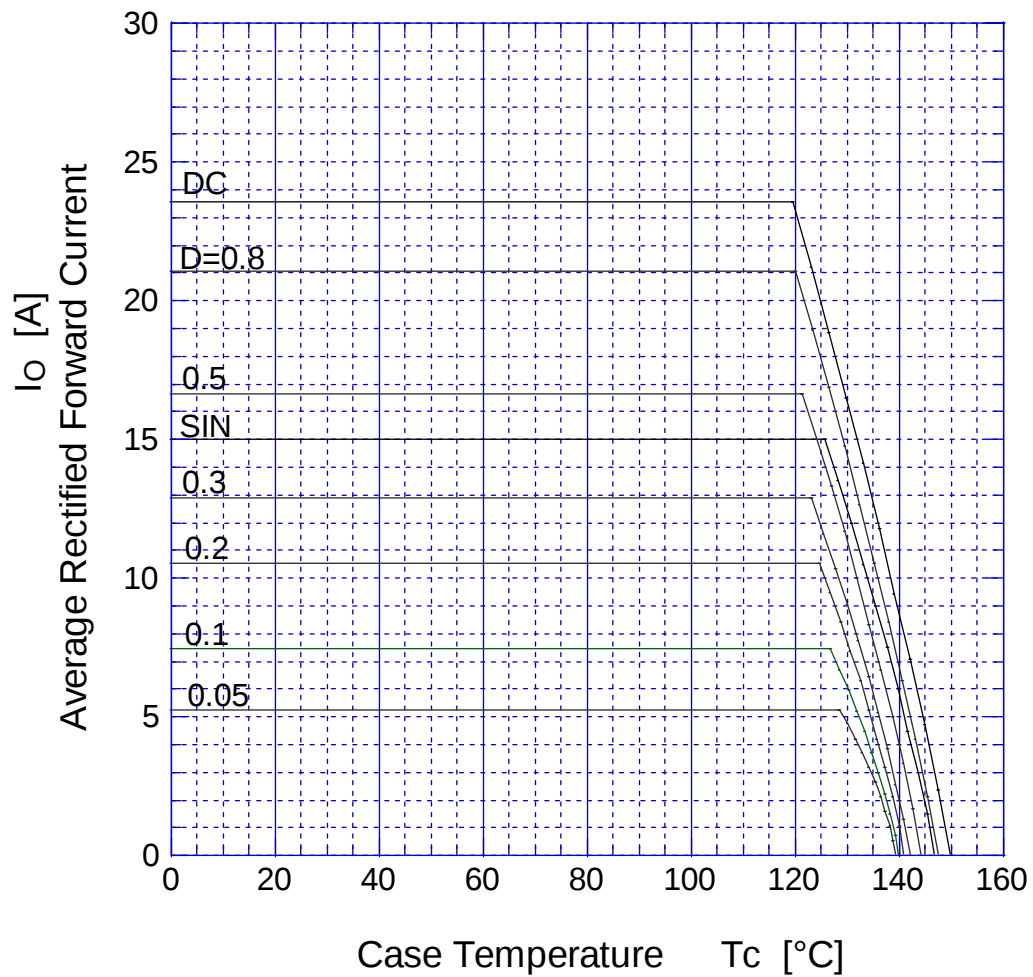


$T_j = 150^\circ\text{C}$

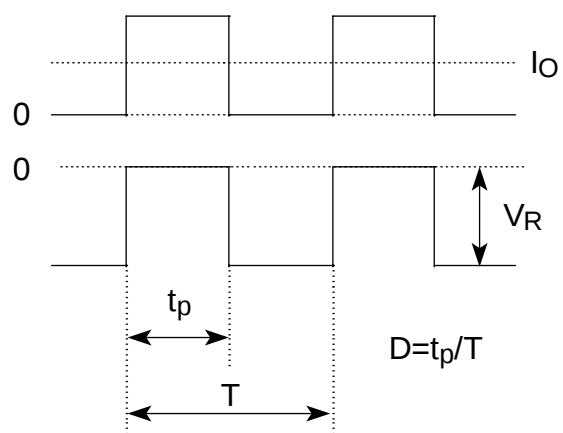


SF15SC4

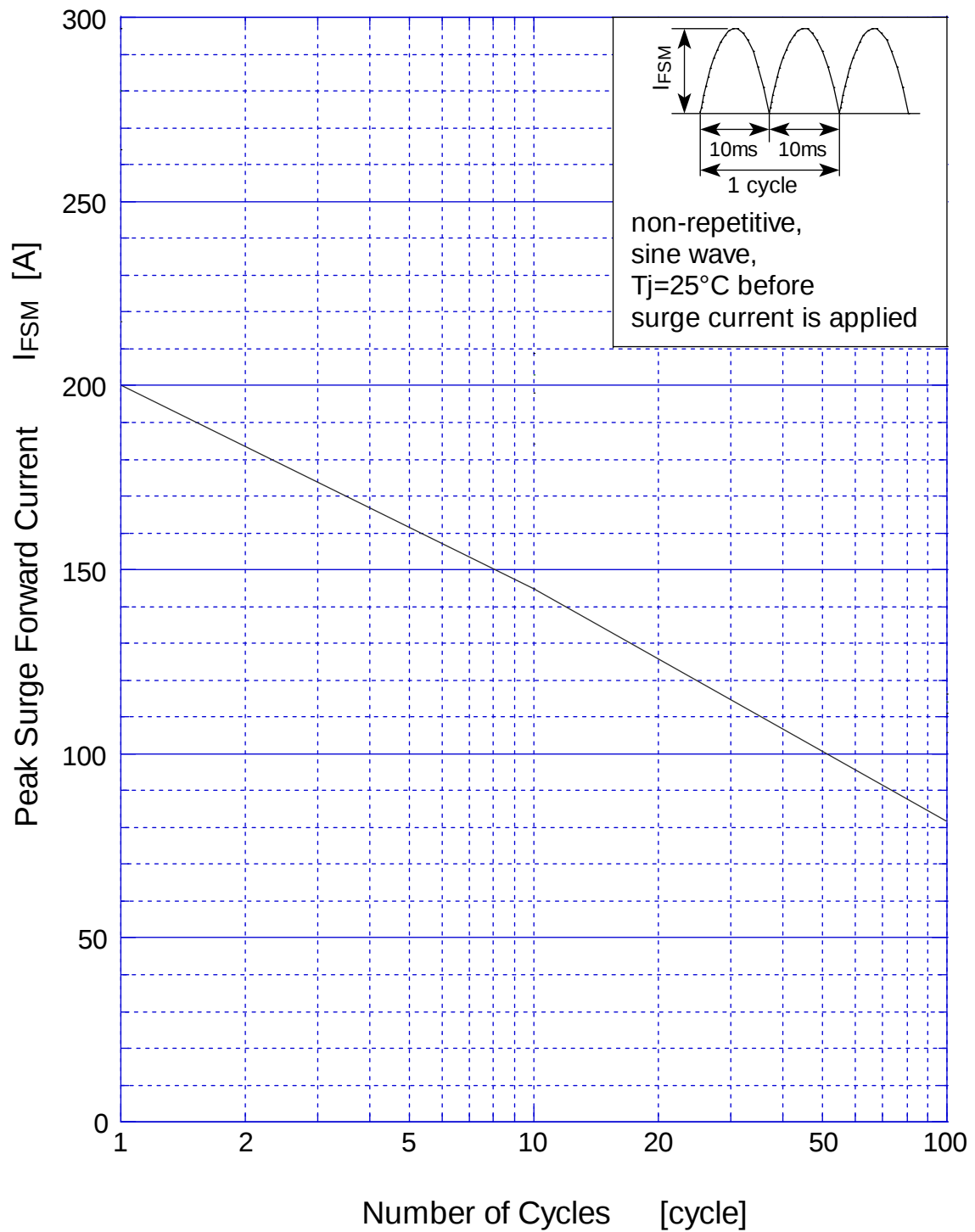
Derating Curve



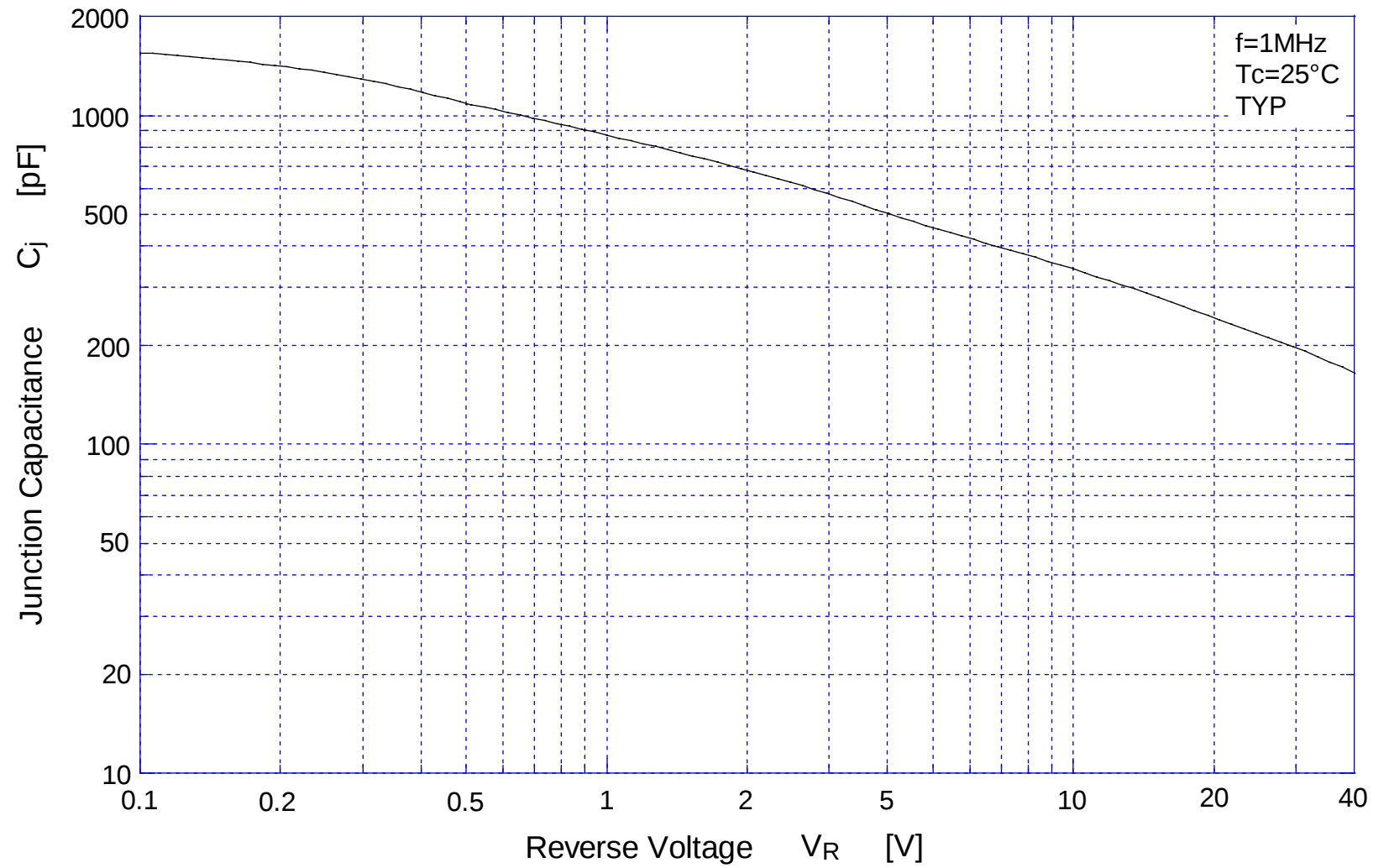
$V_R = 20V$



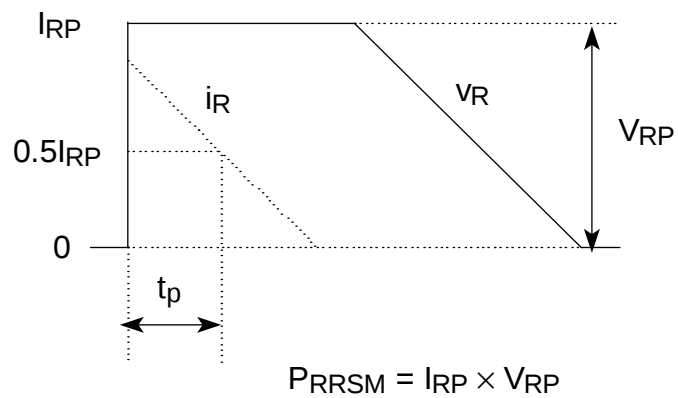
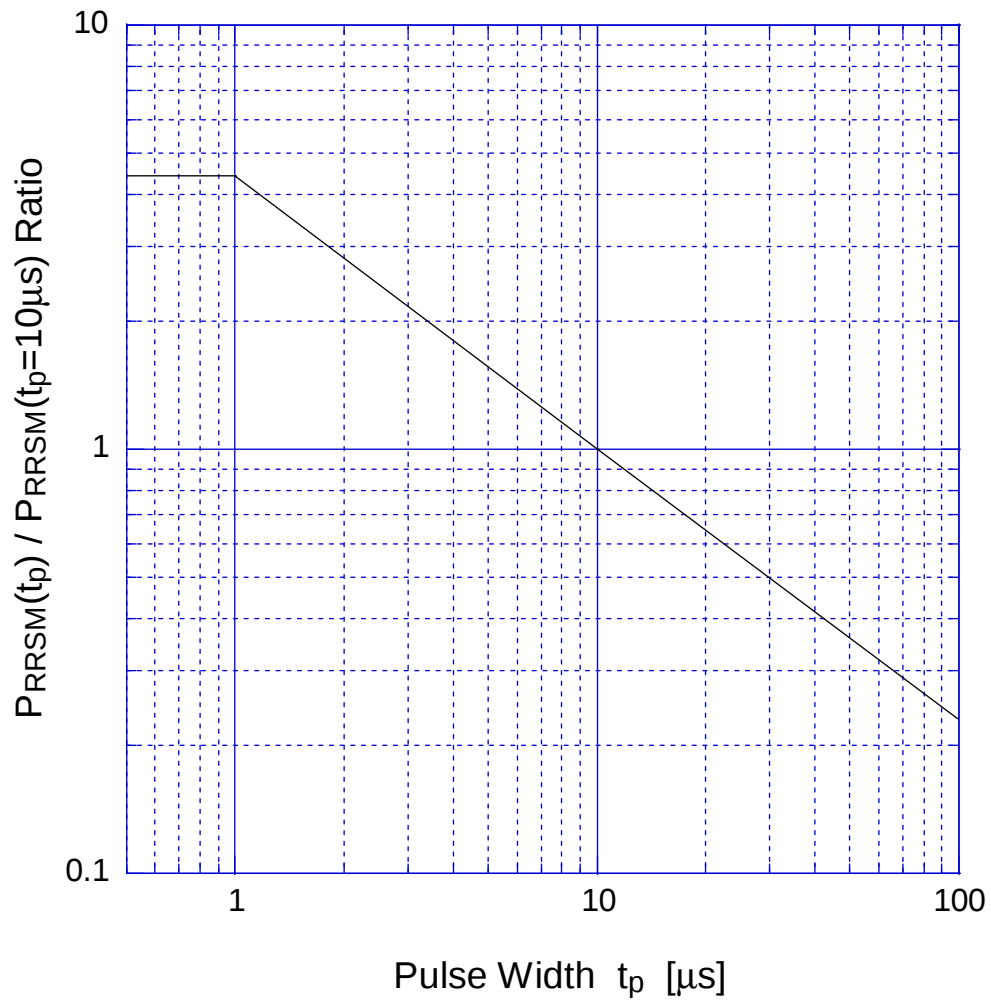
SF15SC4 Peak Surge Forward Capability



SF15SC4 Junction Capacity



SF15SC4 Repetitive Surge Reverse Power Capability



SF15SC4 Repetitive Surge Reverse Power Derating Curve

