

SF10SC3L

30V 10A

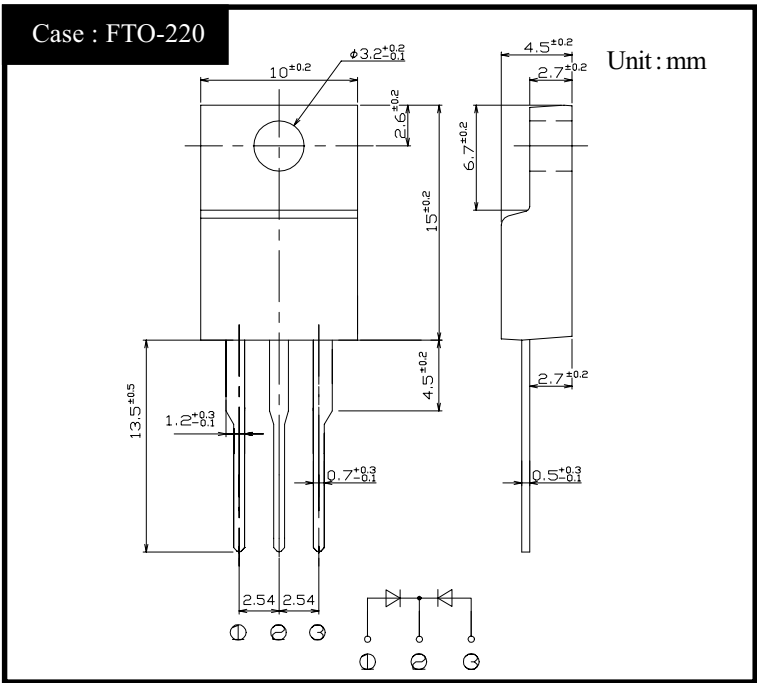
FEATURES

- Tj150°C
- Low $V_F=0.45V$
- P_{RRSM} avalanche guaranteed
- Fully Isolated Molding
- Dielectric strength 2kV guaranteed

APPLICATION

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

OUTLINE DIMENSIONS



RATINGS

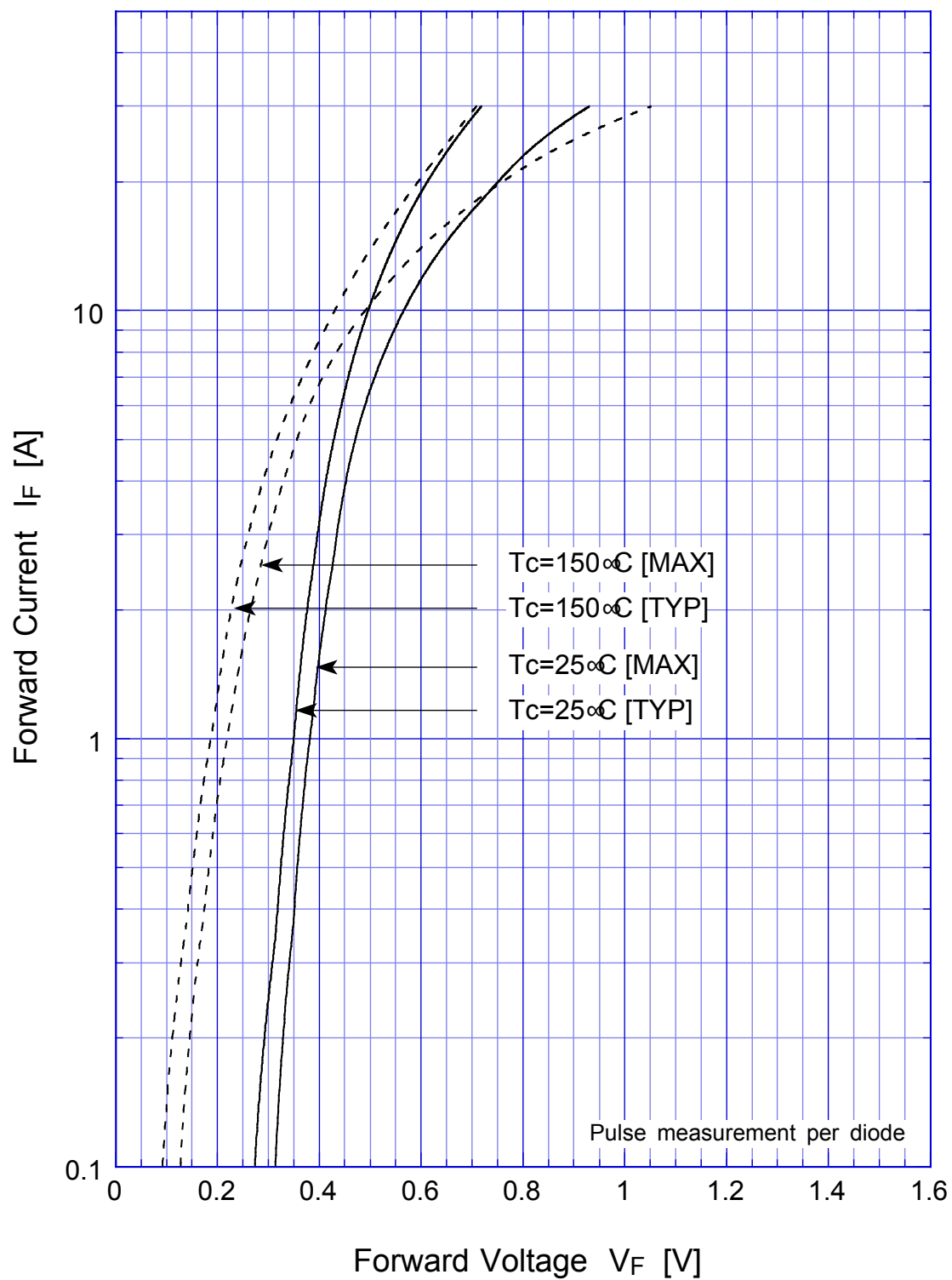
● Absolute Maximum Ratings (If not specified $T_c=25^{\circ}C$)

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-55~150	°C
Operating Junction Temperature	Tj		150	°C
Maximum Reverse Voltage	VRM		30	V
Repetitive Peak Surge Reverse Voltage	VRRSM	Pulse width 0.5ms, duty 1/40	35	V
Average Rectified Forward Current	IO	50Hz sine wave, R-load, Rating for each diode $I_o/2$, $T_c=139^{\circ}C$	10	A
Peak Surge Forward Current	IFSM	50Hz sine wave, Non-repetitive 1 cycle peak value, $T_j=25^{\circ}C$	150	A
Repetitive Peak Surge Reverse Power	PRRSM	Pulse width 10 μ s, Rating of per diode, $T_j=25^{\circ}C$	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

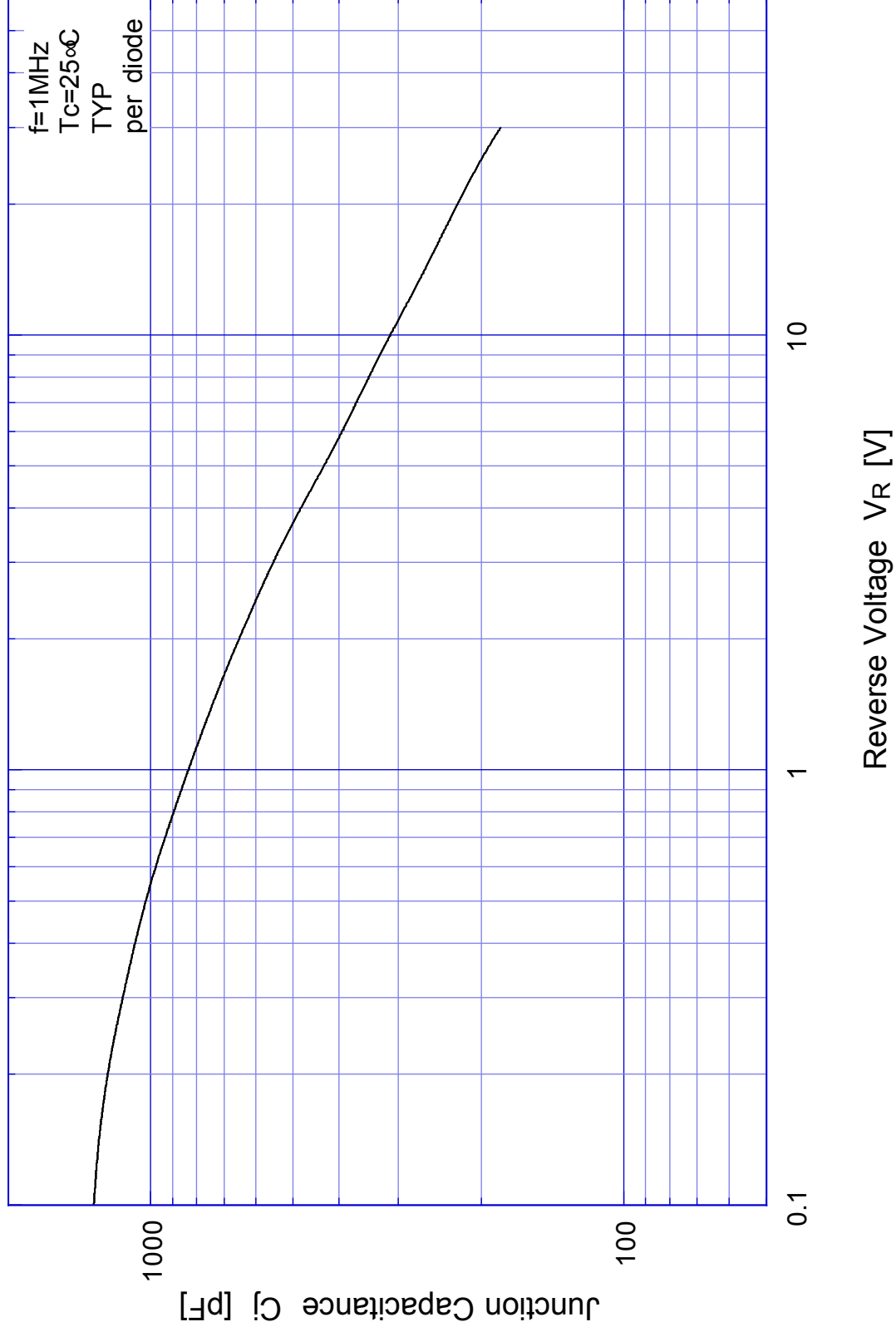
● Electrical Characteristics (If not specified $T_c=25^{\circ}C$)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	VF	IF=4A, Pulse measurement, Rating of per diode	Max.0.45	V
Reverse Current	IR	VR=VRM, Pulse measurement, Rating of per diode	Max.5	mA
Junction Capacitance	Cj	f=1MHz, VR=10V, Rating of per diode	Typ.310	pF
Thermal Resistance	θ_{jc}	junction to case	Max.2.3	°C/W

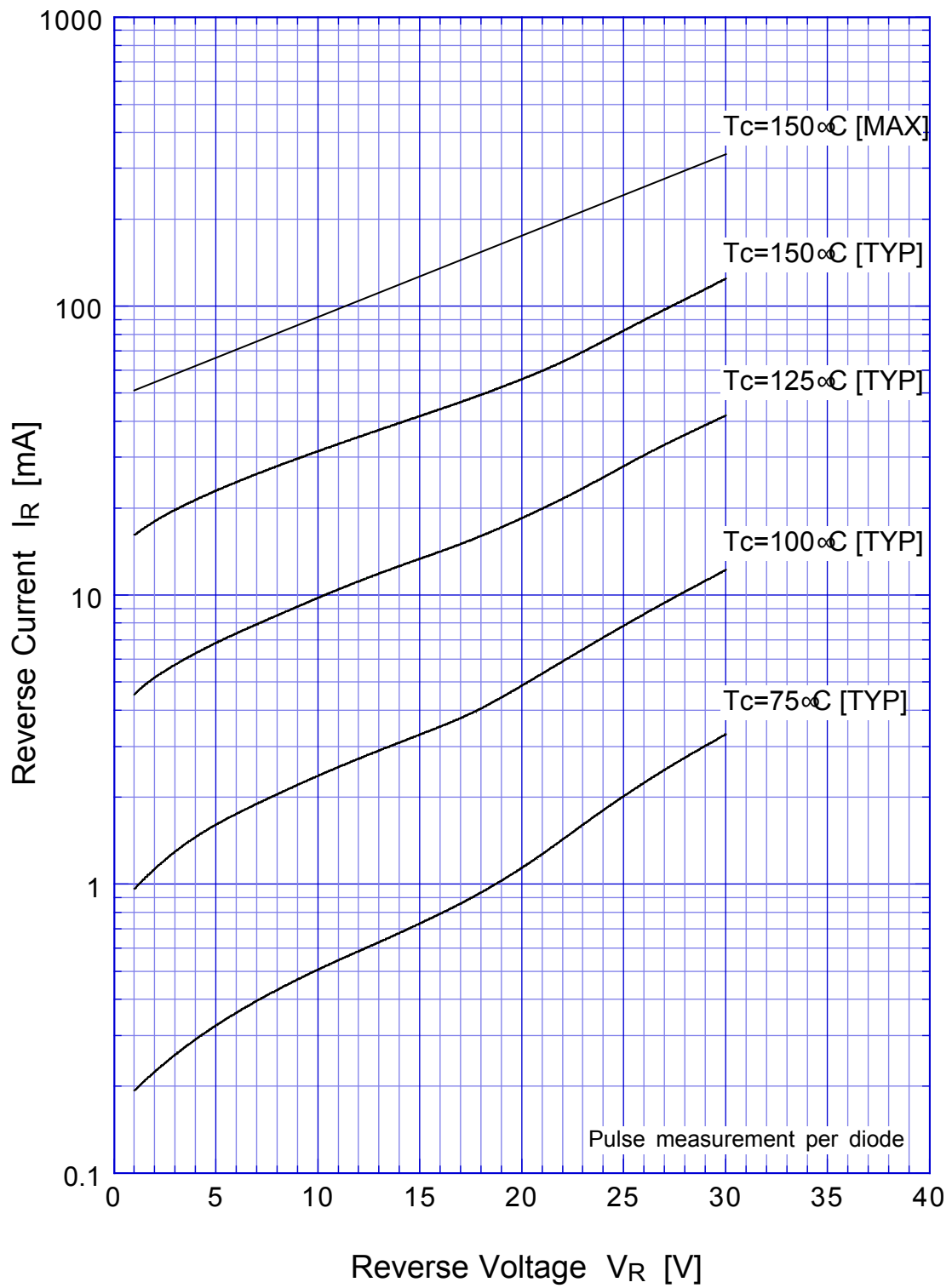
SF10SC3L Forward Voltage



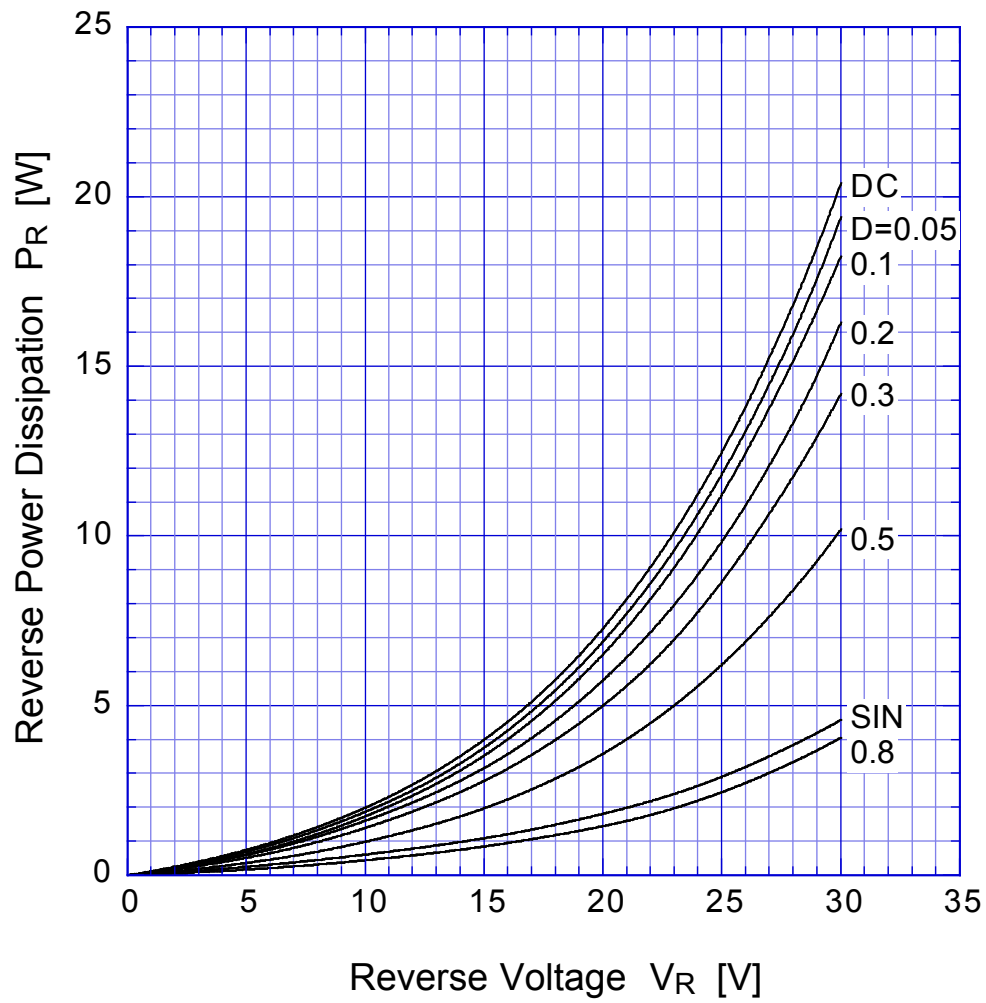
SF10SC3L Junction Capacitance



SF10SC3L Reverse Current



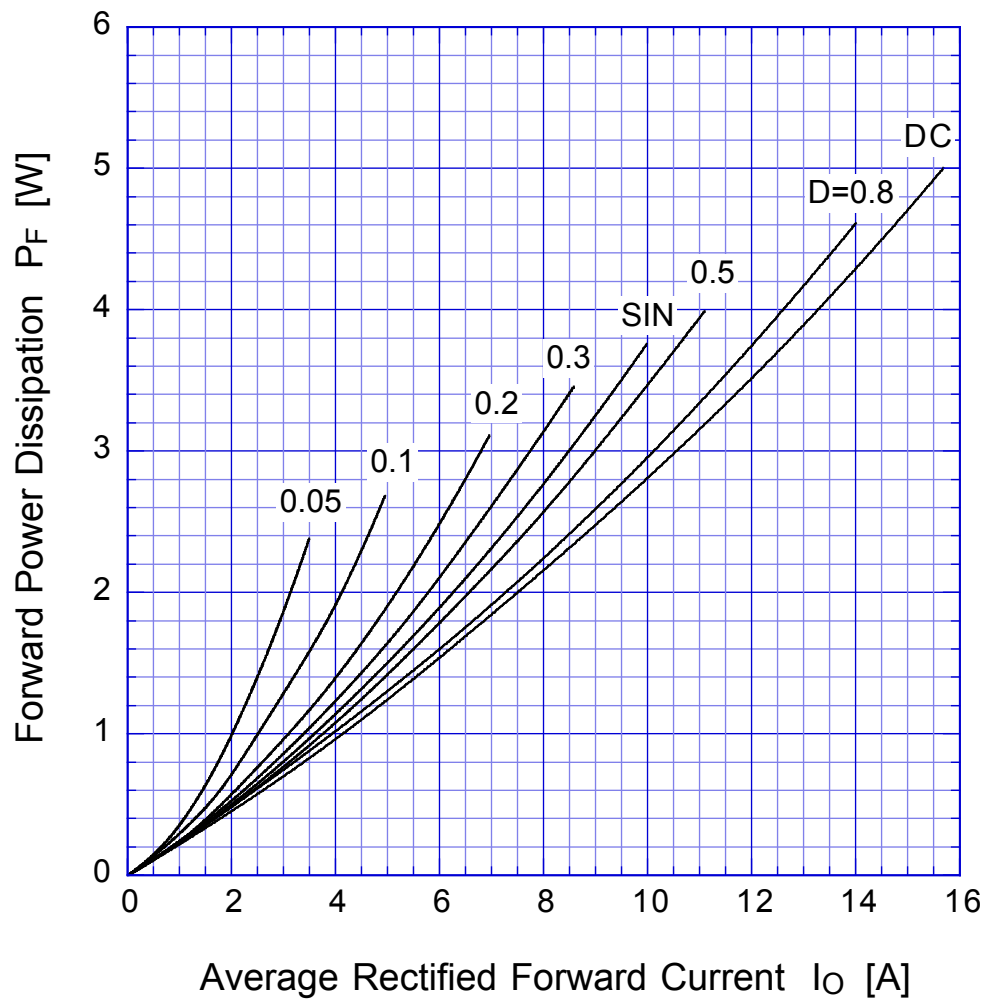
SF10SC3L Reverse Power Dissipation



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



SF10SC3L Forward Power Dissipation

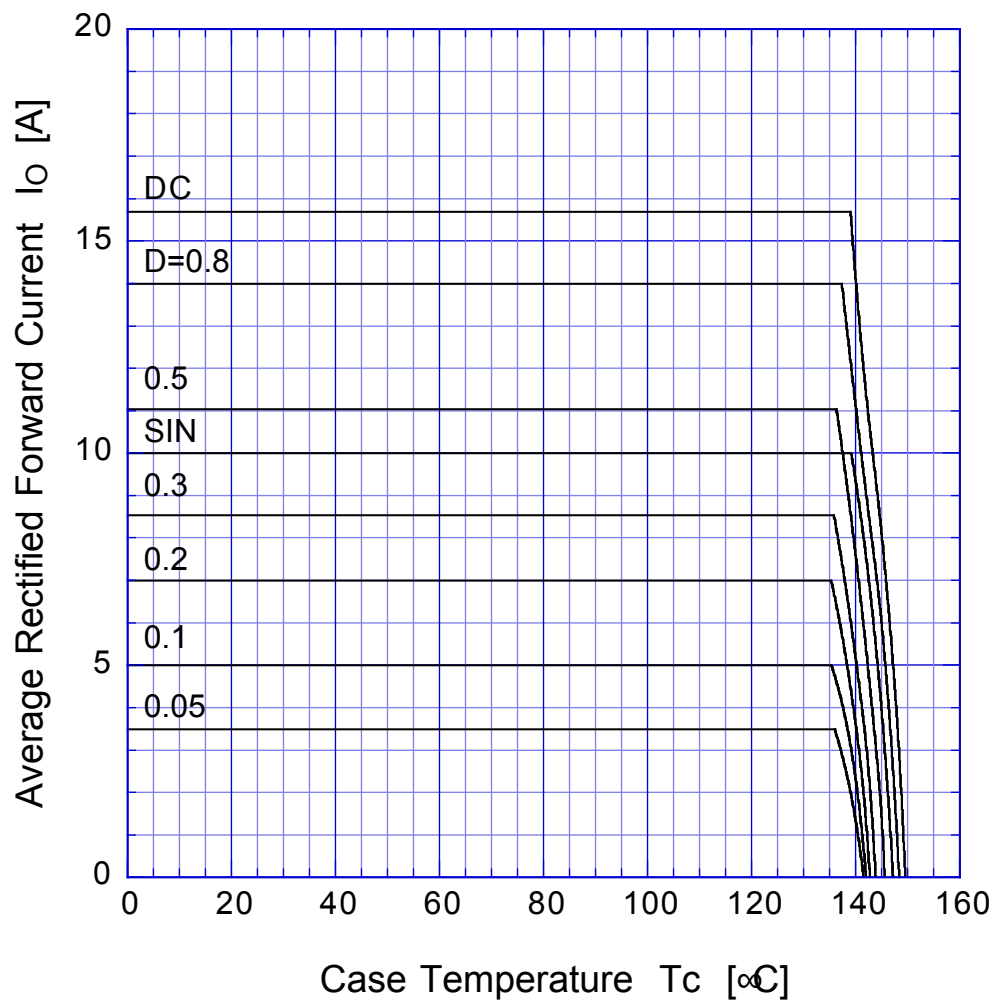


$T_j = 150^\circ\text{C}$

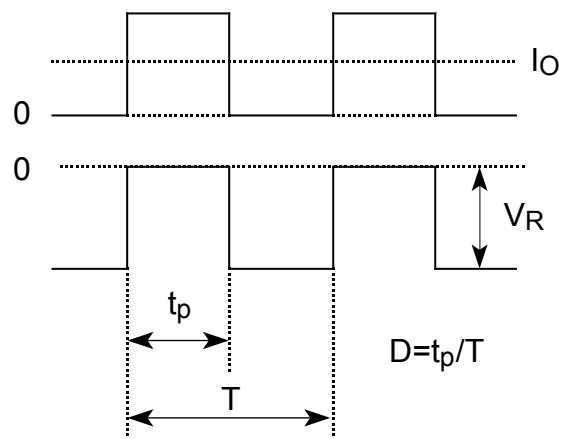


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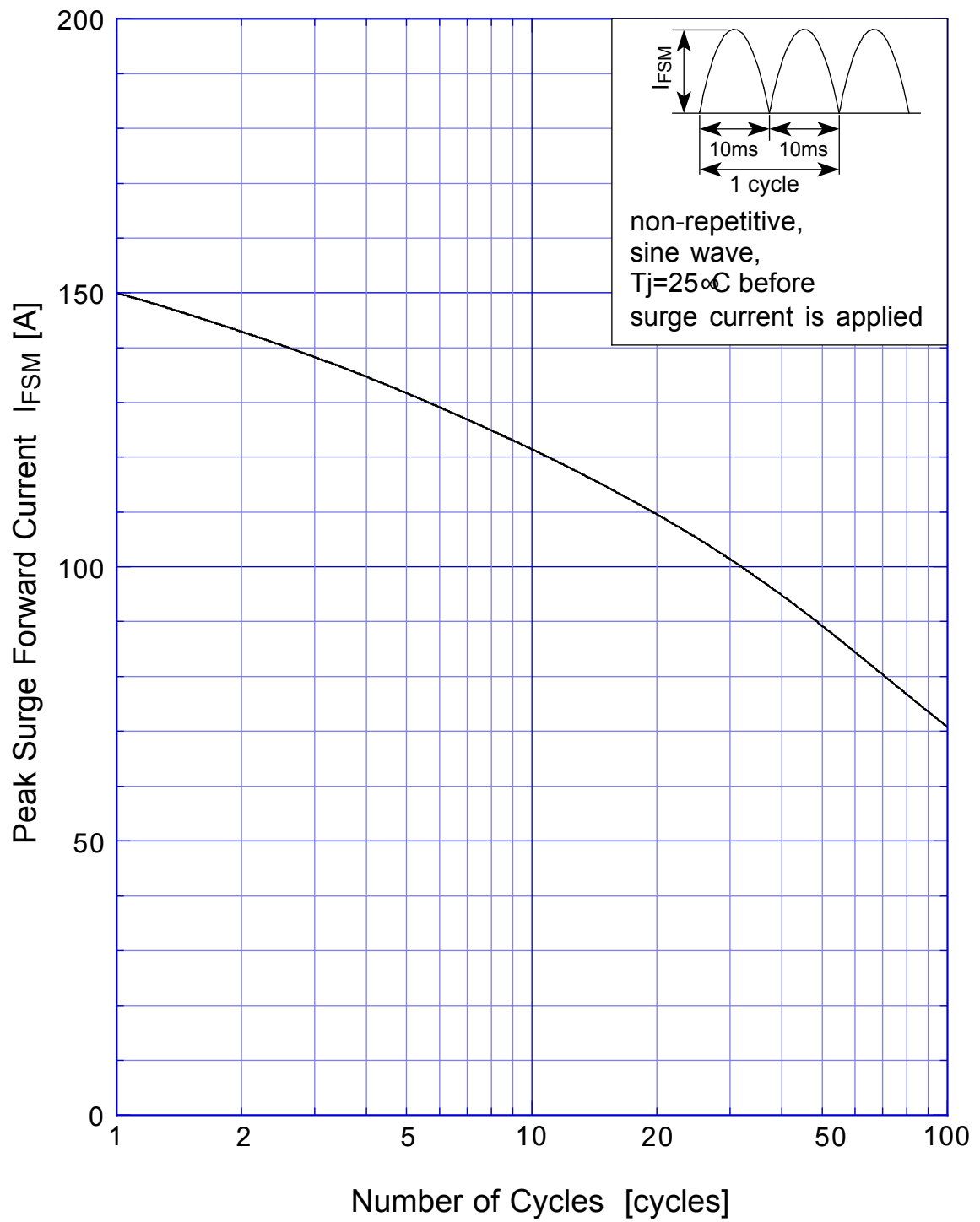
Derating Curve



$V_R = 30V$



SF10SC3L Peak Surge Forward Capability



SBD Repetitive Surge Reverse Power Derating Curve

