

SF30SC6

60V 30A

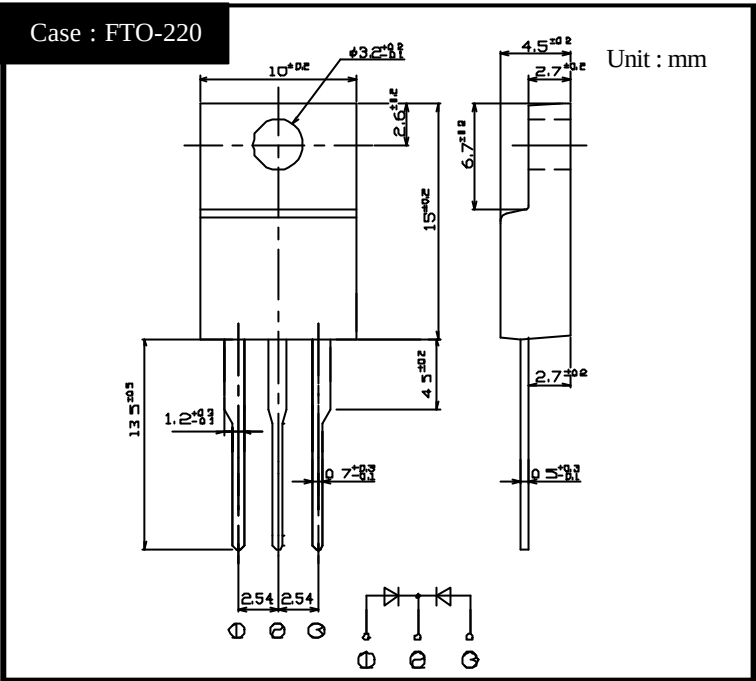
FEATURES

- Tj150°C
- PRRSM 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 Tc=25°C)

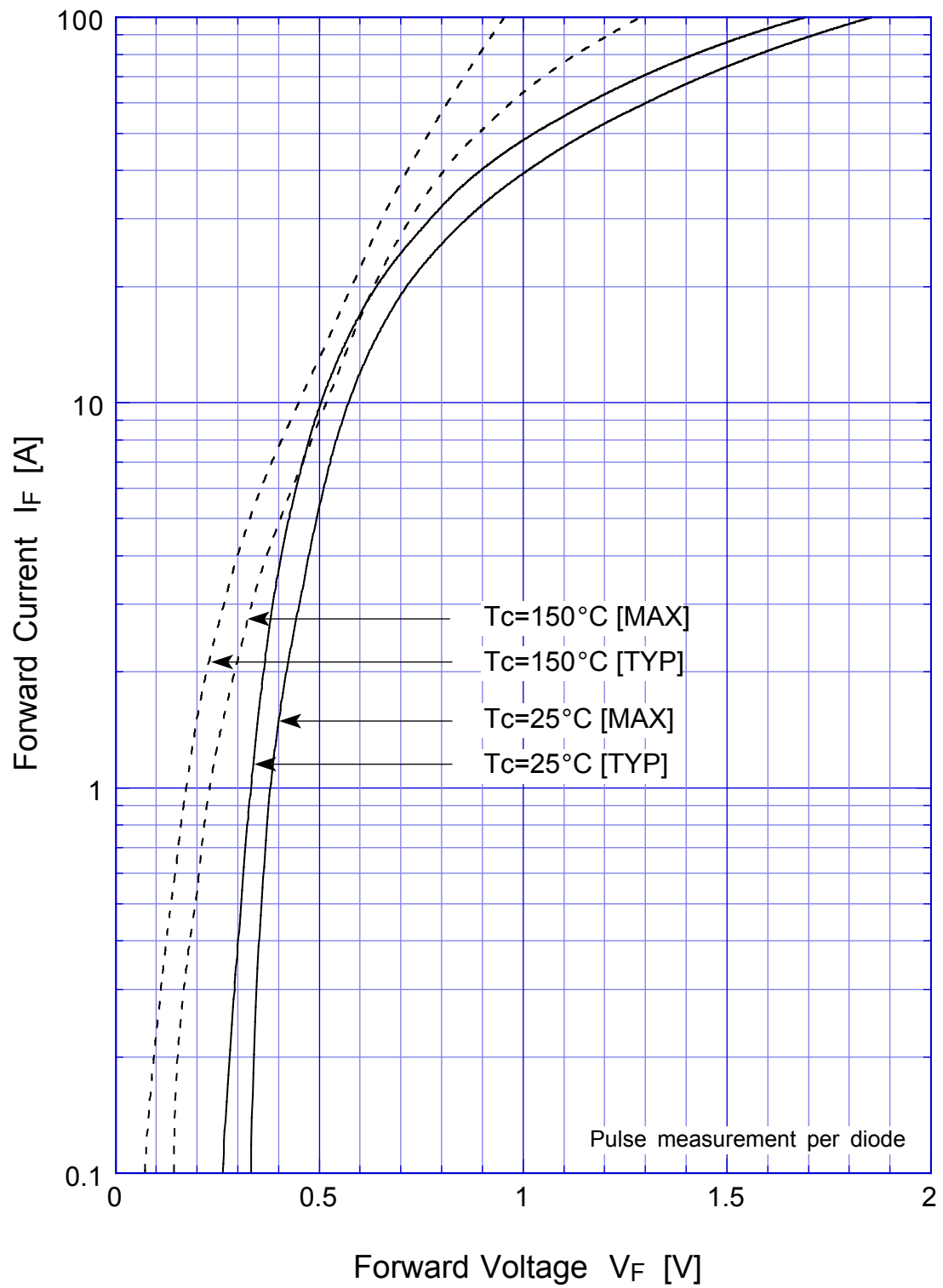
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-55~150	°C
Operating Junction Temperature	Tj		150	°C
Maximum Reverse Voltage	VRM		60	V
Repetitive Peak Surge Reverse Voltage	VRRSM	Pulse width 0.5ms, duty 1/40	65	V
Average Rectified Forward Current	Io	50Hz sine wave, R-load, Rating for each diode Io/2, Tc=107°C	30	A
Peak Surge Forward Current	IFSM	50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=25 °C	250	A
Repetitive Peak Surge Reverse Power	PRRSM	Pulse width 10 μs, Rating of per diode, Ti=25°C	660	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 Tc=25°C)

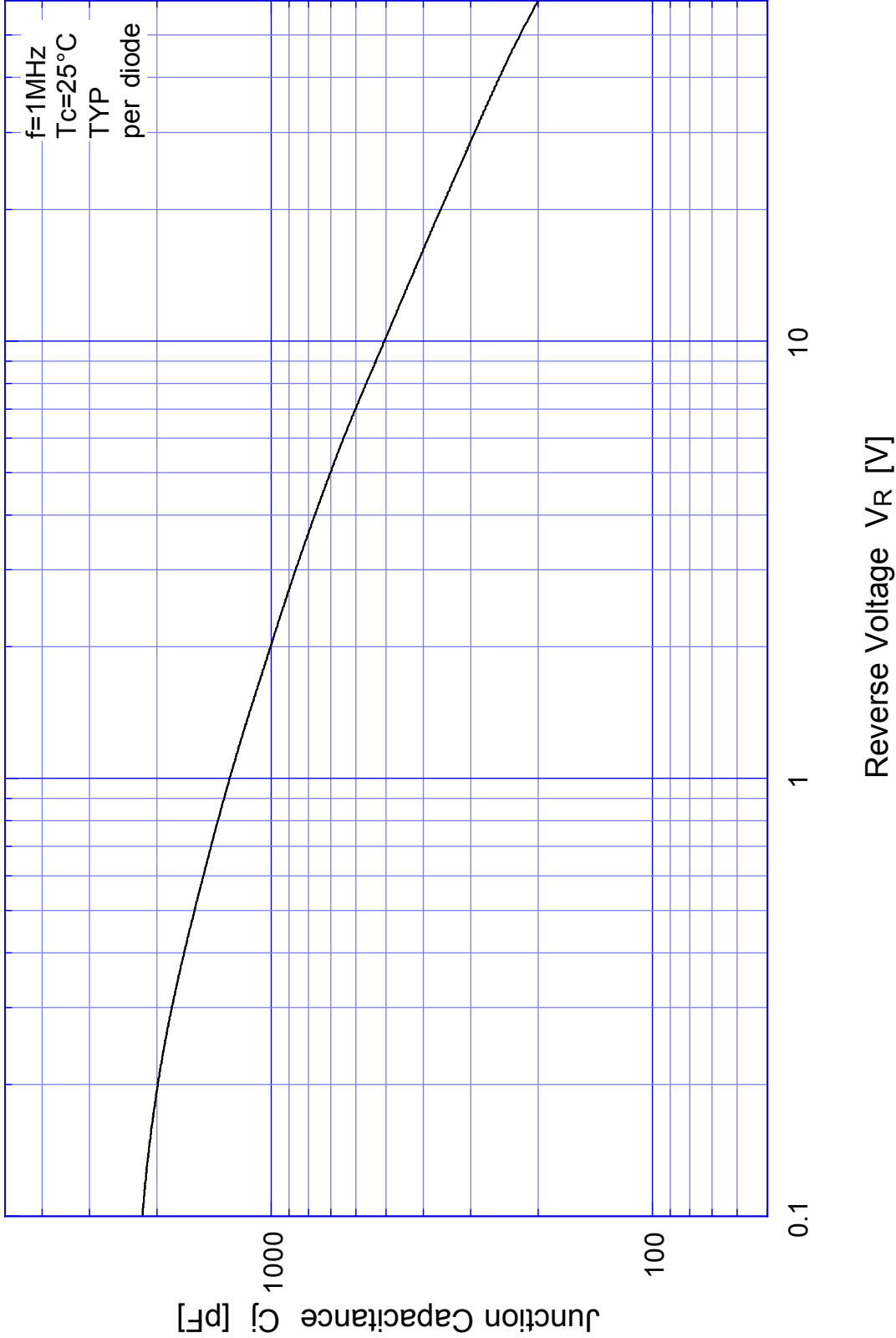
Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	VF	IF=15A, Pulse measurement, Rating of per diode	Max.0.63	V
Reverse Current	IR	VR=VRM, Pulse measurement, Rating of per diode	Max.10	mA
Junction Capacitance	Cj	f=1MHz, VR=10V, Rating of per diode	Tvp.500	pF
Thermal Resistance	θjc	junction to case	Max.1.6	°C/W

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Forward Voltage

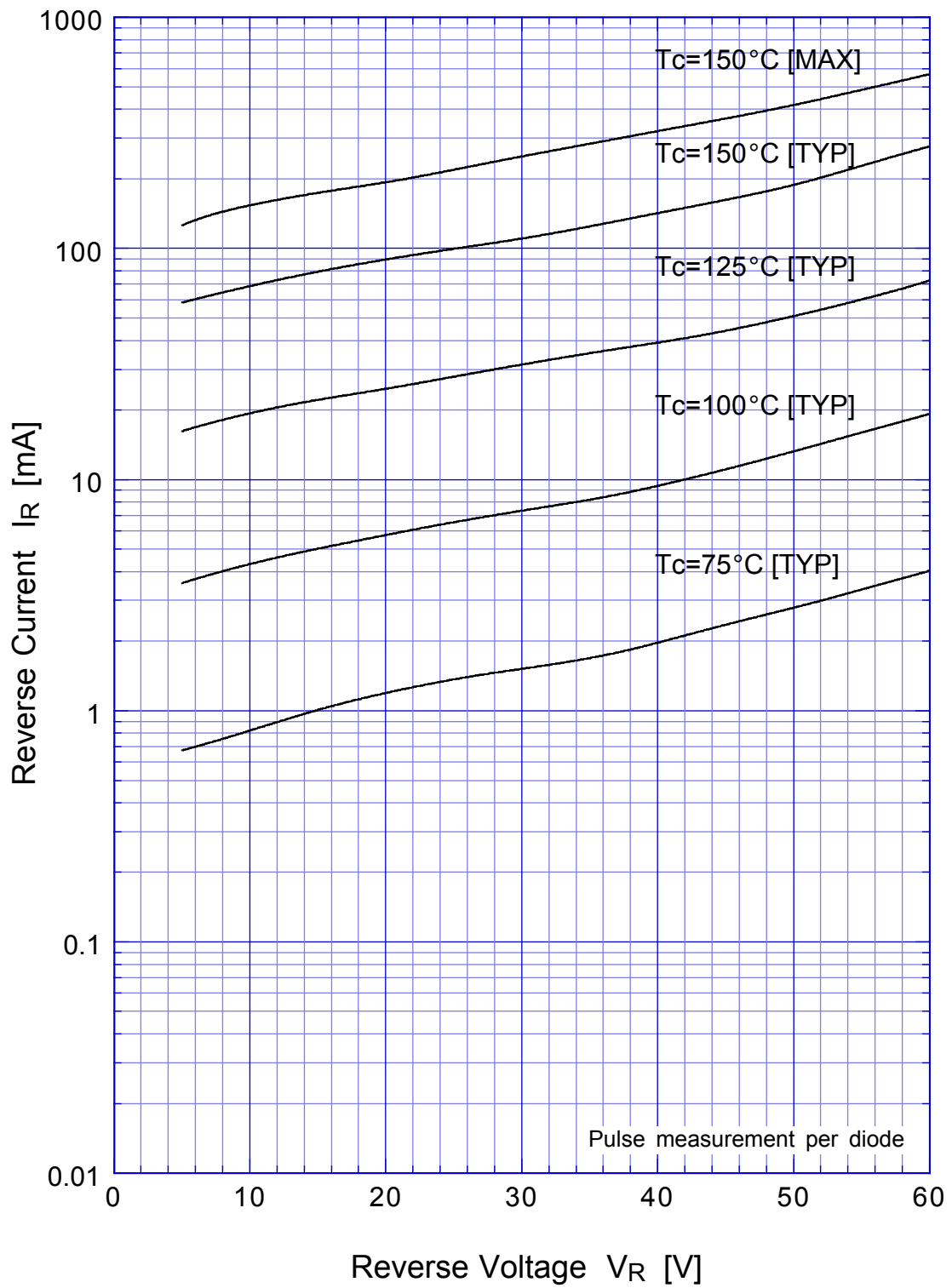


SF30SC6 Junction Capacitance

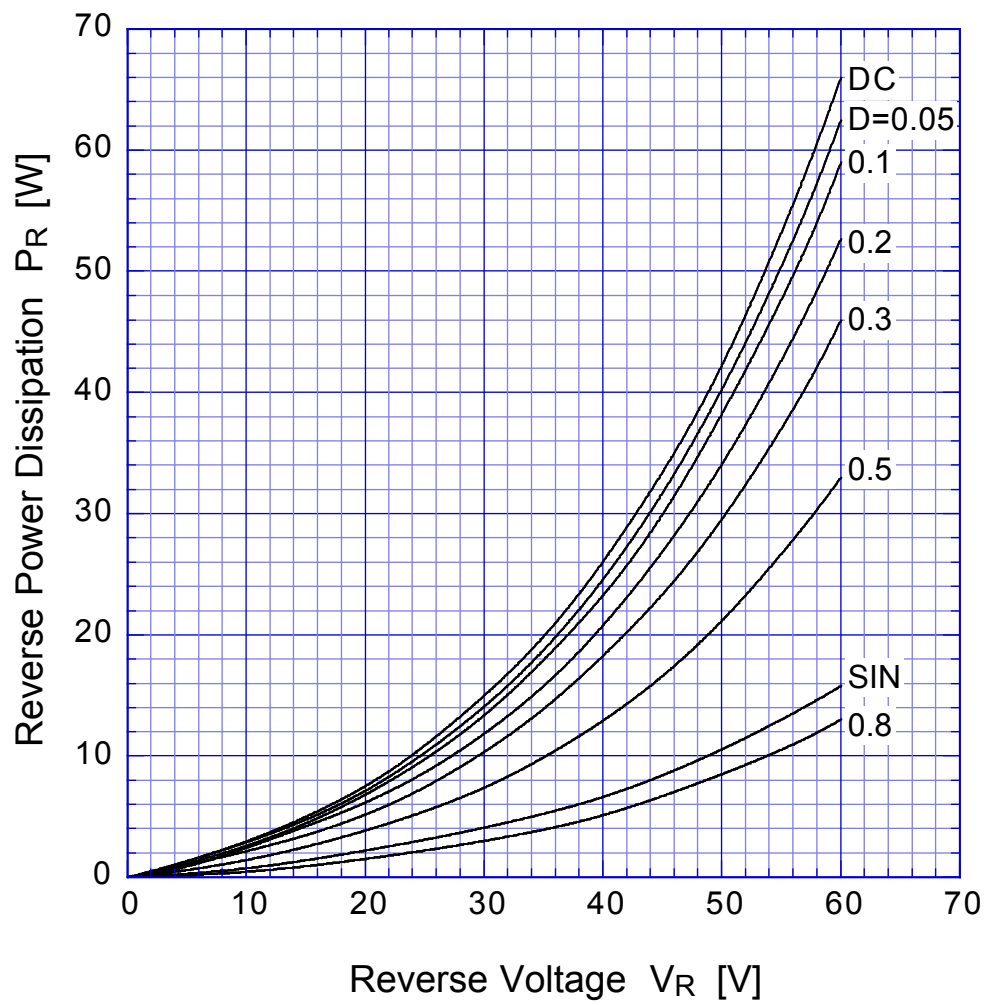


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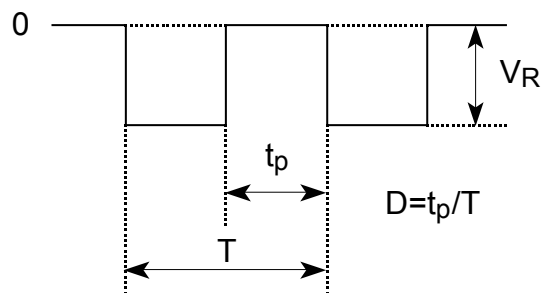
Reverse Current



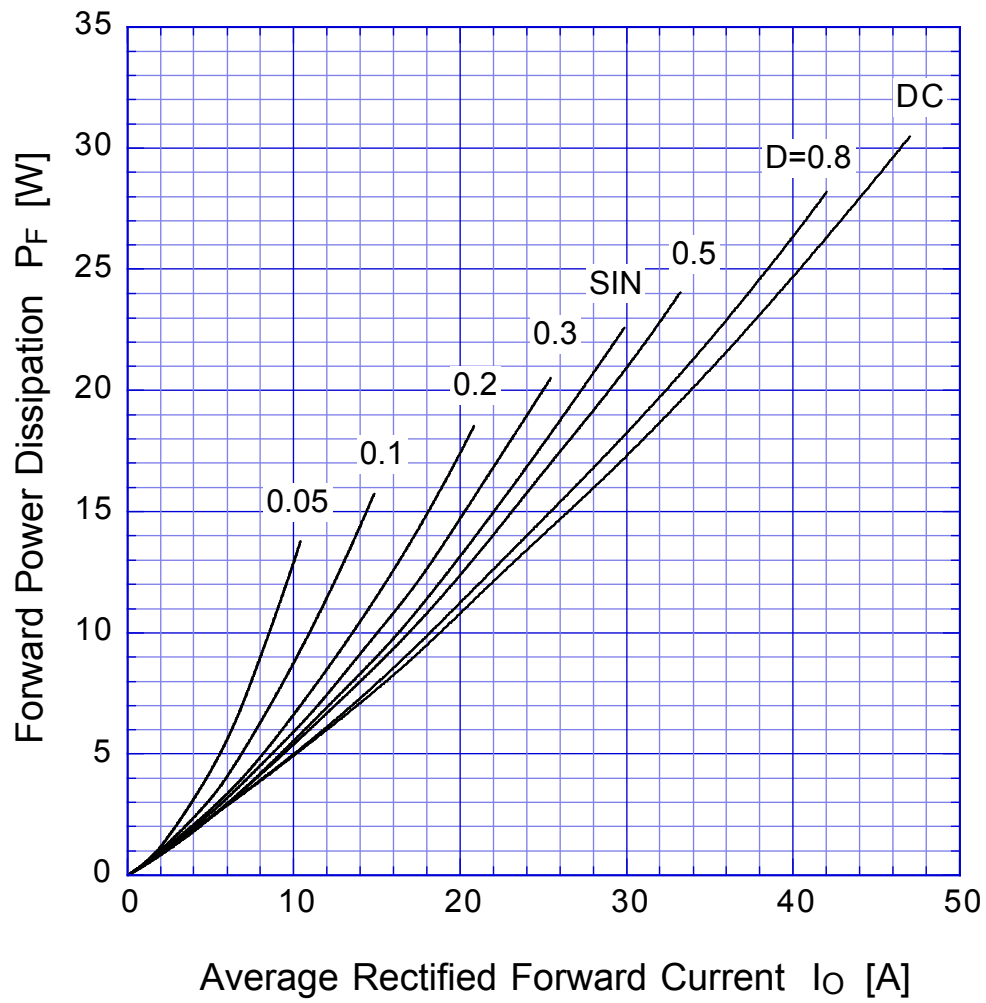
SF30SC6 Reverse Power Dissipation



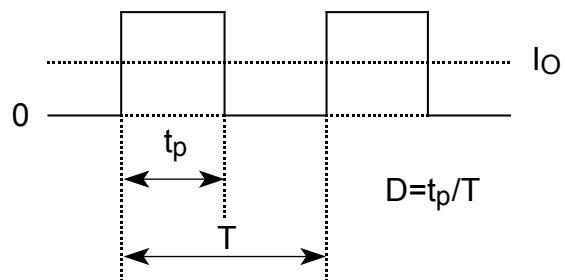
$T_j = 150^\circ\text{C}$



SF30SC6 Forward Power Dissipation

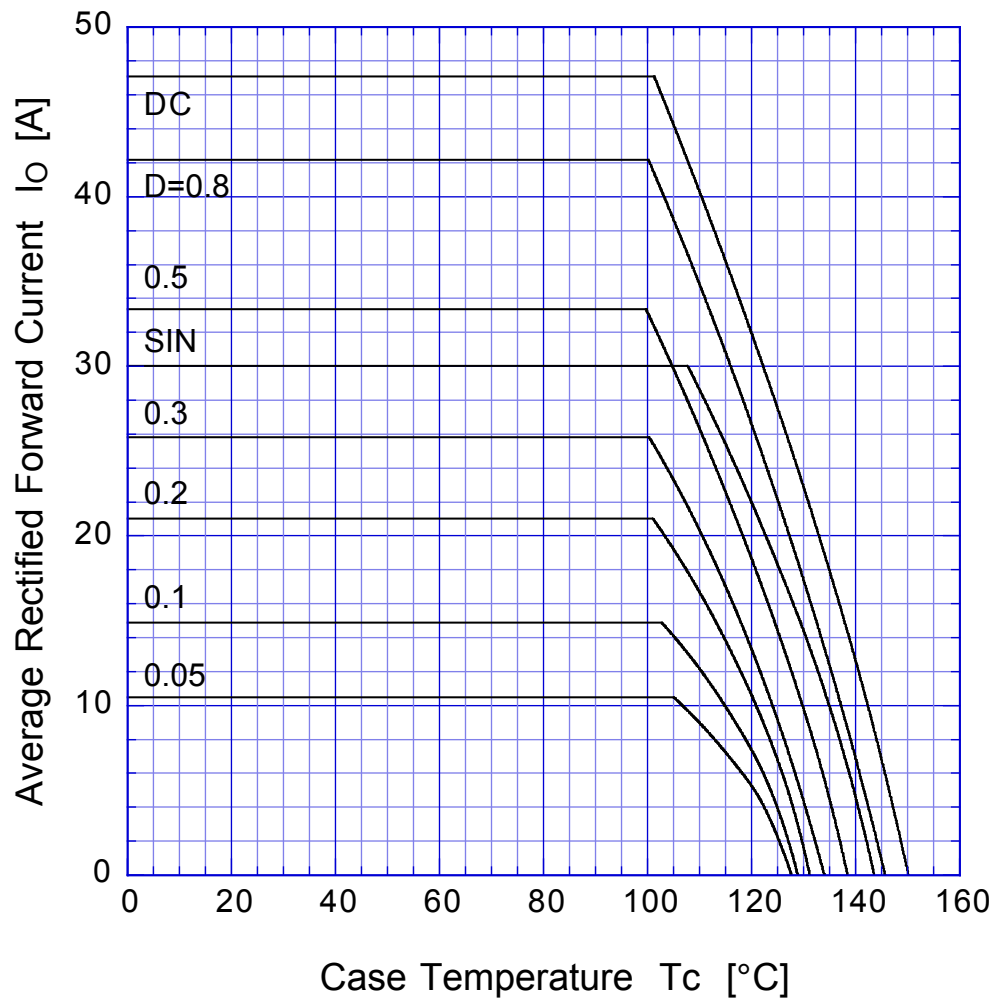


$T_j = 150^\circ\text{C}$

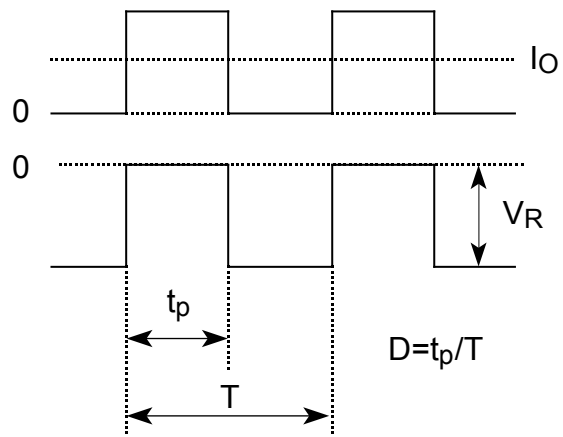


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Derating Curve

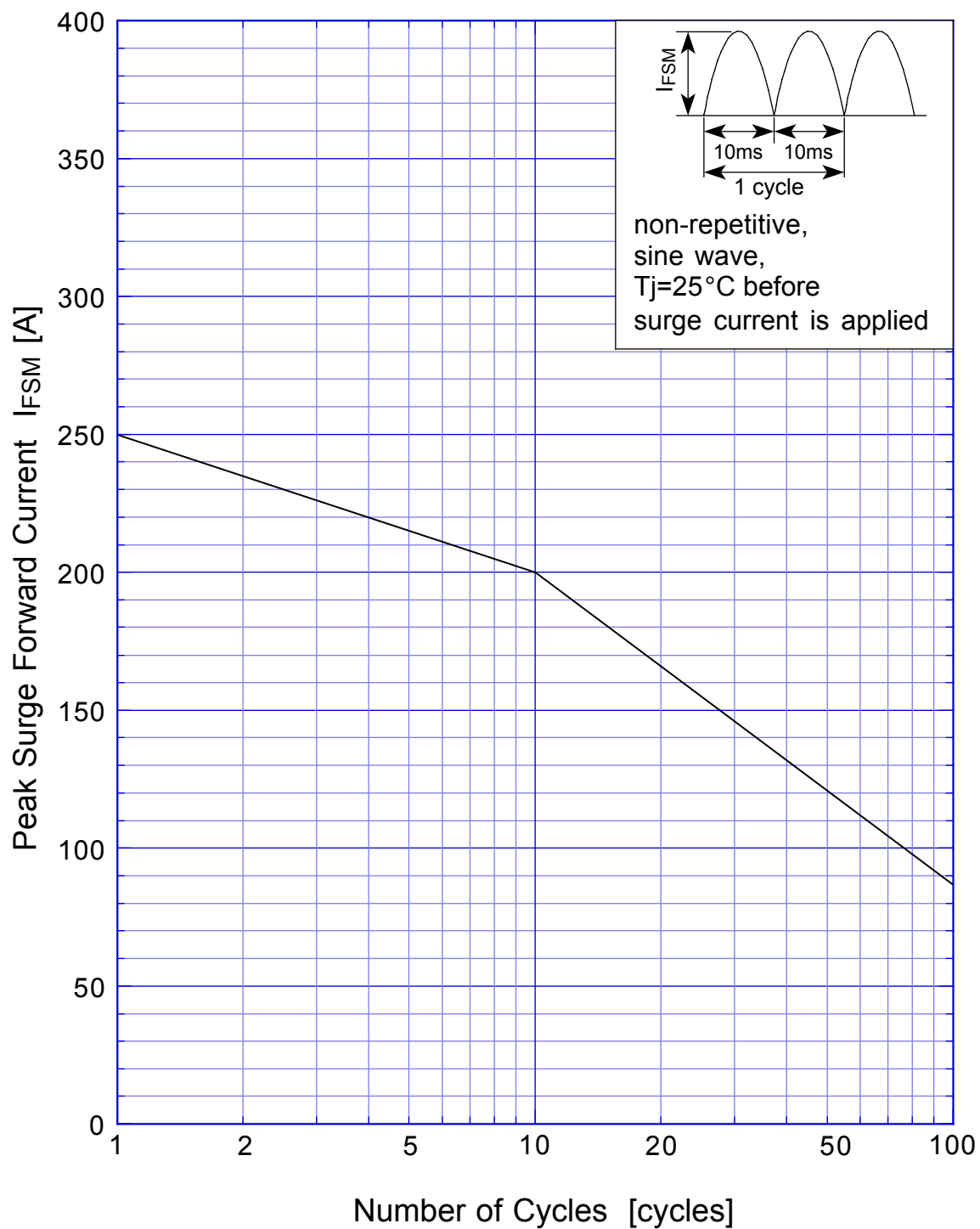


$V_R = 30V$



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Peak Surge Forward Capability



SBD Repetitive Surge Reverse Power Derating Curve

