

SF10SC9

90V 10A

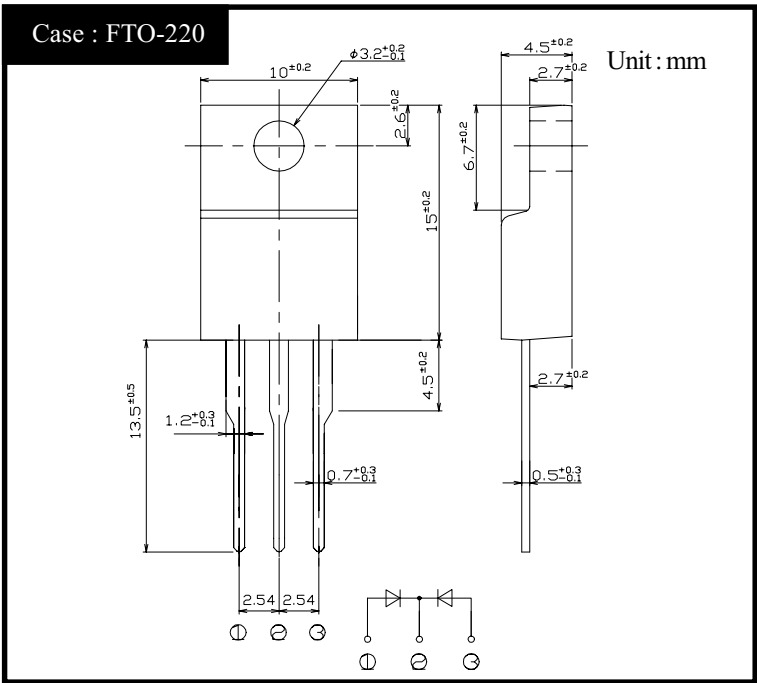
FEATURES

- 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)

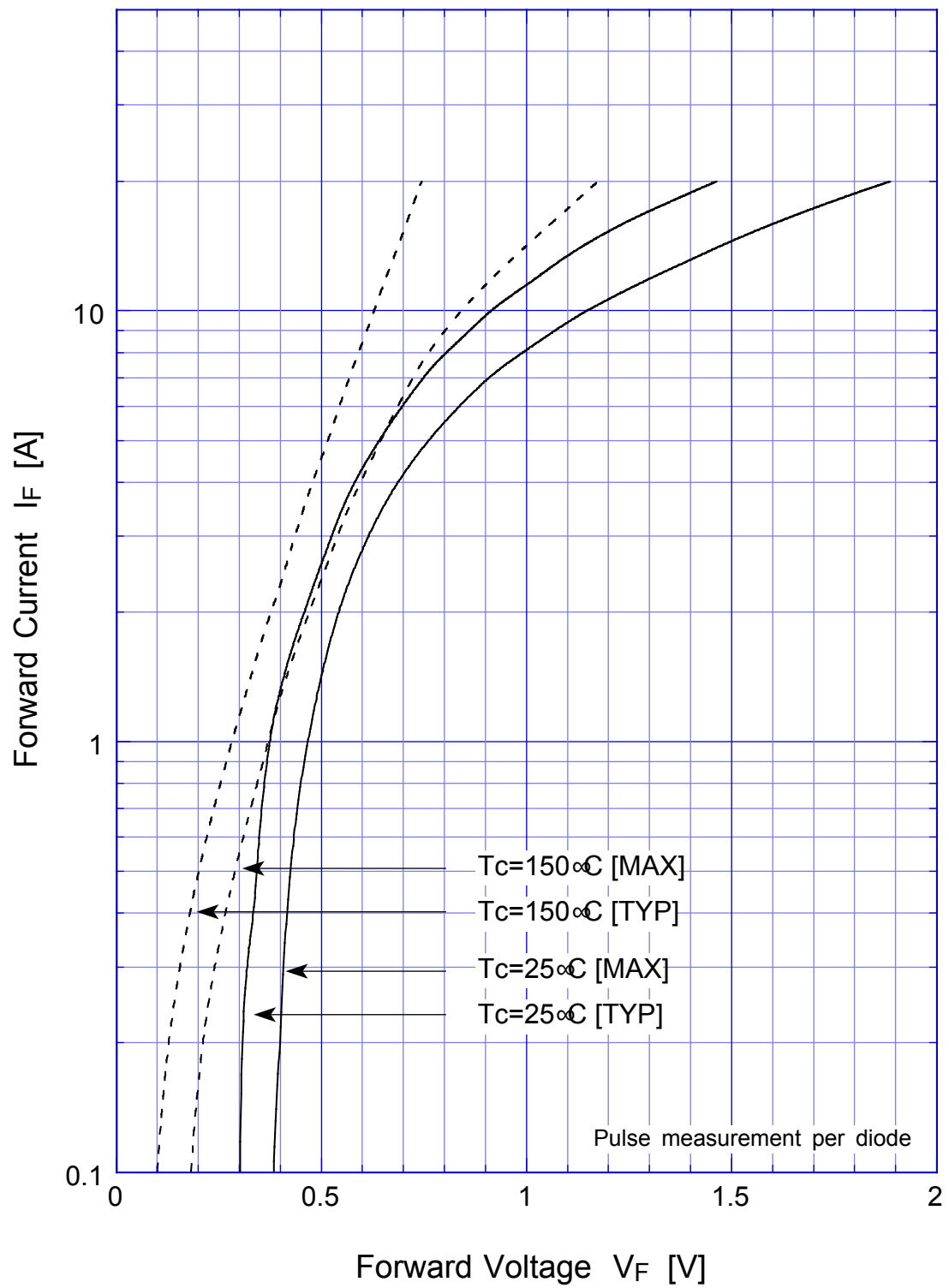
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-40~150	°C
Operating Junction Temperature	Tj		150	°C
Maximum Reverse Voltage	VRM		90	V
Repetitive Peak Surge Reverse Voltage	VRRSM	Pulse width 0.5ms, duty 1/40	100	V
Average Rectified Forward Current	IO	50Hz sine wave, R-load, Rating for each diode Io/2, Tc=120°C	10	A
Peak Surge Forward Current	IFSM	50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=125°C	100	A
Repetitive Peak Surge Reverse Power	PRRSM	Pulse width 10 μs, 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 (If not specified Tc=25°C)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	VF	IF=5A, Pulse measurement, Rating of per diode	Max.0.75	V
Reverse Current	IR	VR=VRM, Pulse measurement, Rating of per diode	Max.3	mA
Junction Capacitance	Cj	f=1MHz, VR=10V, Rating of per diode	Typ.185	pF
Thermal Resistance	θjc	junction to case	Max.2.3	°C/W

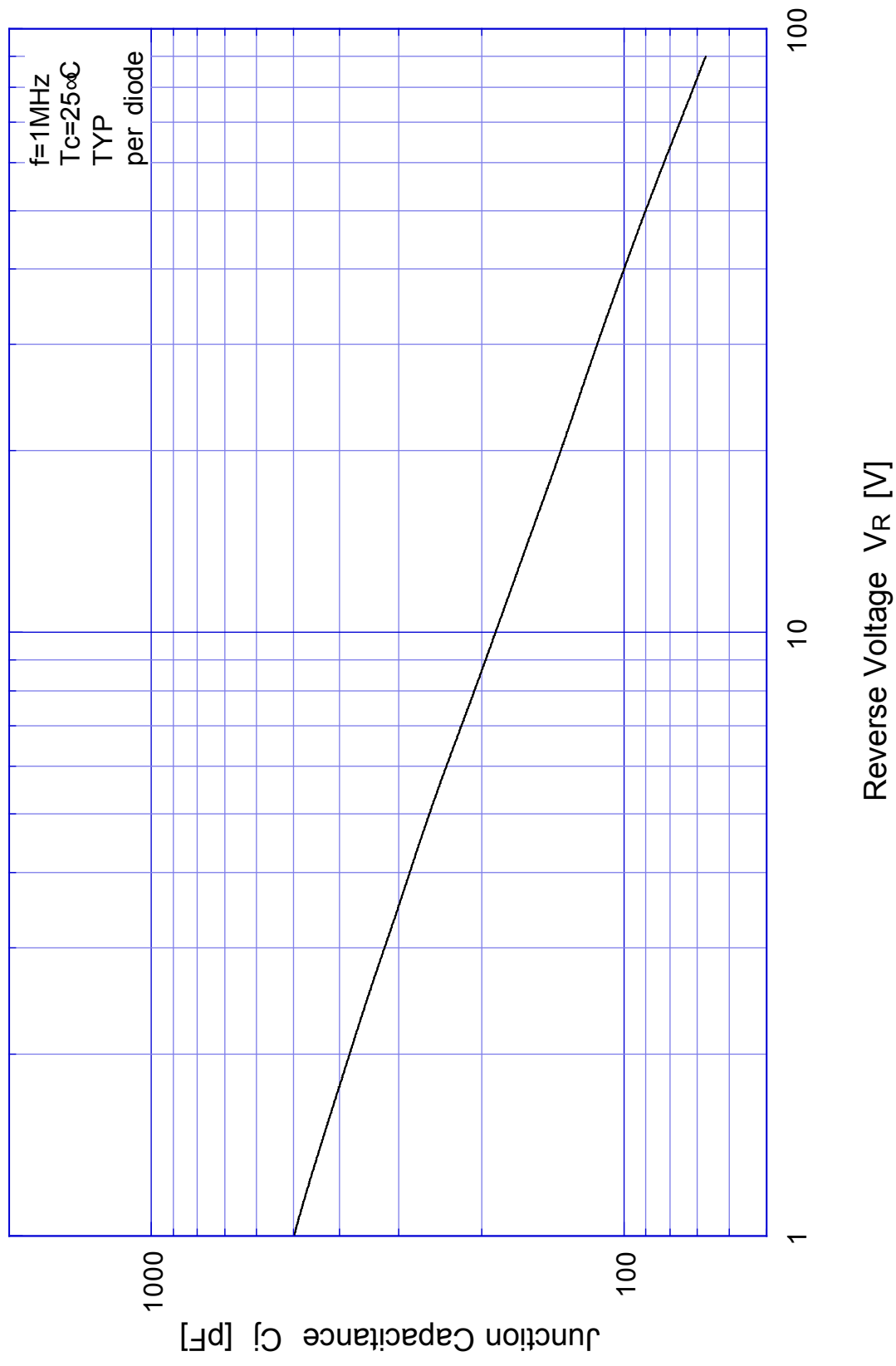
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Forward Voltage



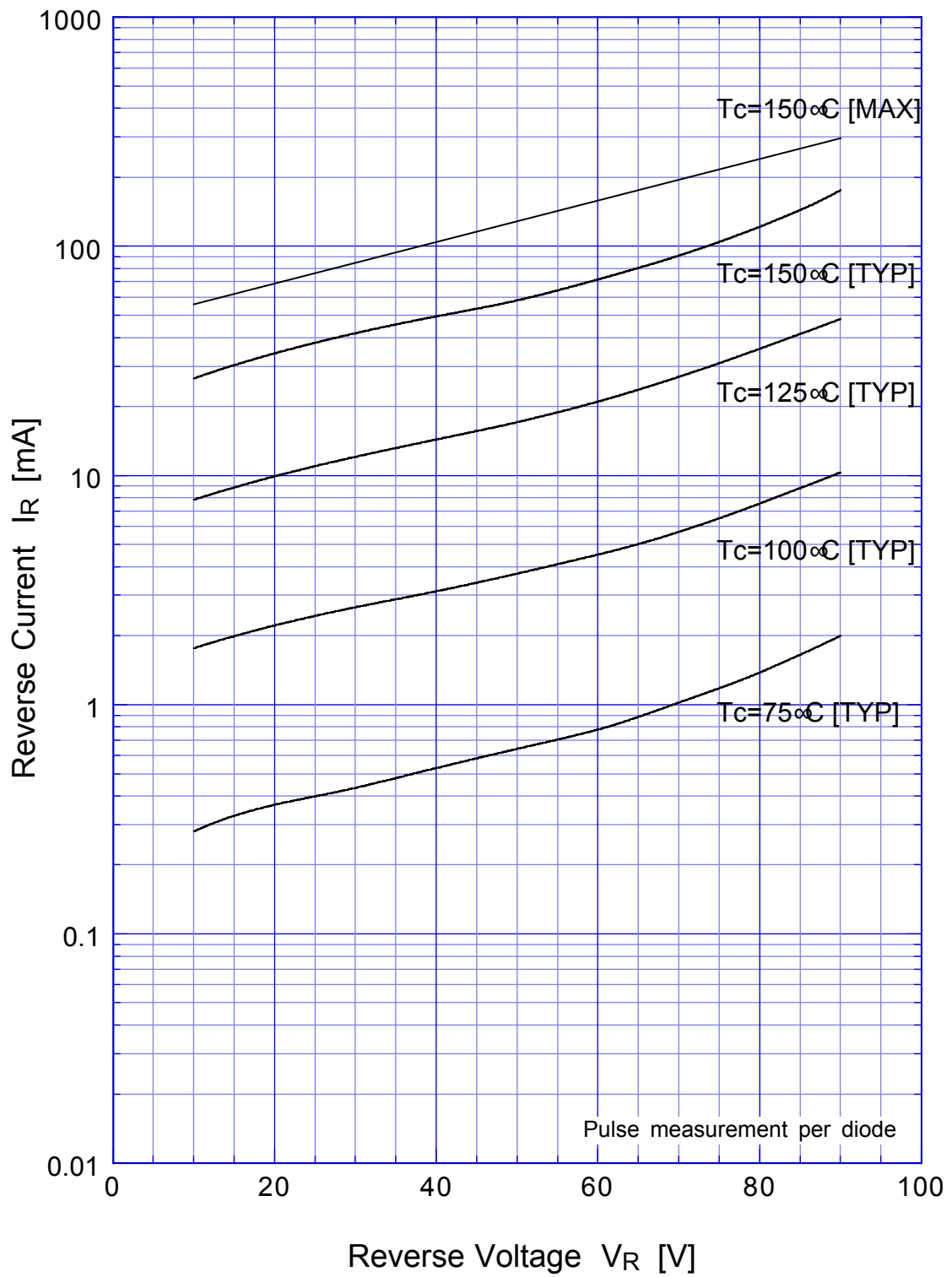
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Junction Capacitance

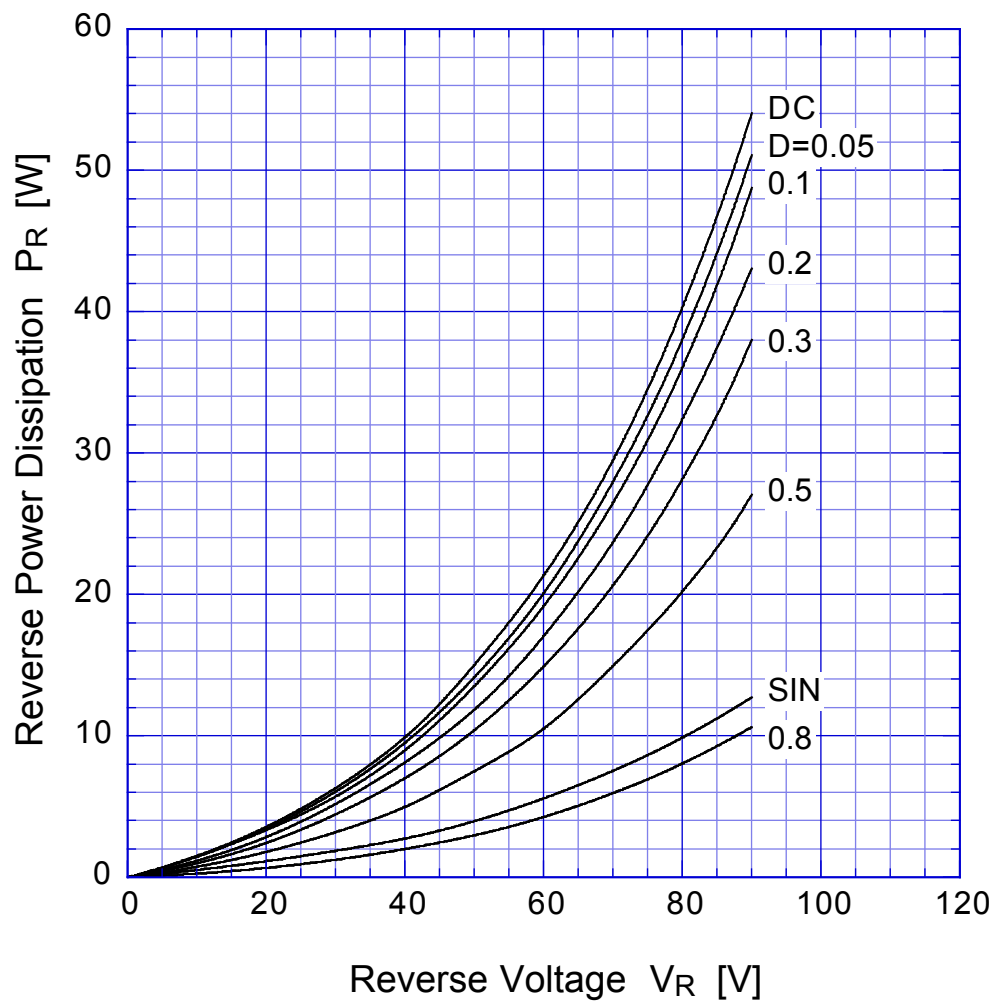


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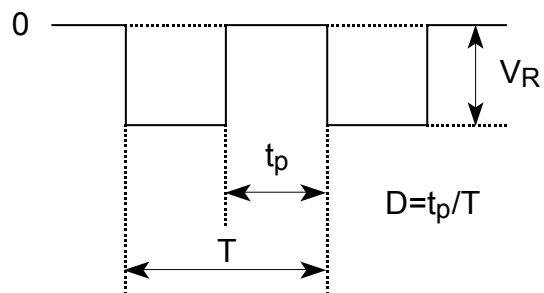
Reverse Current



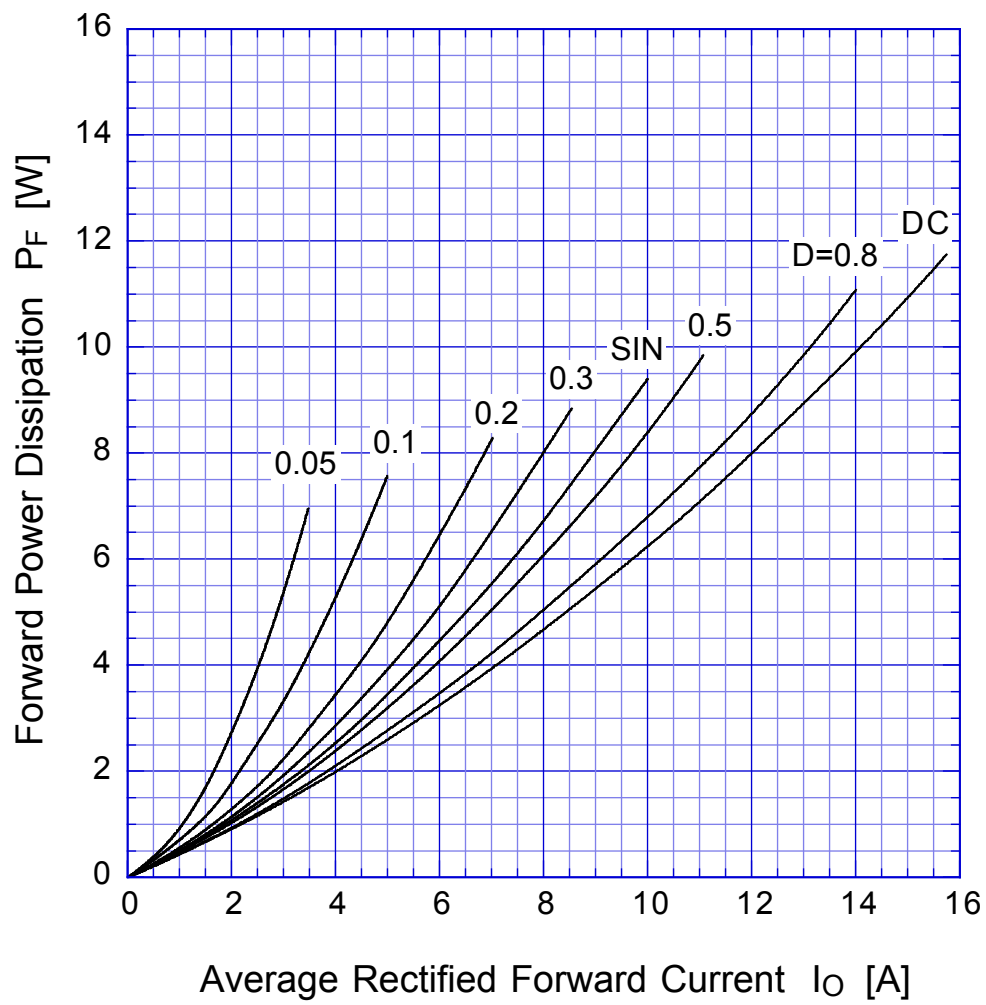
SF10SC9 Reverse Power Dissipation



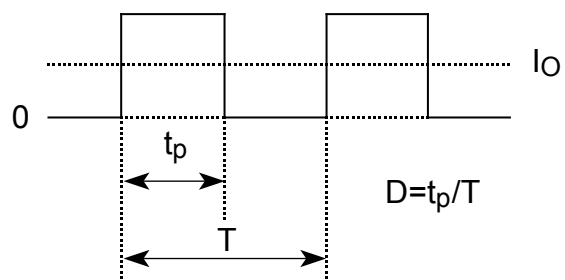
$T_j = 150^\circ\text{C}$



SF10SC9 Forward Power Dissipation

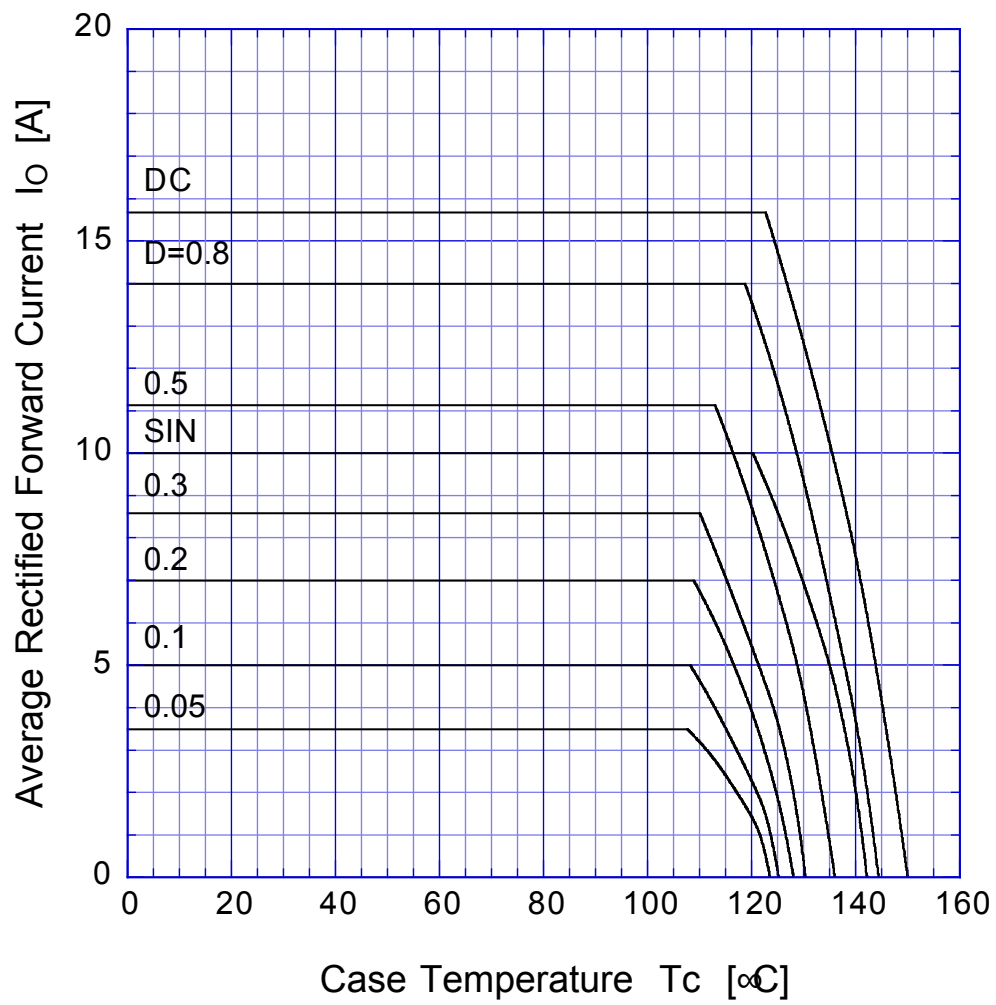


$T_J = 150^\circ\text{C}$



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Derating Curve

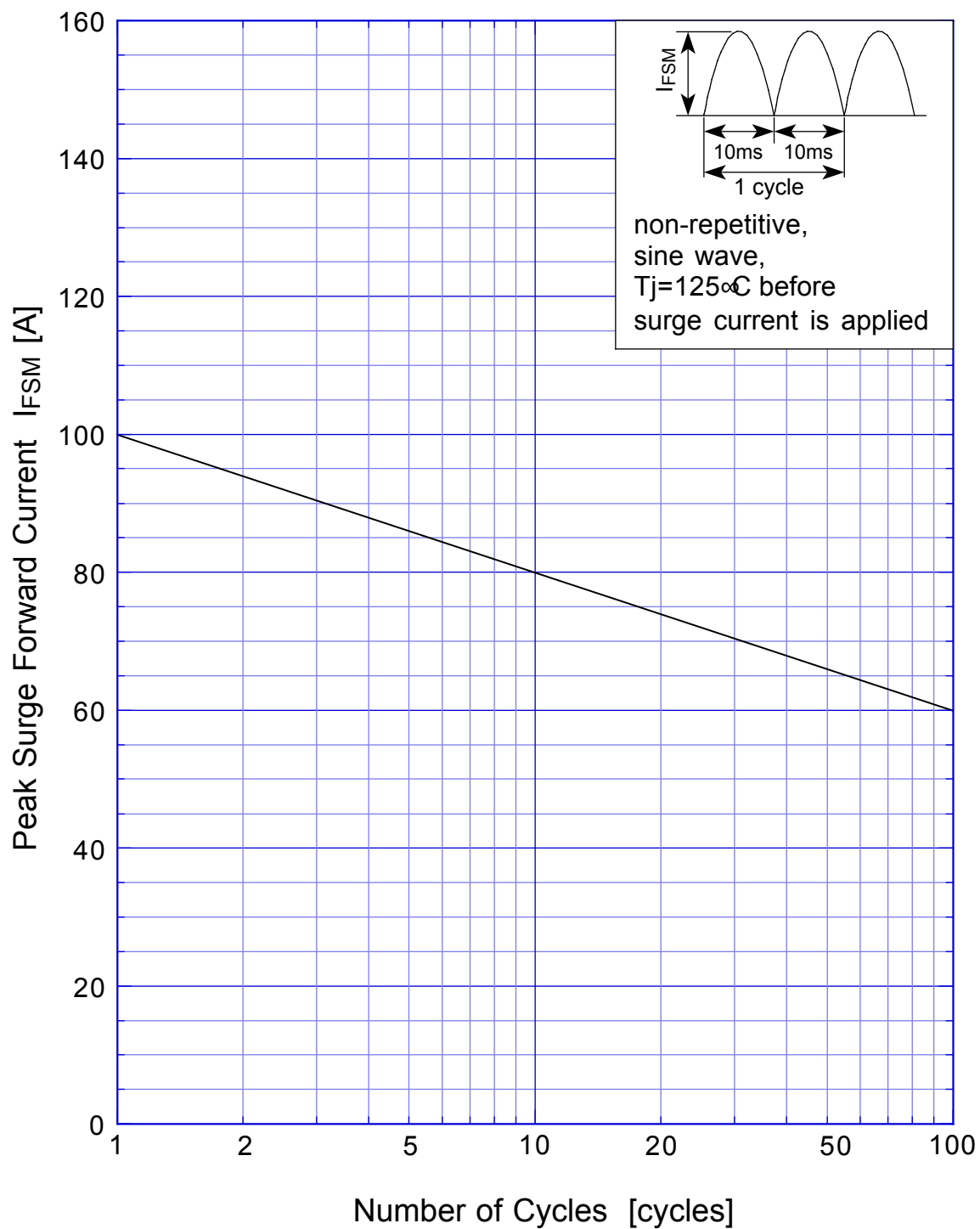


$V_R = 45V$



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Peak Surge Forward Capability



SBD Repetitive Surge Reverse Power Derating Curve

