

D10SC6MR

60V 10A

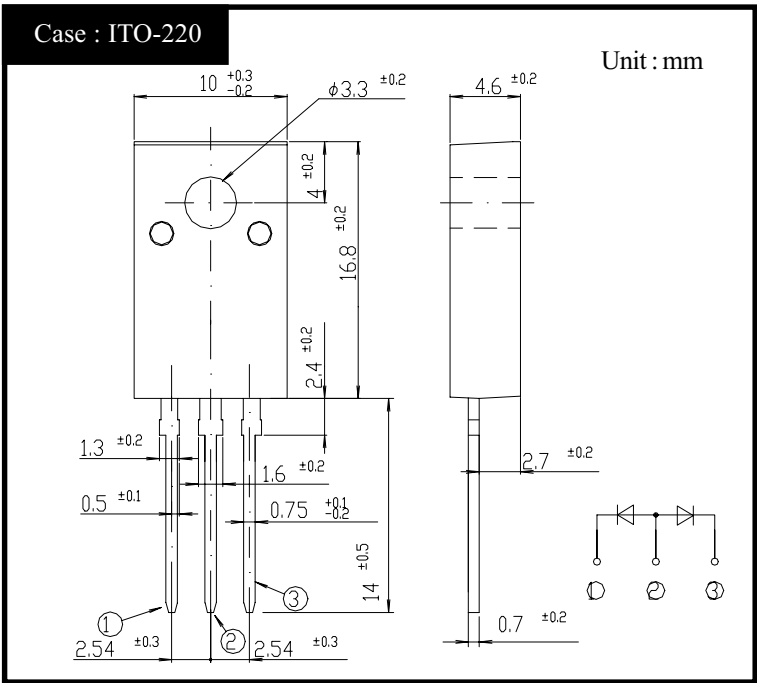
FEATURES

- Tj150°C
- PRRSM avalanche guaranteed
- Fully Isolated Molding

APPLICATION

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

OUTLINE DIMENSIONS



RATINGS

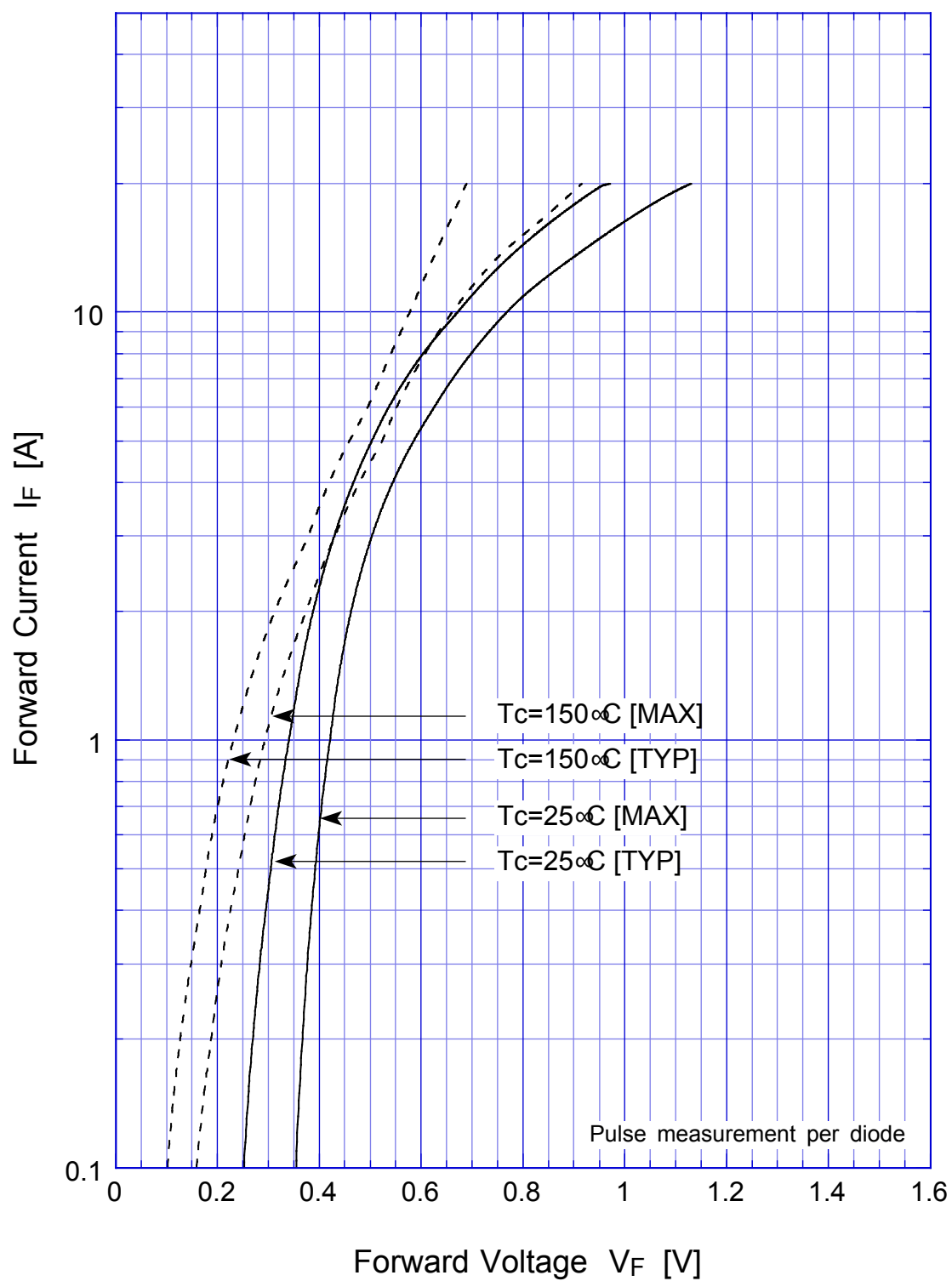
● Absolute Maximum Ratings (If not specified Tc=25°C)

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-40~150	°C
Operating Junction Temperature	Tj		150	°C
Maximum Reverse Voltage	VRM		60	V
Repetitive Peak Surge Reverse Voltage	VRFSM	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=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	PRFSM	Pulse width 10 μs, Rating of per diode, Tj= 25°C	330	W
Dielectric Strength	Vdis	Terminals to case, AC 1 minute	1.5	kV
Mounting Torque	TOR	(Recommended torque: 0.3N·m)	0.5	N·m

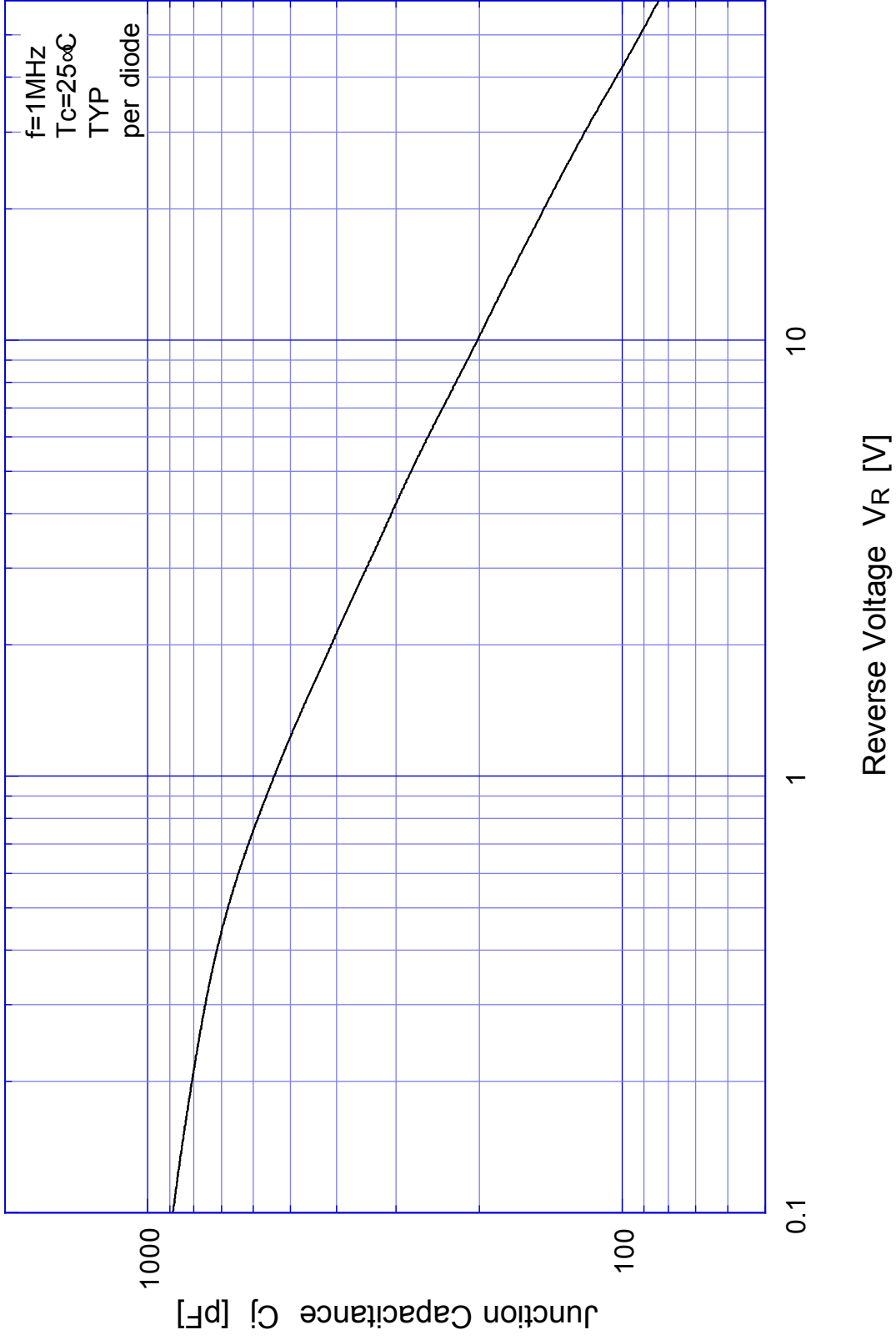
● Electrical Characteristics Tc=25°C

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	VF	IF=5A, Pulse measurement, Rating of per diode	Max 0.58	V
Reverse Current	IR	VR=VRM, Pulse measurement, Rating of per diode	Max 4.5	mA
Junction Capacitance	Cj	f=1MHz, VR=10V, Rating of per diode	Typ 200	pF
Thermal Resistance	θjc	junction to case	Max 3.3	°C/W
	θjf	junction to heatsink (Reference value)	Max 4.8	

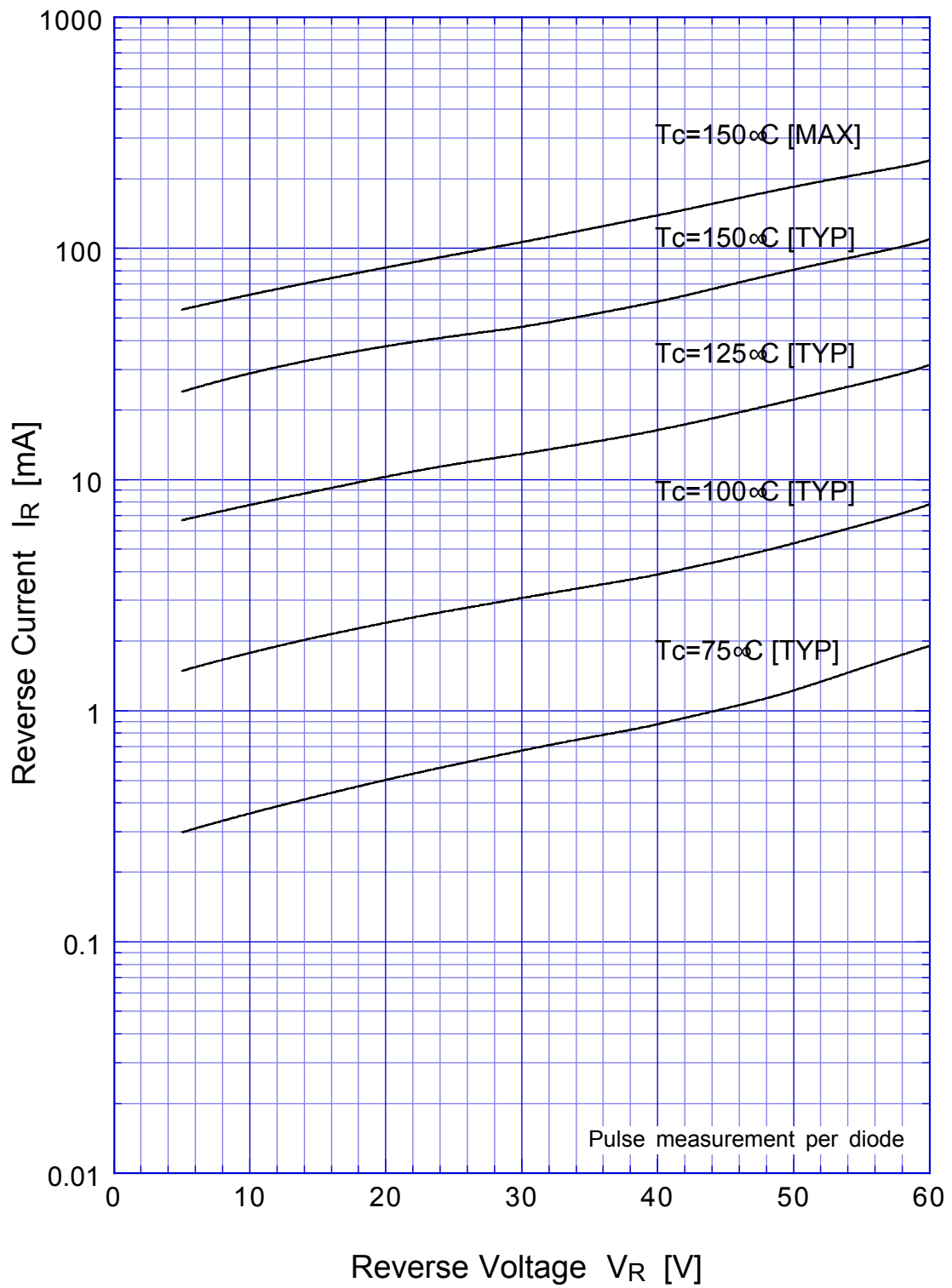
D10SC6MR Forward Voltage



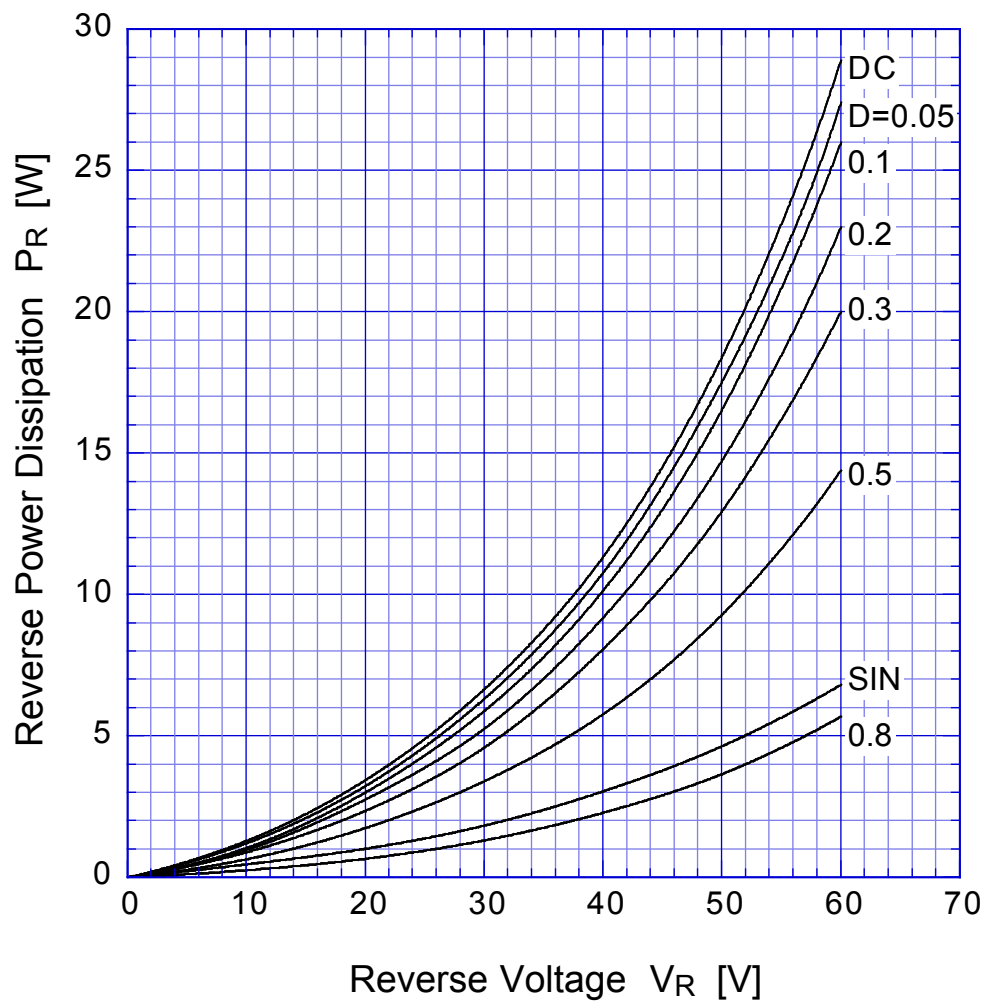
D10SC6MR Junction Capacitance



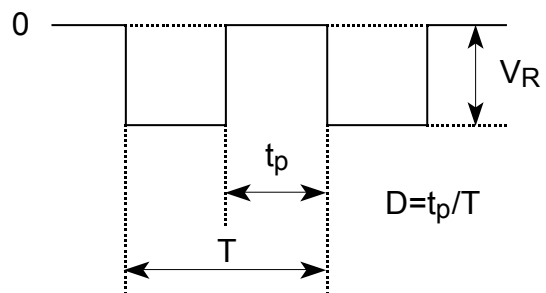
D10SC6MR Reverse Current



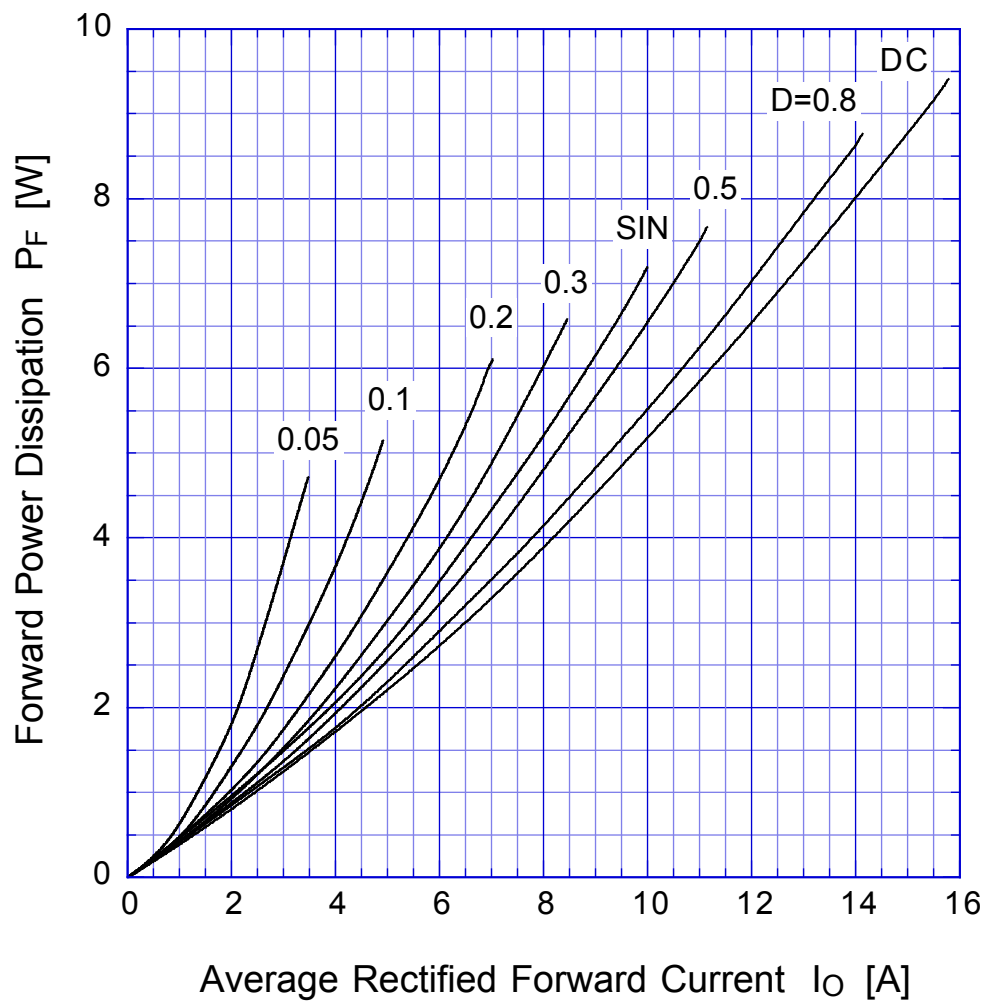
D10SC6MR Reverse Power Dissipation



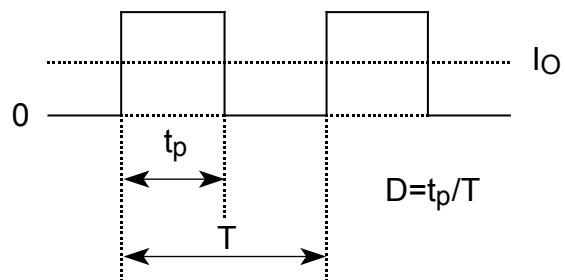
$T_j = 150^\circ\text{C}$



D10SC6MR Forward Power Dissipation

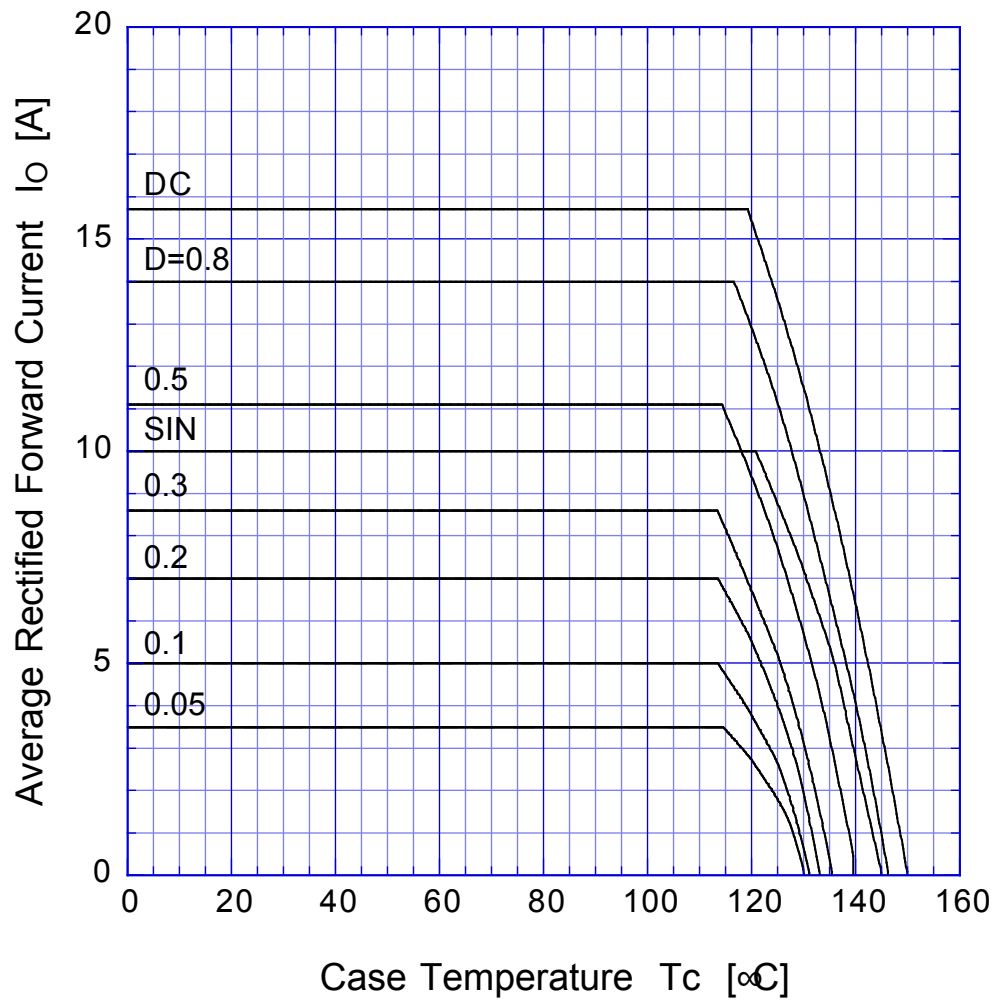


$T_J = 150^\circ\text{C}$

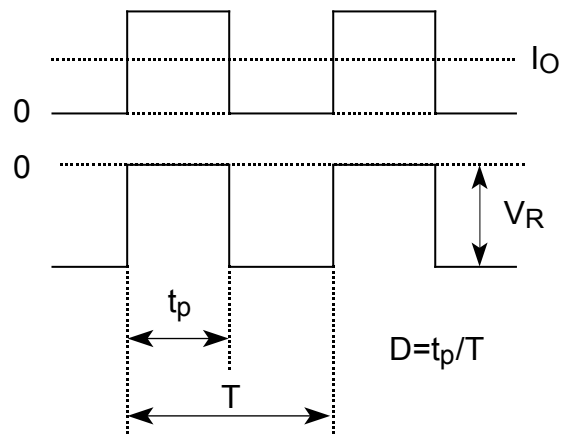


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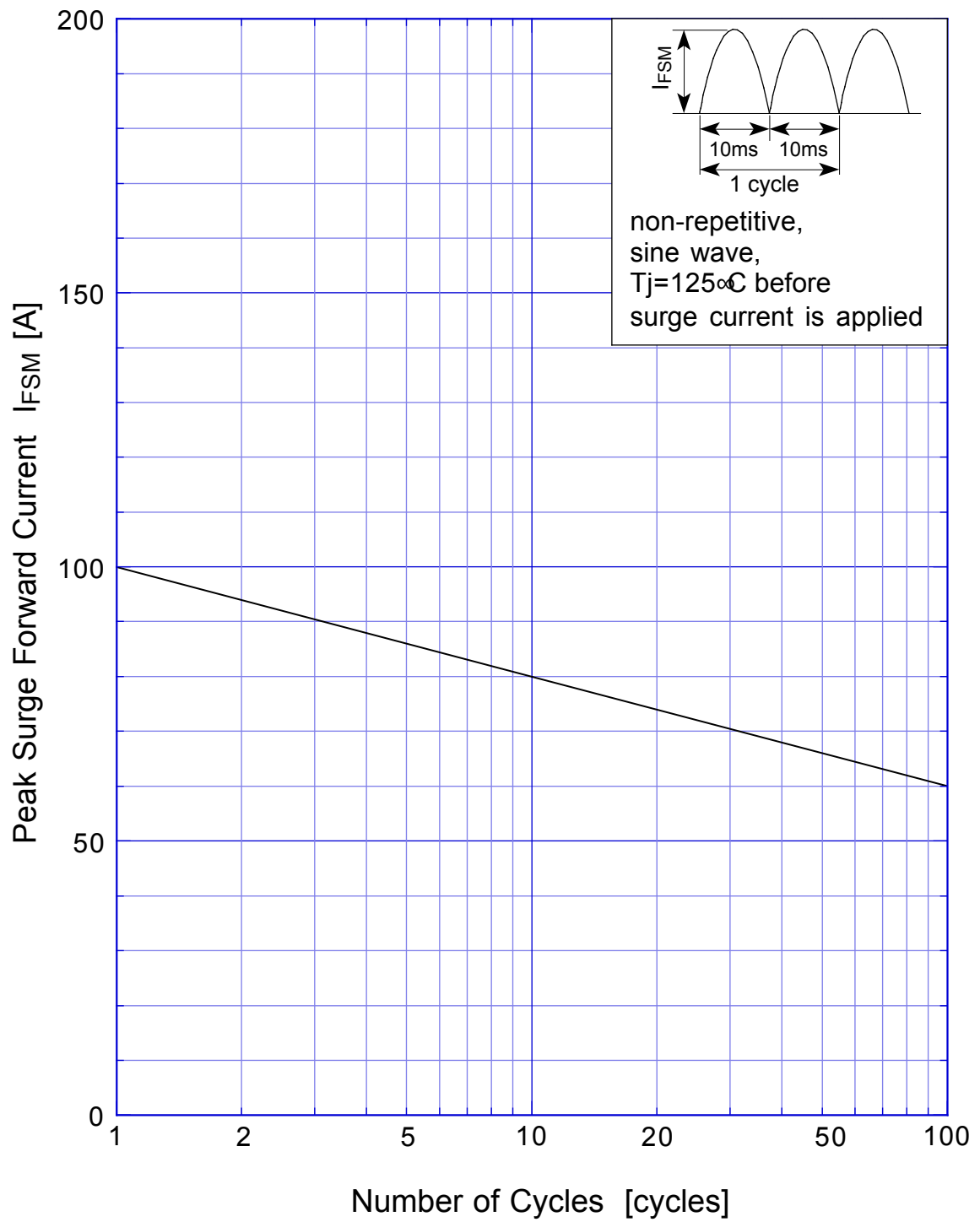
Derating Curve



$V_R = 30\text{V}$



D10SC6MR Peak Surge Forward Capability



SBD Repetitive Surge Reverse Power Derating Curve

