

DE10SC3L

30V 10A

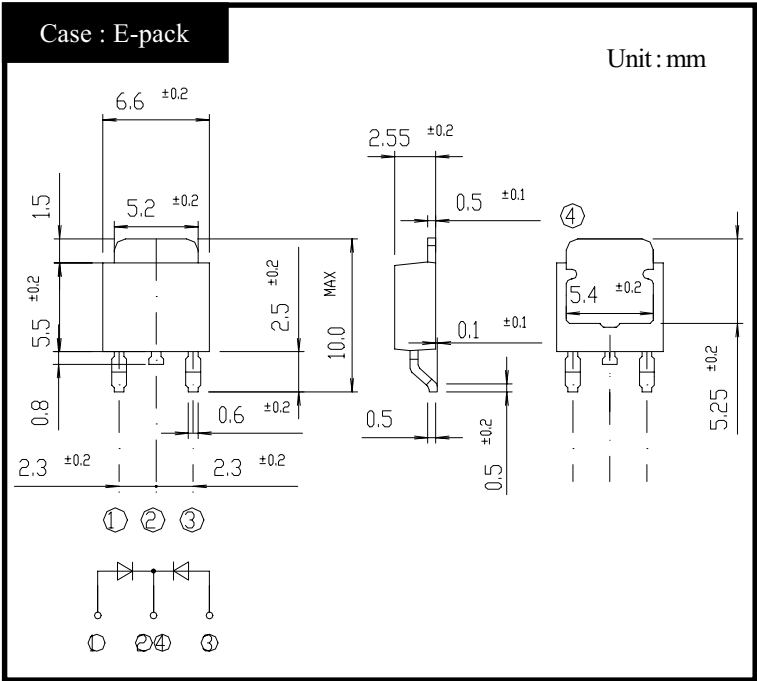
FEATURES

- SMT
- Tj150°C
- Low VF=0.45V
- PRRSM avalanche guaranteed
- High current capacity with Small Package

APPLICATION

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

OUTLINE DIMENSIONS



RATINGS

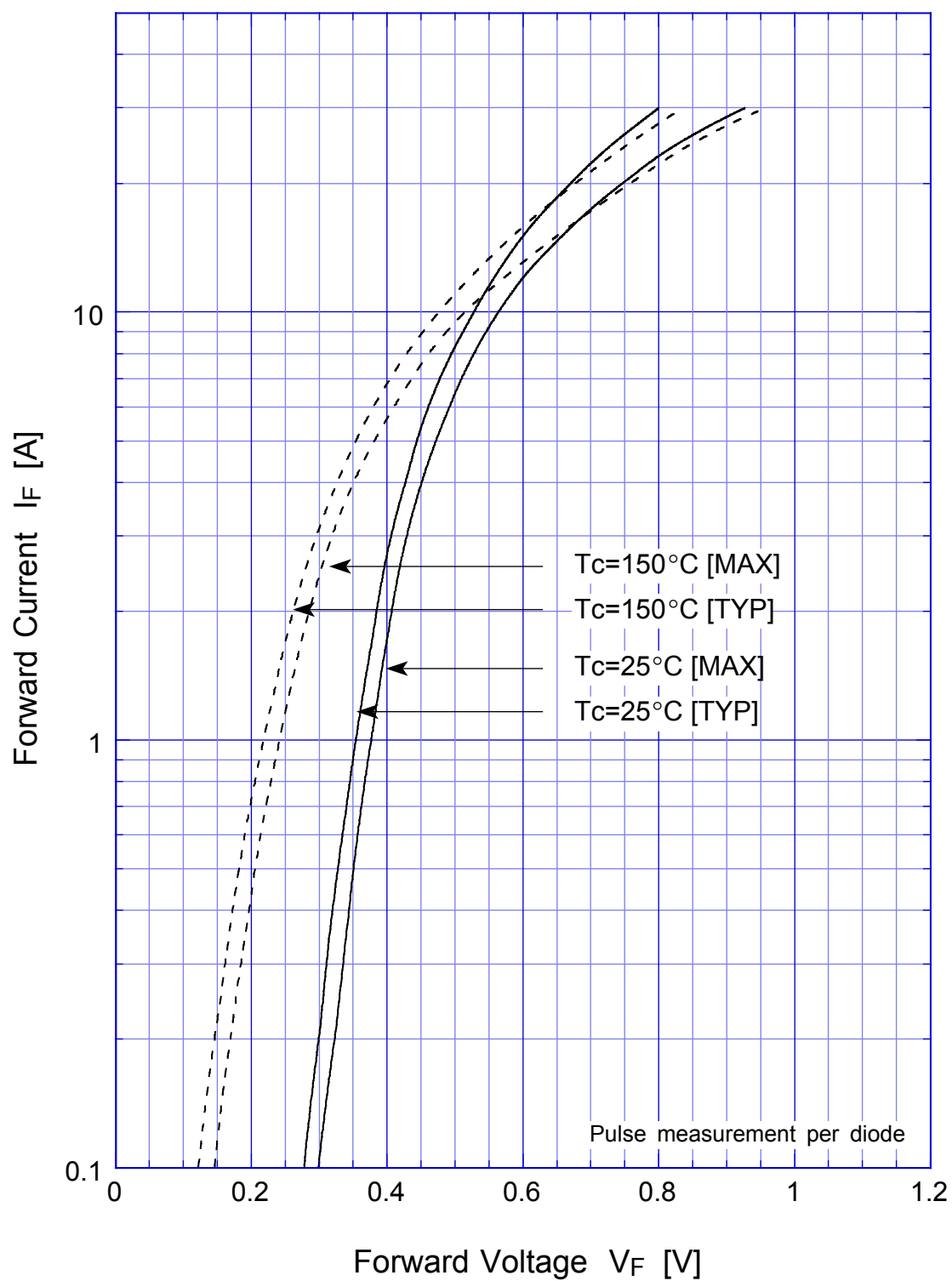
●Absolute Maximum Ratings (If not specified Tc=25°C)

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-55~150	°C
Operating Junction Temperature	Tj		150	°C
Maximum Reverse Voltage	VRM		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 Io/2, Tc=124°C	10	A
Peak Surge Forward Current	IFSM	50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=25°C	100	A
Repetitive Peak Surge Reverse Power	PRRSM	Pulse width 10 μ s, Rating of per diode, Tj=25°C	330	W

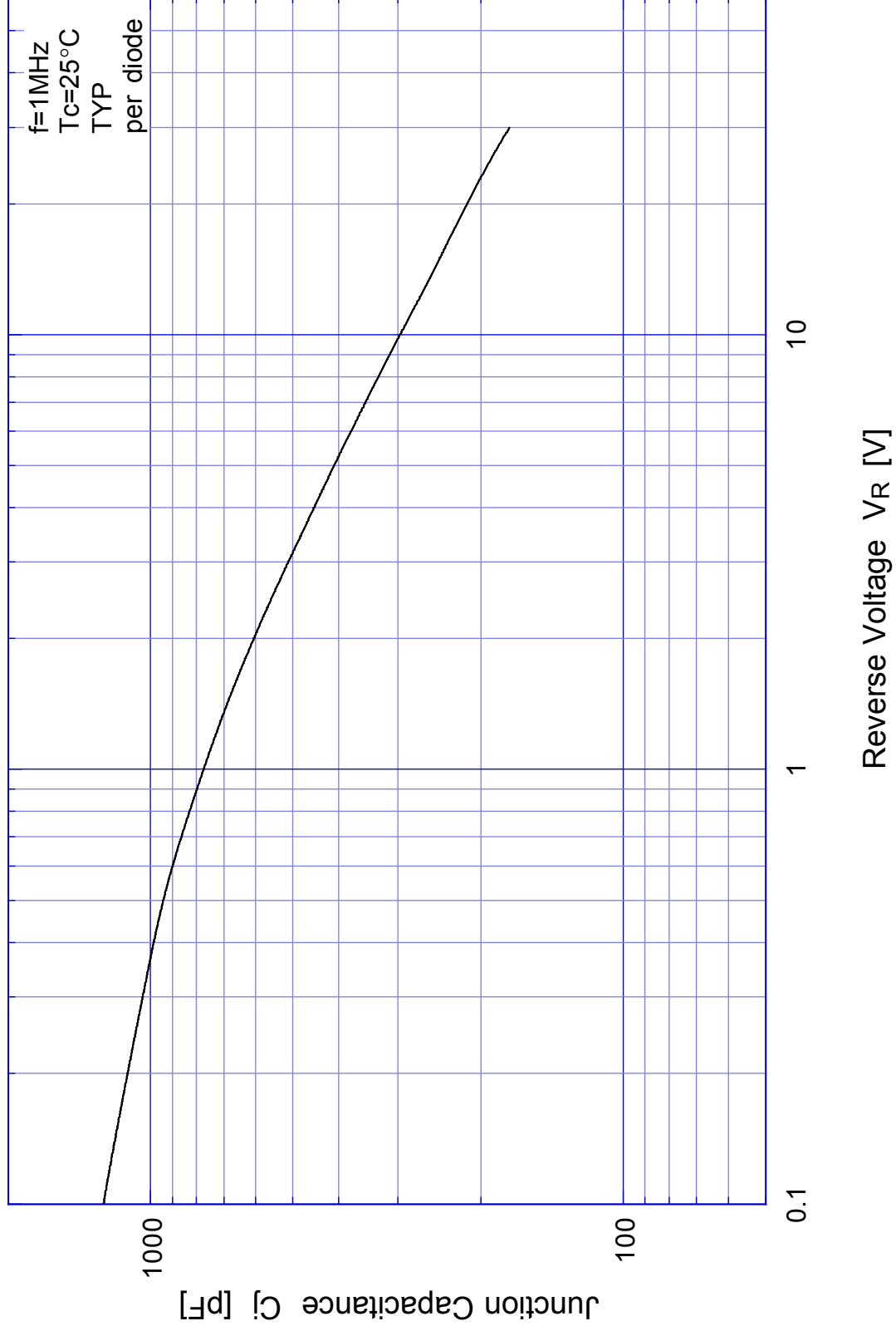
●Electrical Characteristics (If not specified Tc=25°C)

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.5.0	mA
Junction Capacitance	Cj	f=1MHz, VR=10V, Rating of per diode	Typ.290	pF
Thermal Resistance	θ jc	junction to case	Max.4.0	°C/W

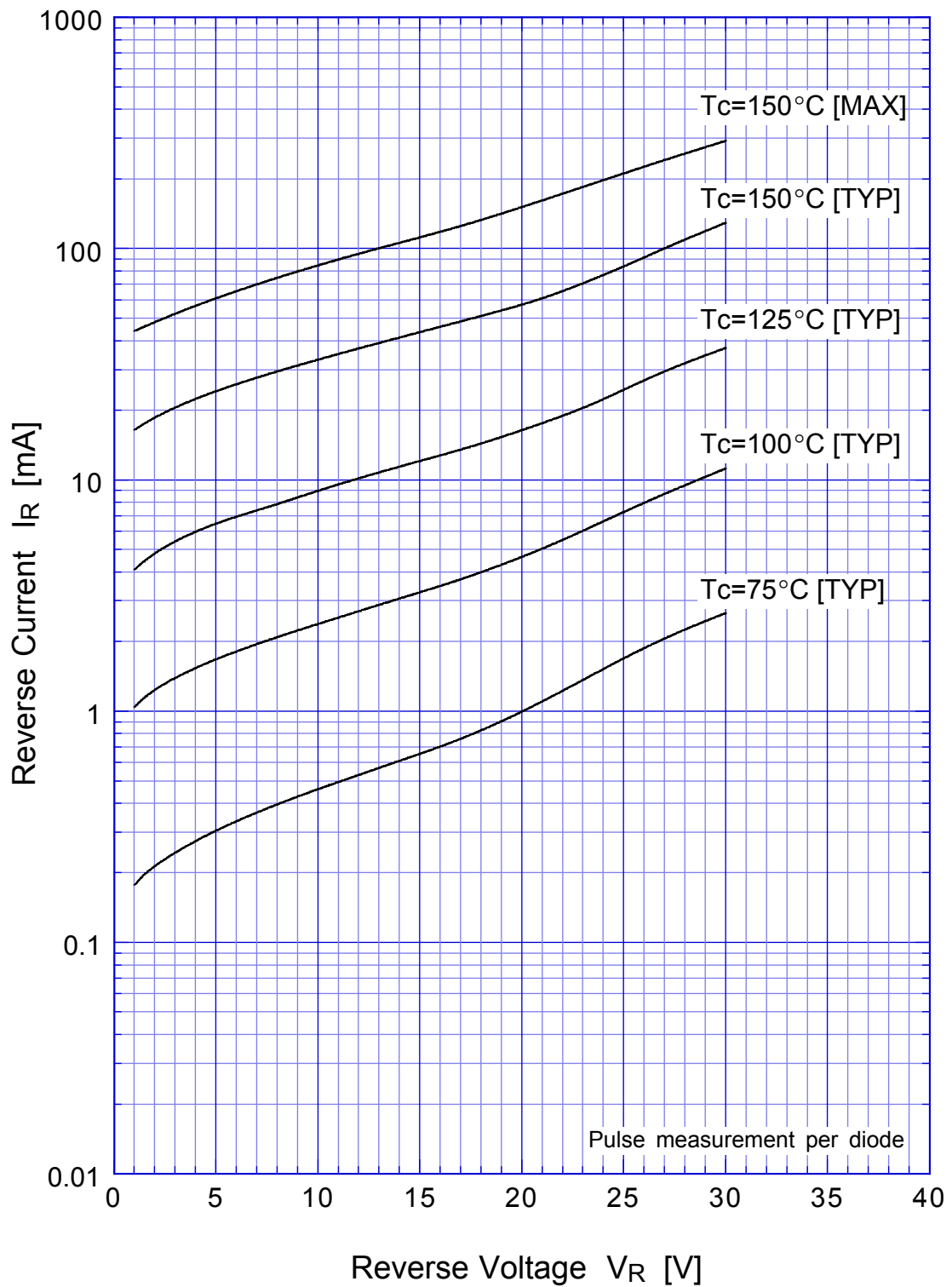
DE10SC3L Forward Voltage



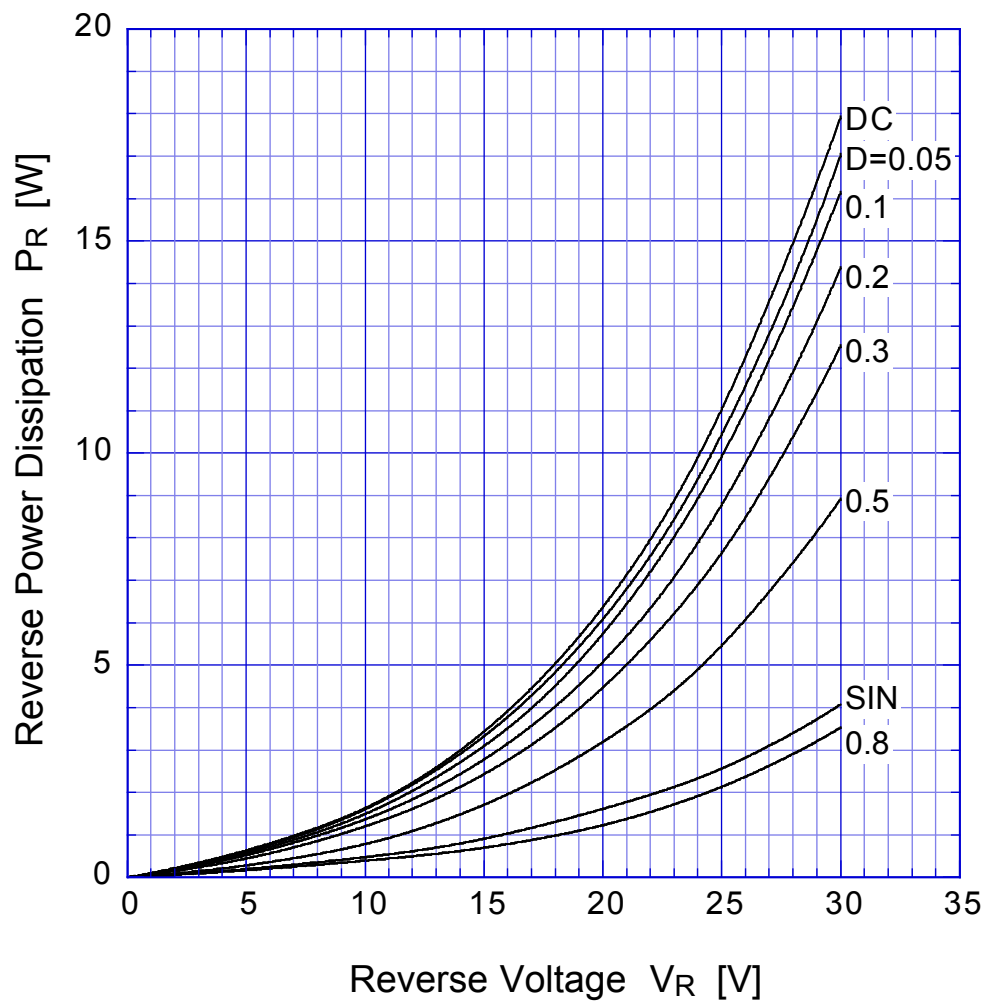
DE10SC3L Junction Capacitance



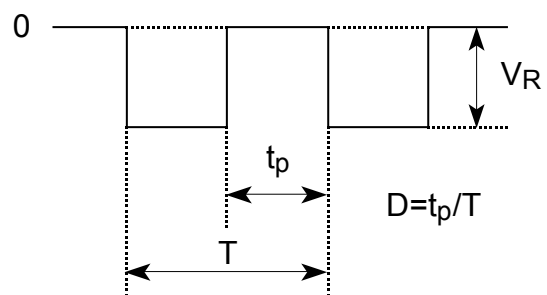
DE10SC3L Reverse Current



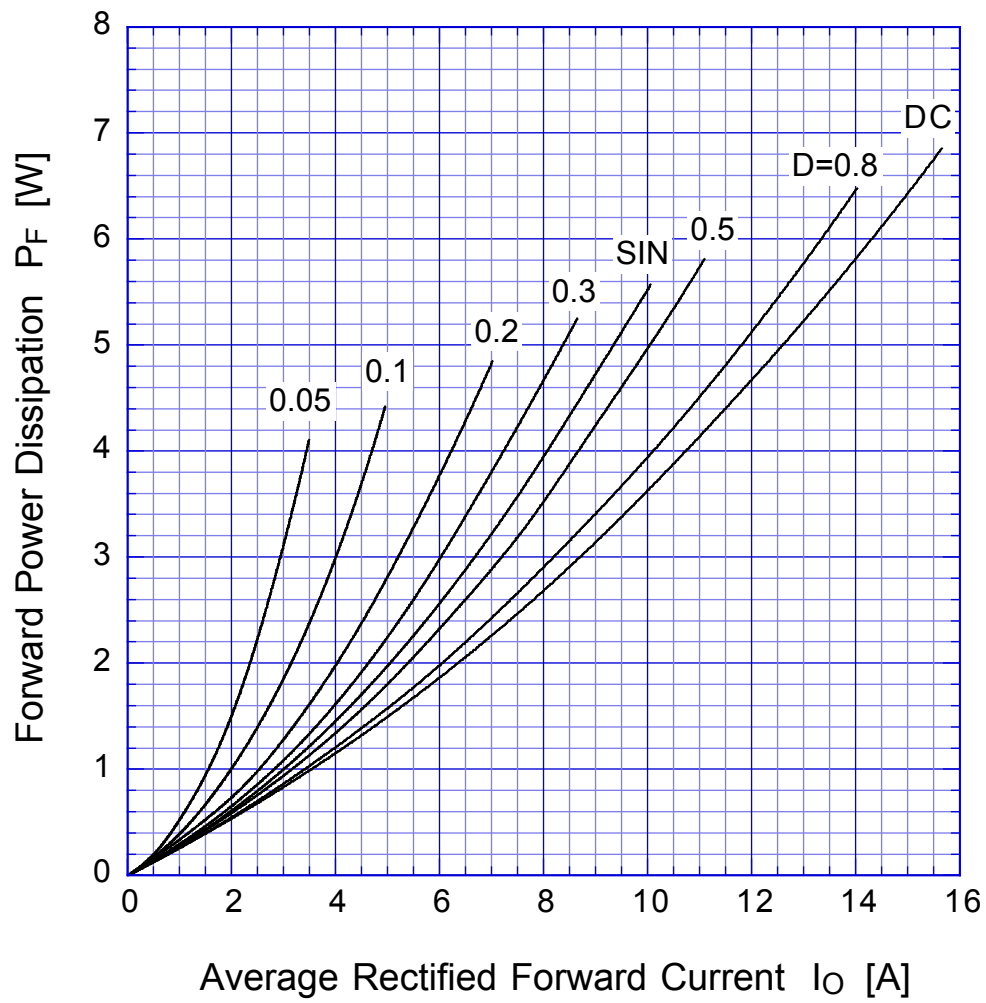
DE10SC3L Reverse Power Dissipation



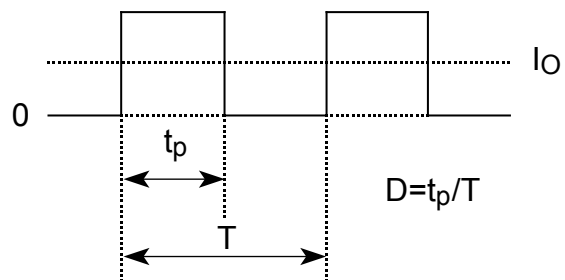
$T_j = 150^\circ\text{C}$



DE10SC3L Forward Power Dissipation

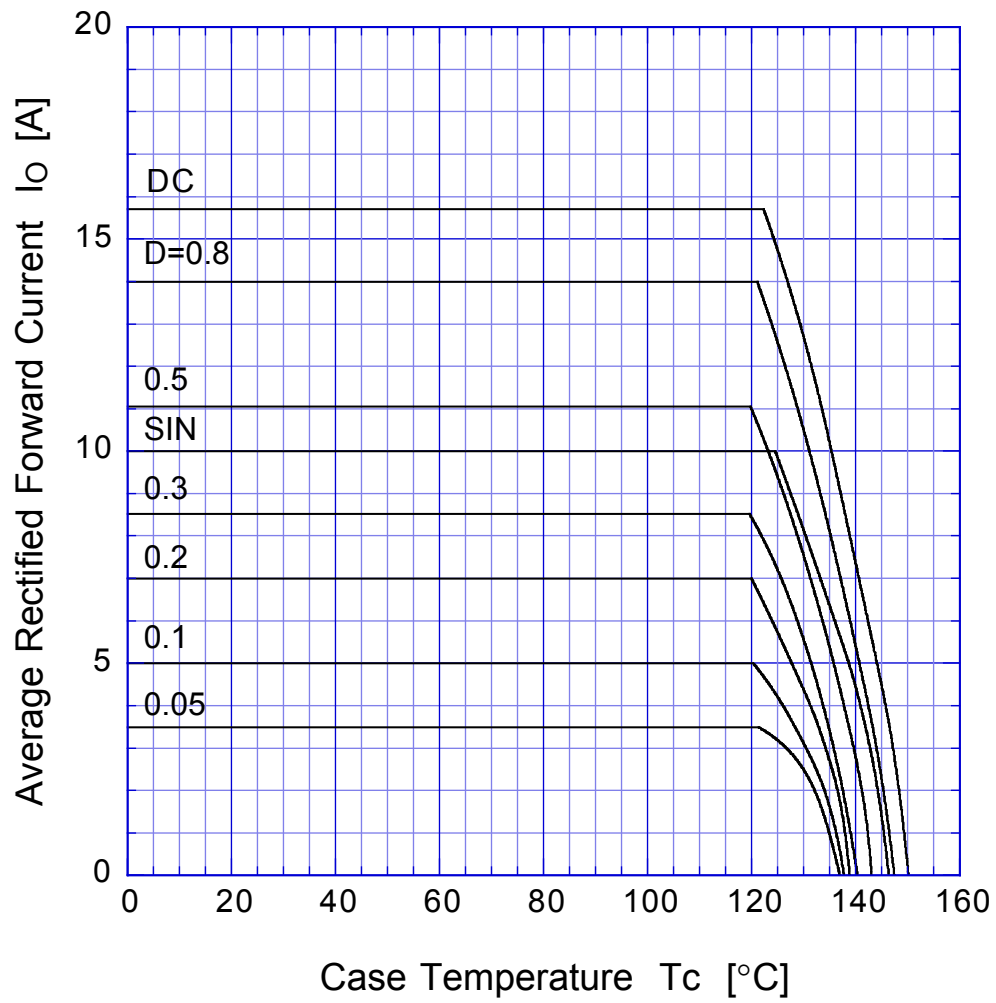


$T_j = 150^\circ\text{C}$

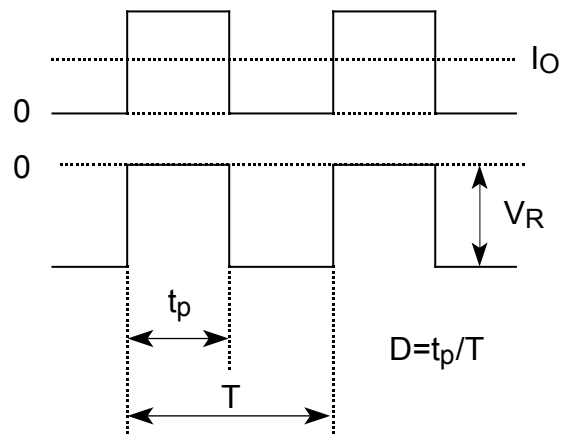


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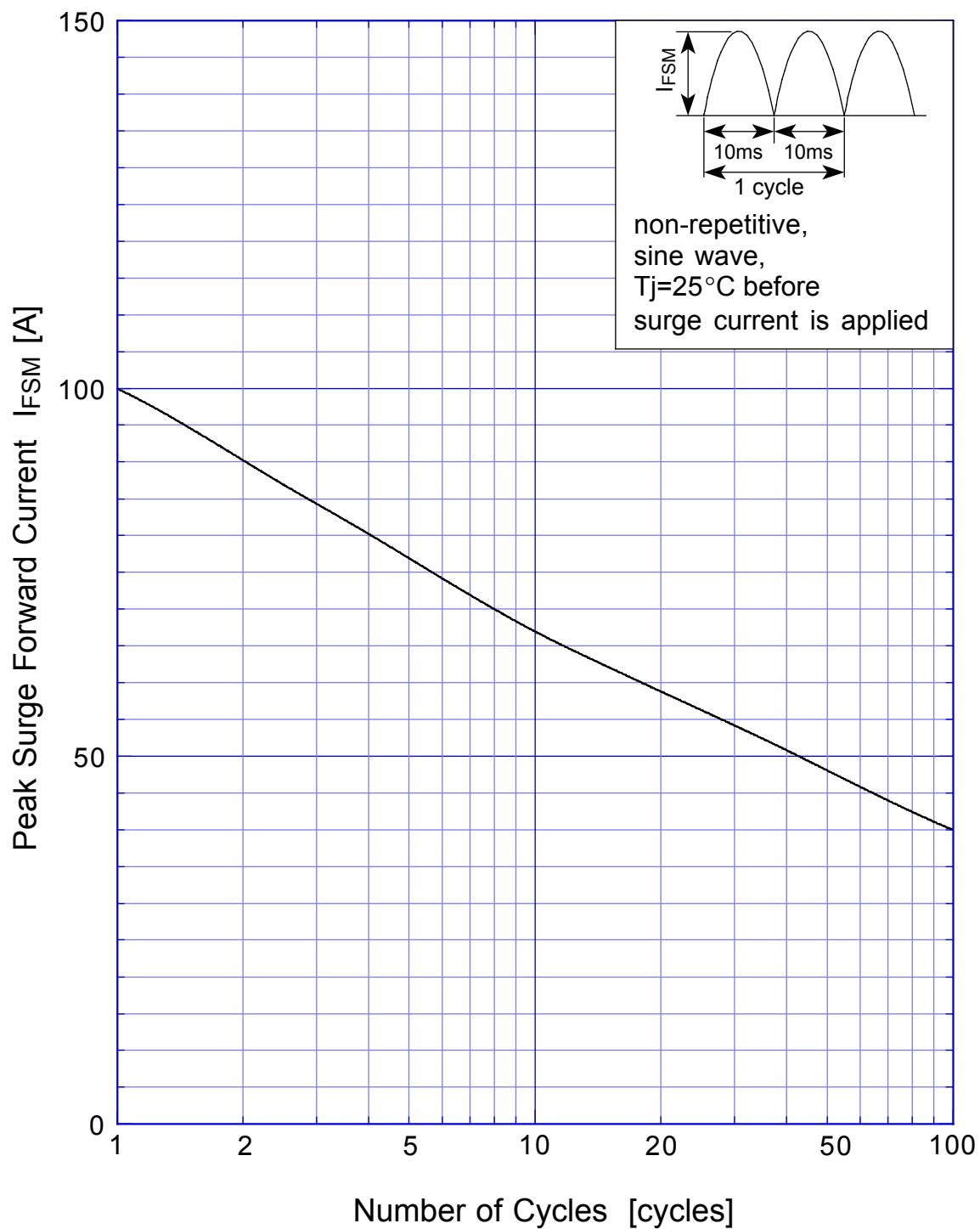
Derating Curve



$V_R = 15\text{V}$



DE10SC3L Peak Surge Forward Capability



SBD Repetitive Surge Reverse Power Derating Curve

