

SHINDENGEN

Schottky Rectifiers (SBD)

Dual

DE10SC3L

30V 10A

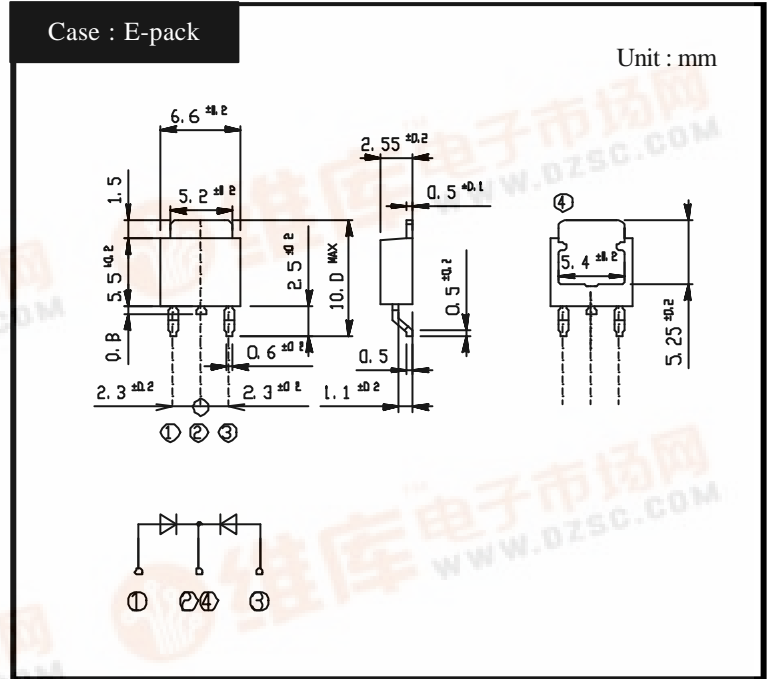
FEATURES

- SMT
- Tj150
- Low $V_F=0.45V$
- P_{RRSM} 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 $T_c=25$)

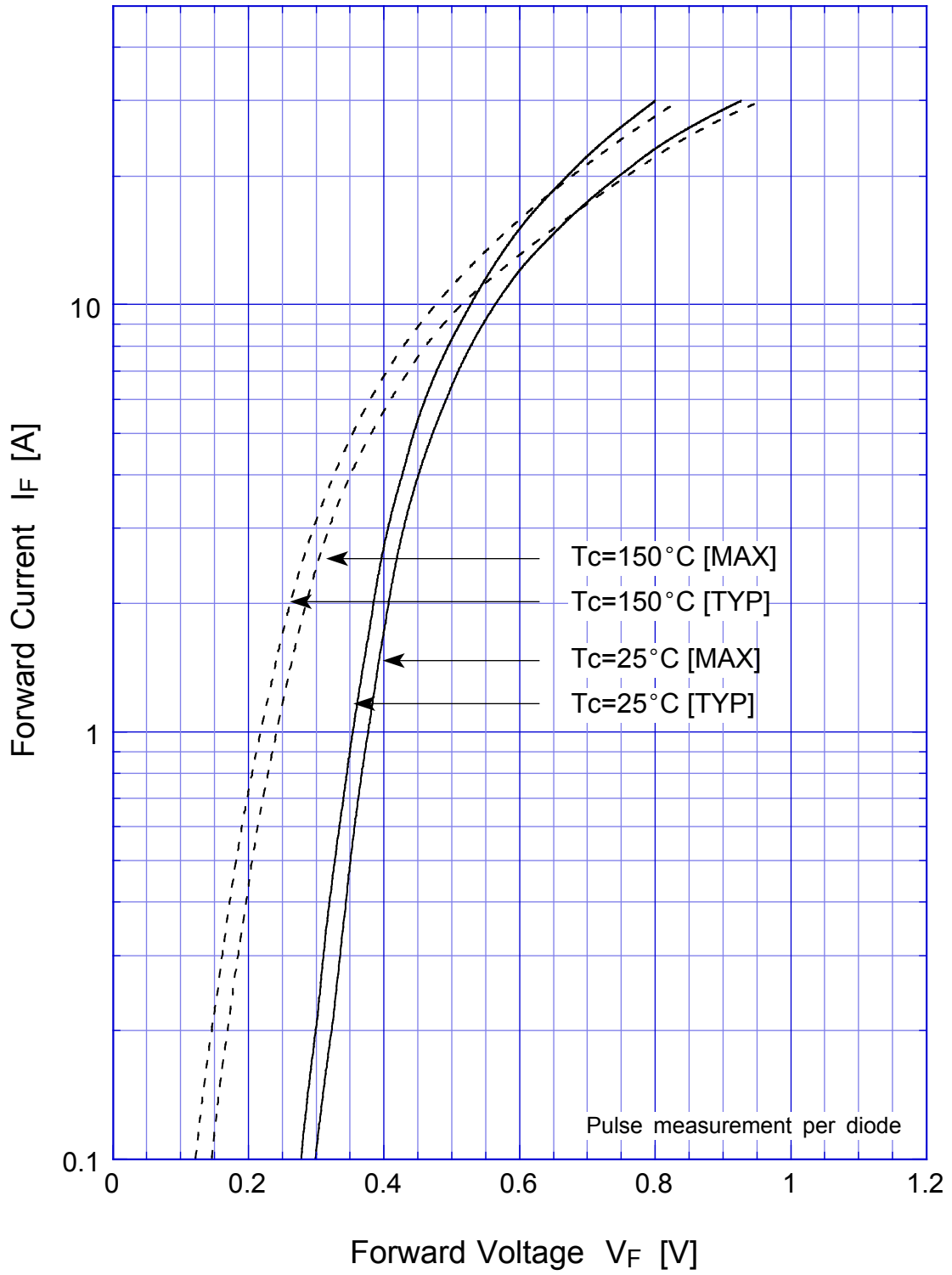
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-55 ~ 150	
Operating Junction Temperature	Tj		150	
Maximum Reverse Voltage	V_{RM}		30	V
Repetitive Peak Surge Reverse Voltage	V_{RRSM}	Pulse width 0.5ms, duty 1/40	35	V
Average Rectified Forward Current	I_O	50Hz sine wave, R-load, Rating for each diode $I_o/2$, $T_c=124$	10	A
Peak Surge Forward Current	I_{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, $T_j=25$	100	A
Repetitive Peak Surge Reverse Power	P_{RRSM}	Pulse width 10 μ s, Rating of per diode, $T_j=25$	330	W

Electrical Characteristics (If not specified $T_c=25$)

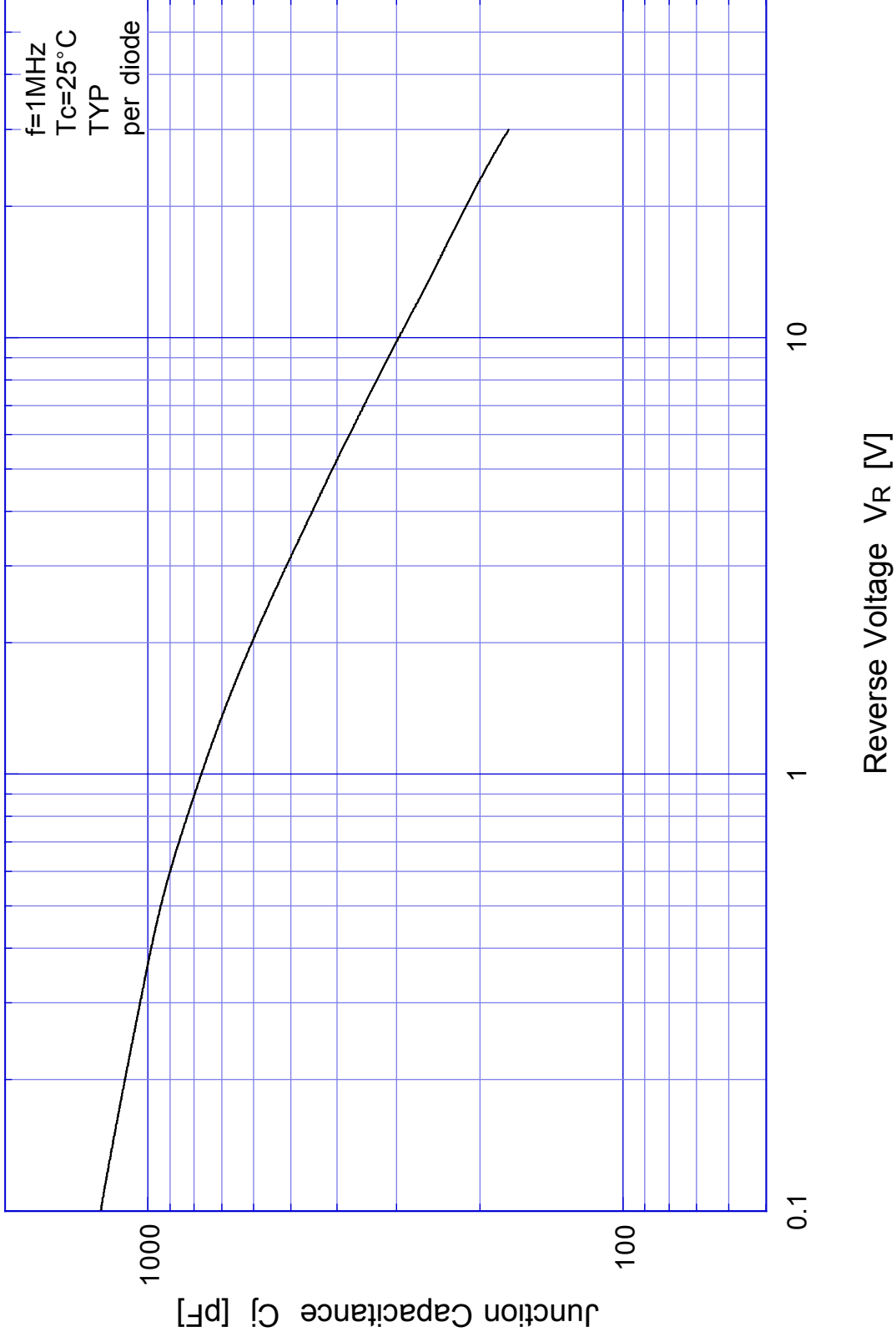
Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V_F	$I_F=4A$, Pulse measurement, Rating of per diode	Max.0.45	V
Reverse Current	I_R	$V_R=V_{RM}$, Pulse measurement, Rating of per diode	Max.5.0	mA
Junction Capacitance	C_j	$f=1MHz$, $V_R=10V$, Rating of per diode	Typ.290	pF
Thermal Resistance	θ_c	junction to case	Max.4.0	/W



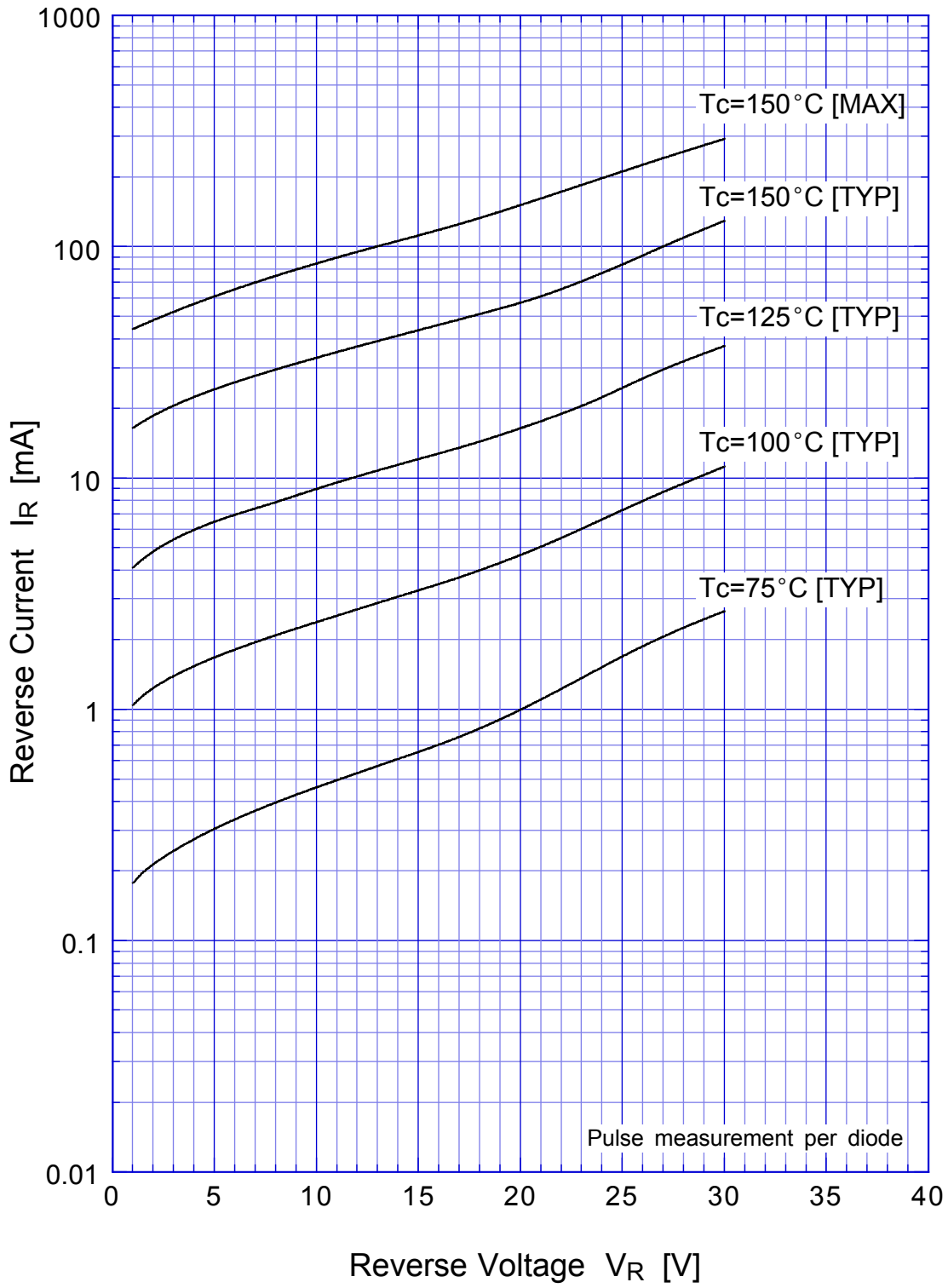
DE10SC3L Forward Voltage



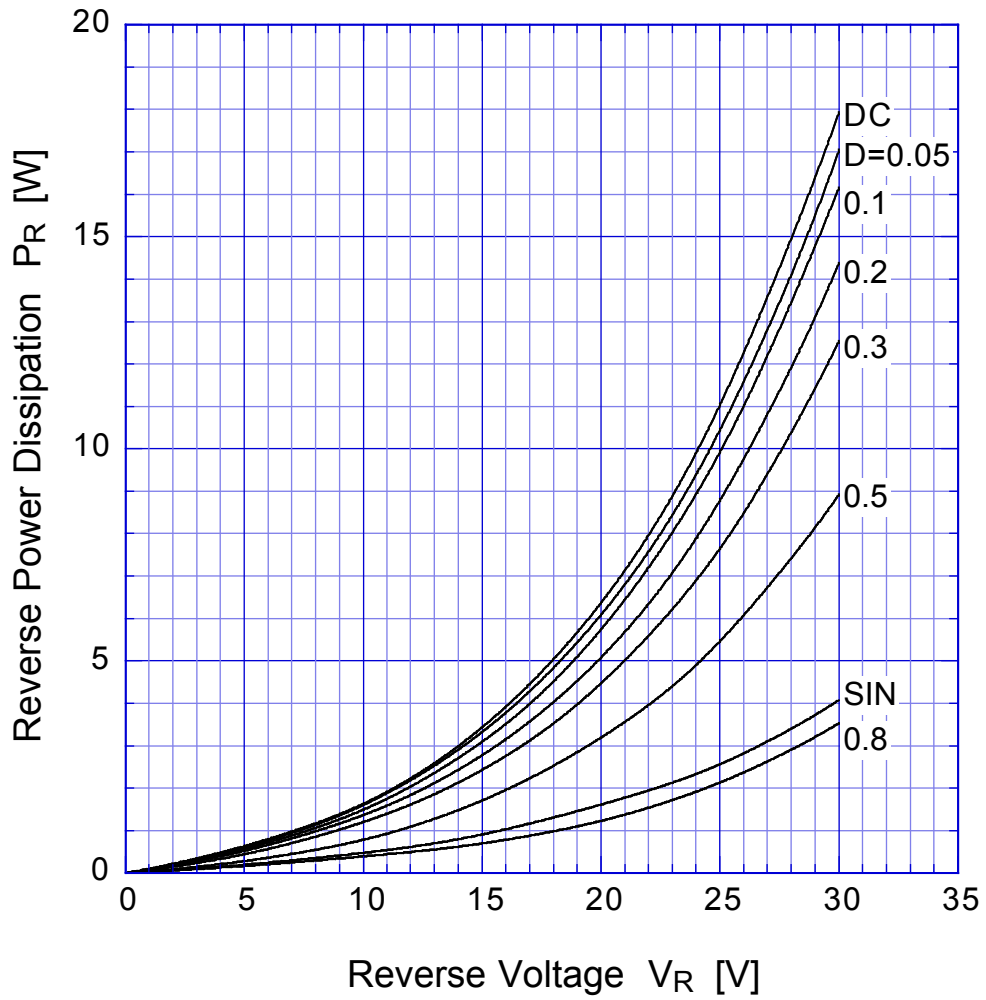
DE10SC3L Junction Capacitance



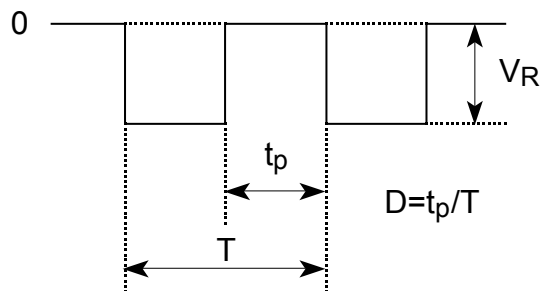
DE10SC3L Reverse Current



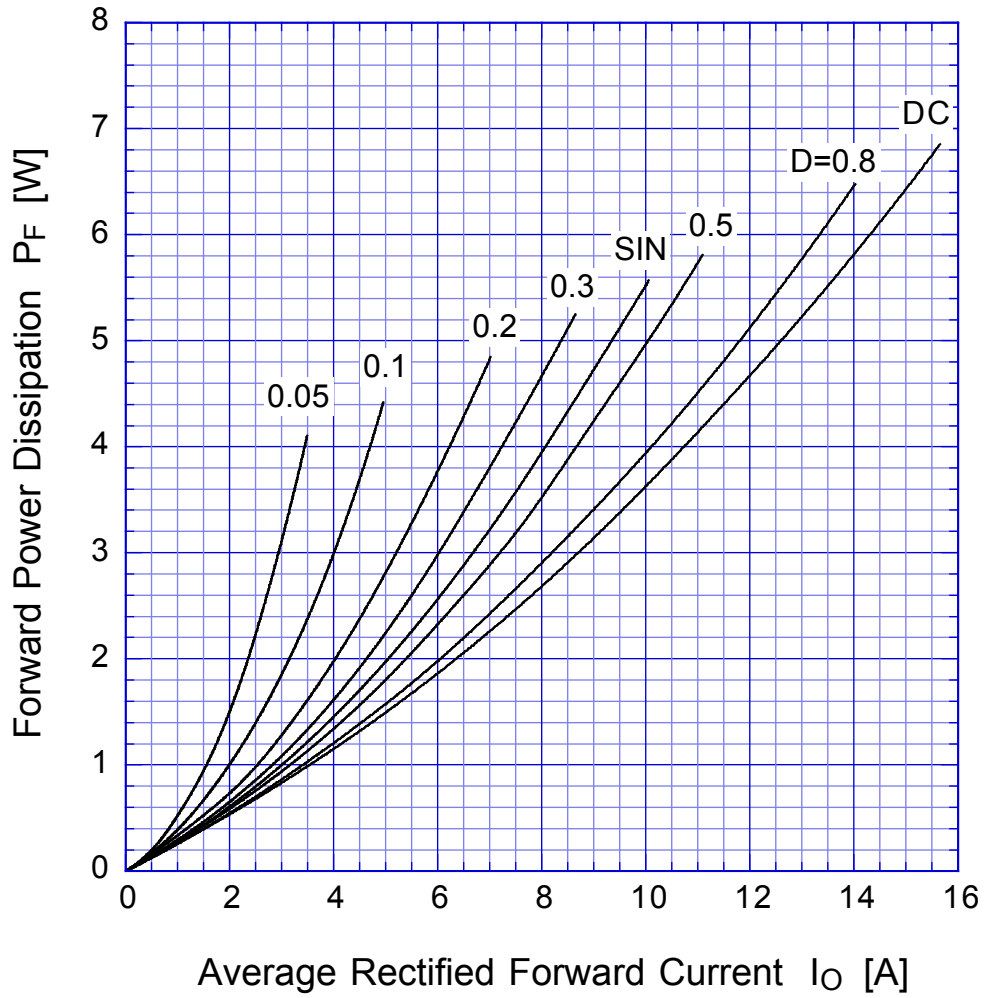
DE10SC3L Reverse Power Dissipation



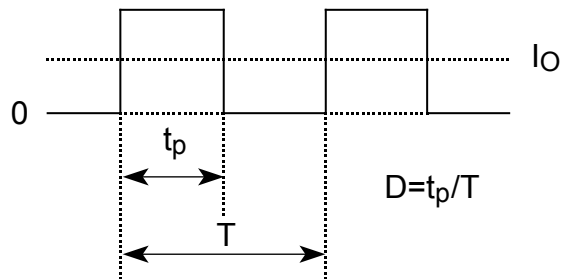
$T_j = 150^\circ\text{C}$



DE10SC3L Forward Power Dissipation

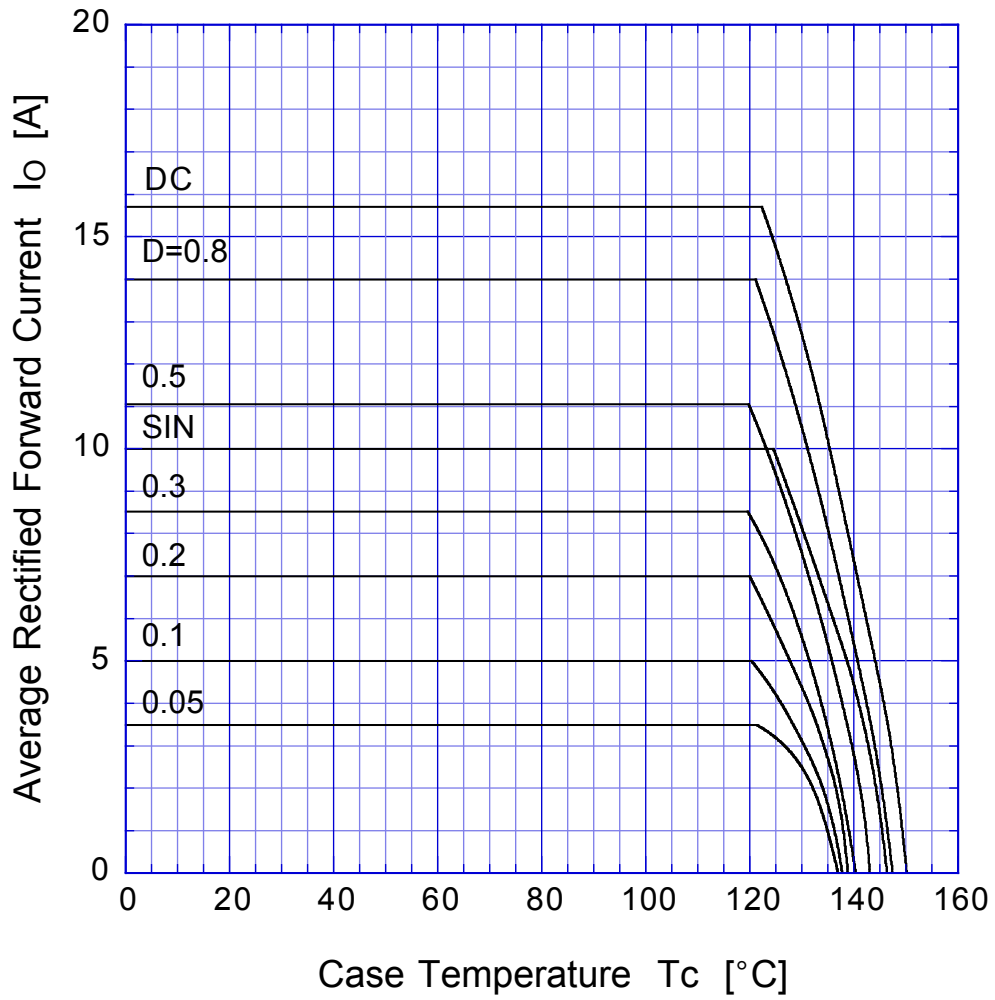


$T_j = 150^\circ\text{C}$

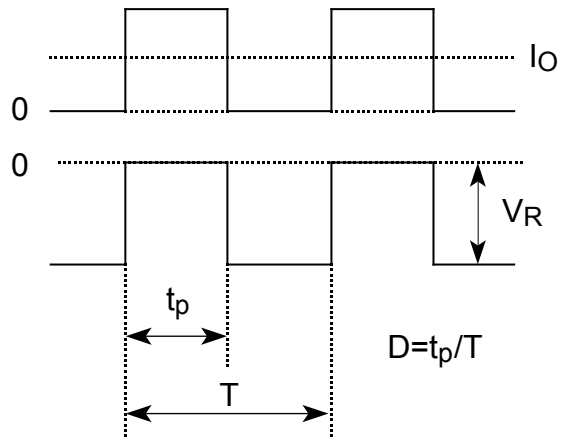


DE10SC3L

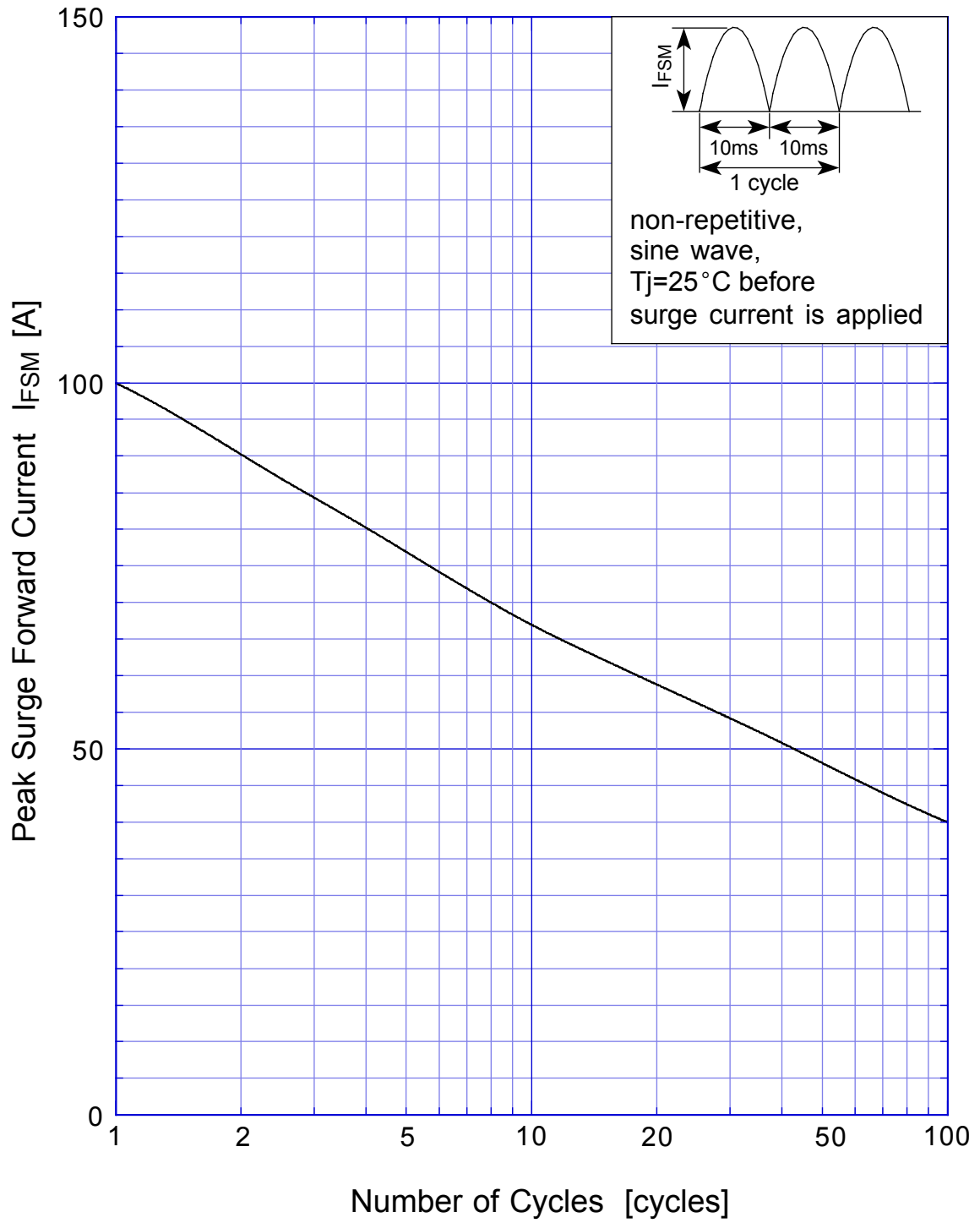
Derating Curve



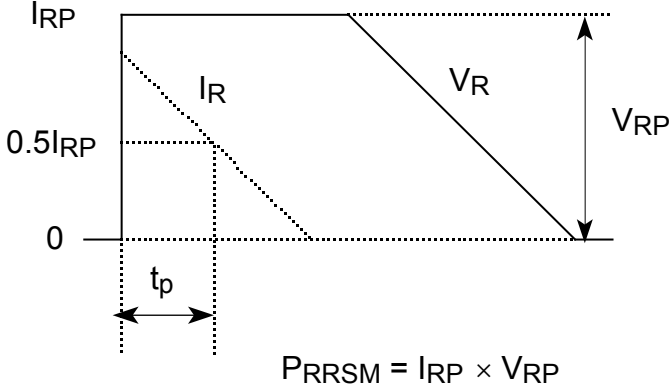
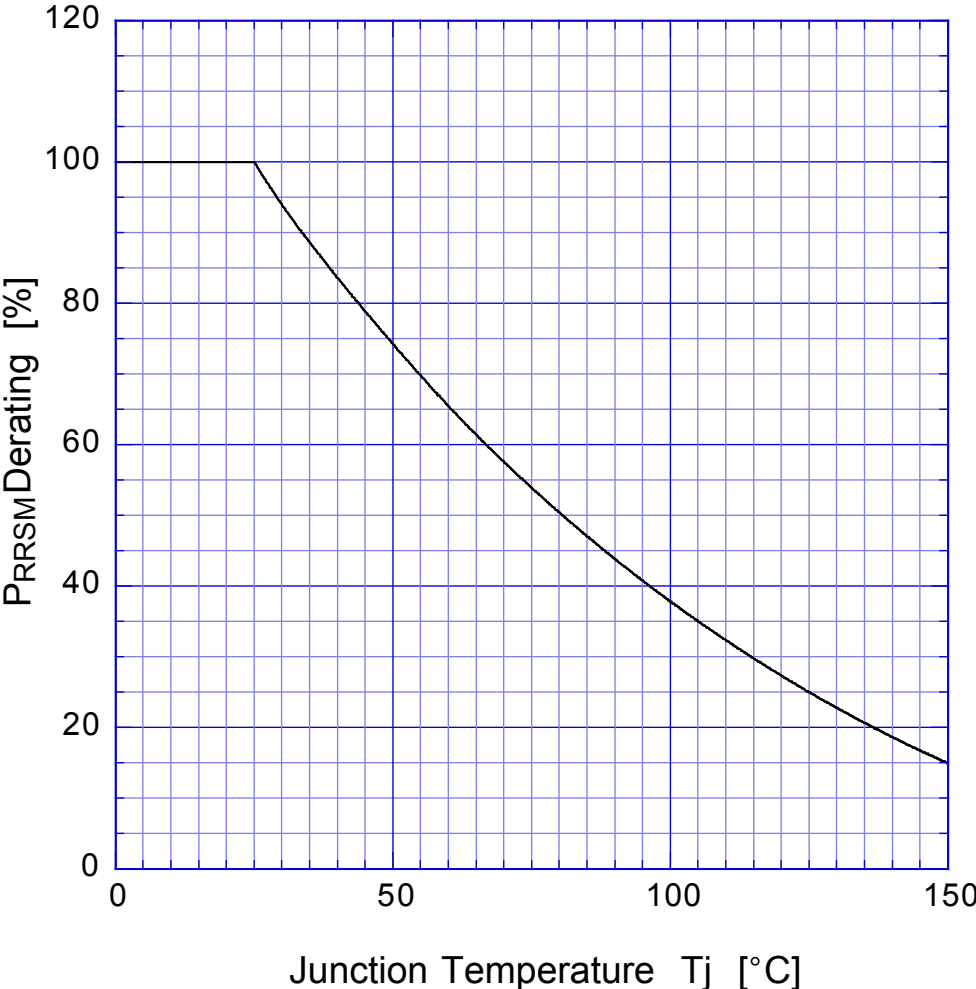
$V_R = 15V$



DE10SC3L Peak Surge Forward Capability



SBD Repetitive Surge Reverse Power Derating Curve



SBD

Repetitive Surge Reverse Power Capability

