

SHINDENGEN

Schottky Rectifiers (SBD)

Single

DE10S3L

30V 10A

FEATURES

SMT
T_j150
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

RATINGS

Absolute Maximum Ratings (If not specified T ≤ 25 °C)

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T _{Stg}		-55 ~ 150	
Operating Junction Temperature	T _j		150	
Maximum Reverse Voltage	V _{RM}		30	V
Repetitive Peak Surge Reverse Voltage	V _{RRSM}	Pulse width 0.5ms, duty1/40	35	V
Average Rectified Forward Current	I _o	50Hz sine wave, T _c =124	10	A
Peak Surge Forward Current	I _{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, T _j =25	250	A
Repetitive Peak Surge Reverse Power	P _{RRSM}	Pulse width 10 μs, T _j =25	660	W

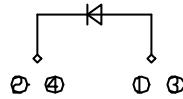
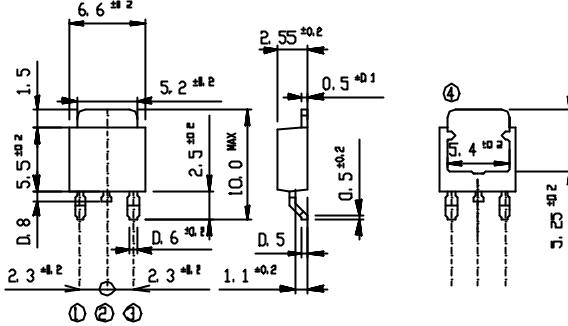
Electrical Characteristics (If not specified T ≤ 25 °C)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V _F	I _F =8A, Pulse measurement	Max. 0.45	V
Reverse Current	I _R	V _R =V _{RM} , Pulse measurement	Max.10	mA
Junction Capacitance	C _j	f=1MHz, V _R =10V	Typ.640	pF
Thermal Resistance	j _C	junction to case	Max.4.0	/W

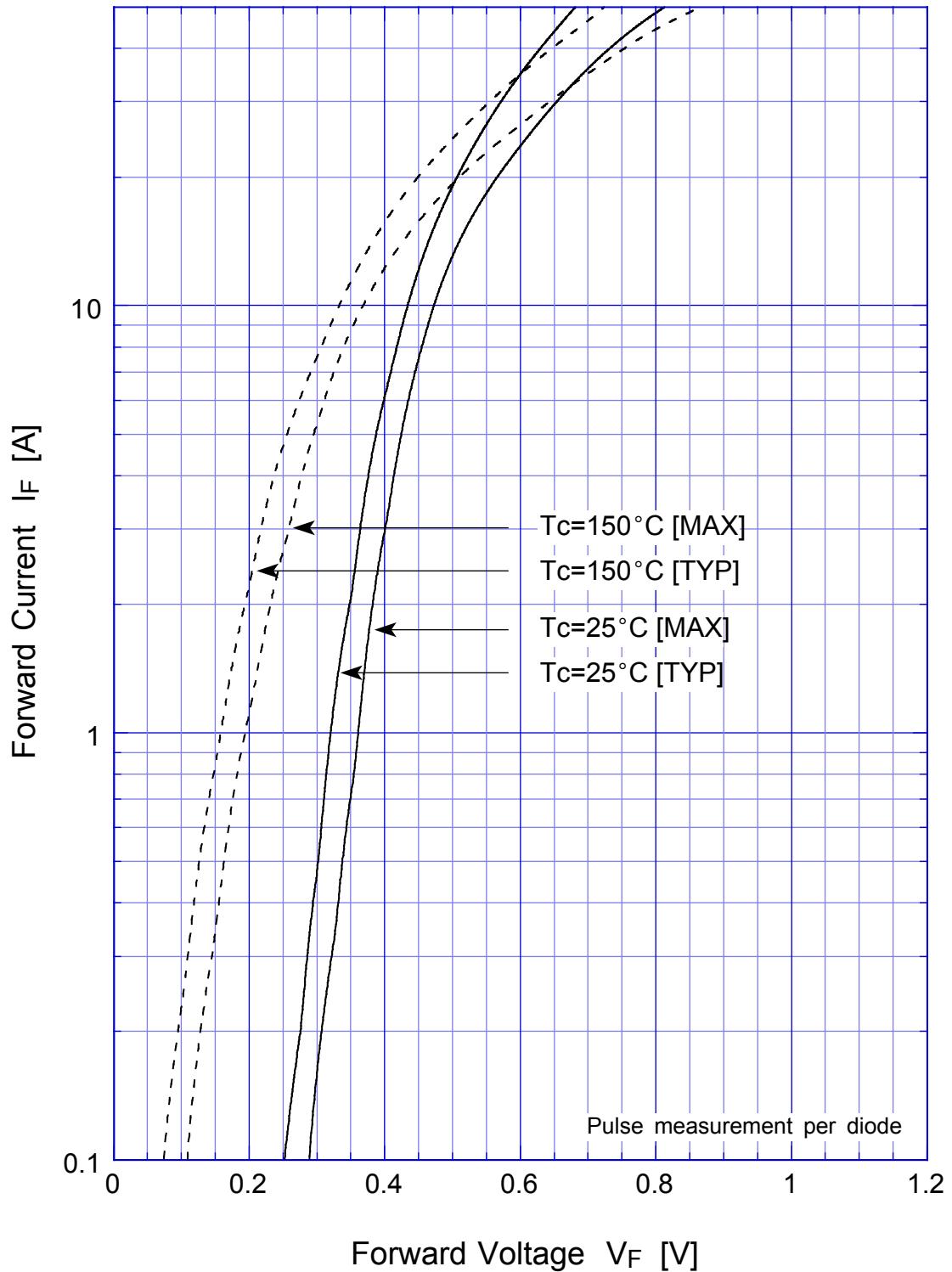
OUTLINE DIMENSIONS

Case : E-pack

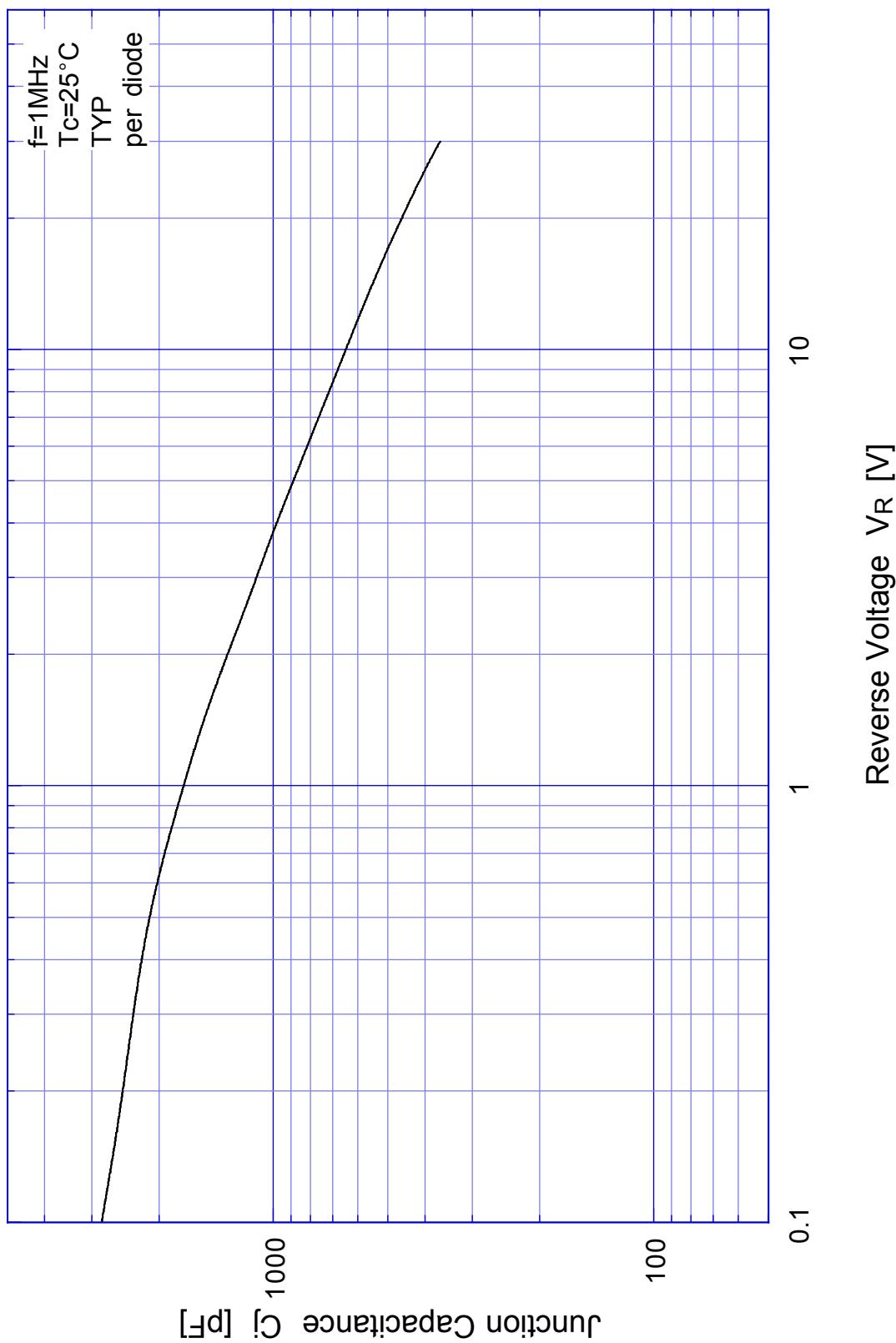
Unit : mm



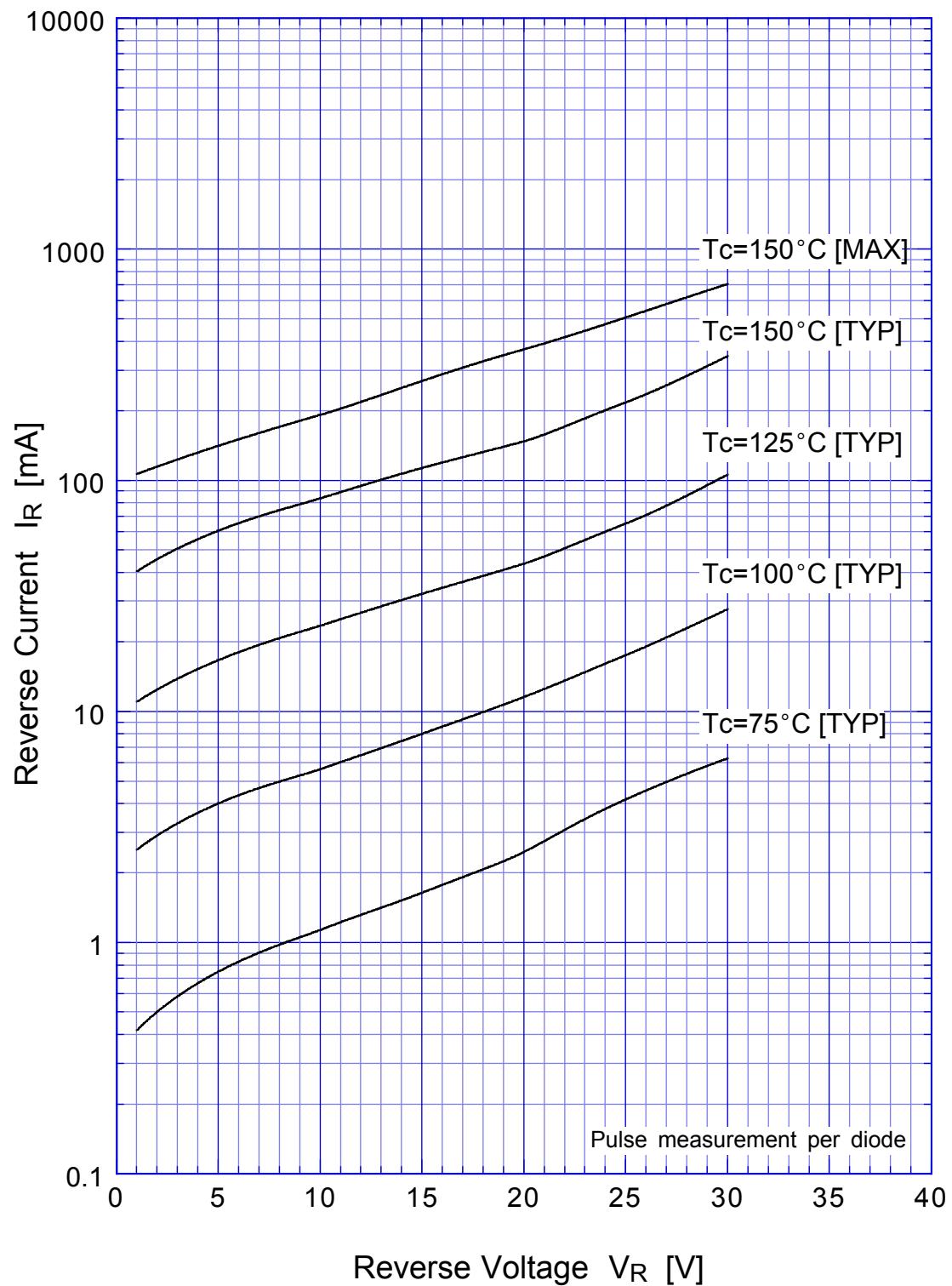
DE10S3L Forward Voltage



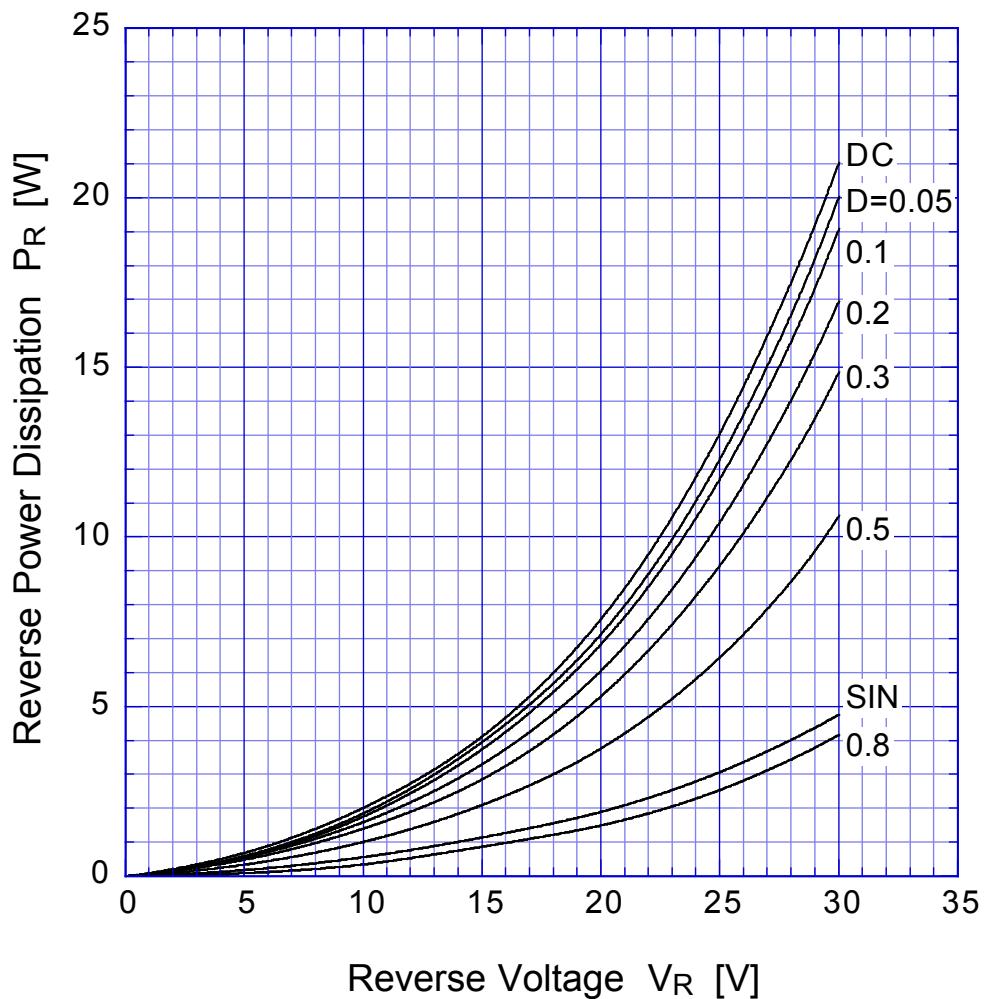
DE10S3L Junction Capacitance



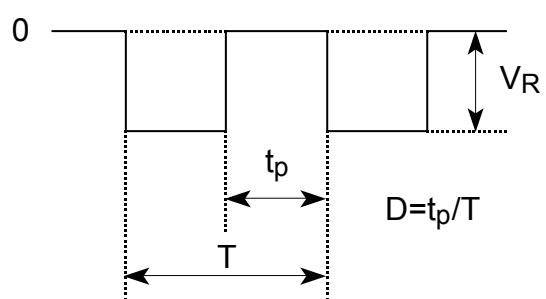
DE10S3L Reverse Current



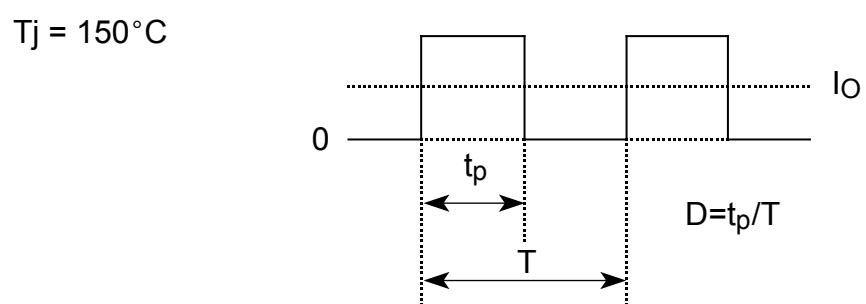
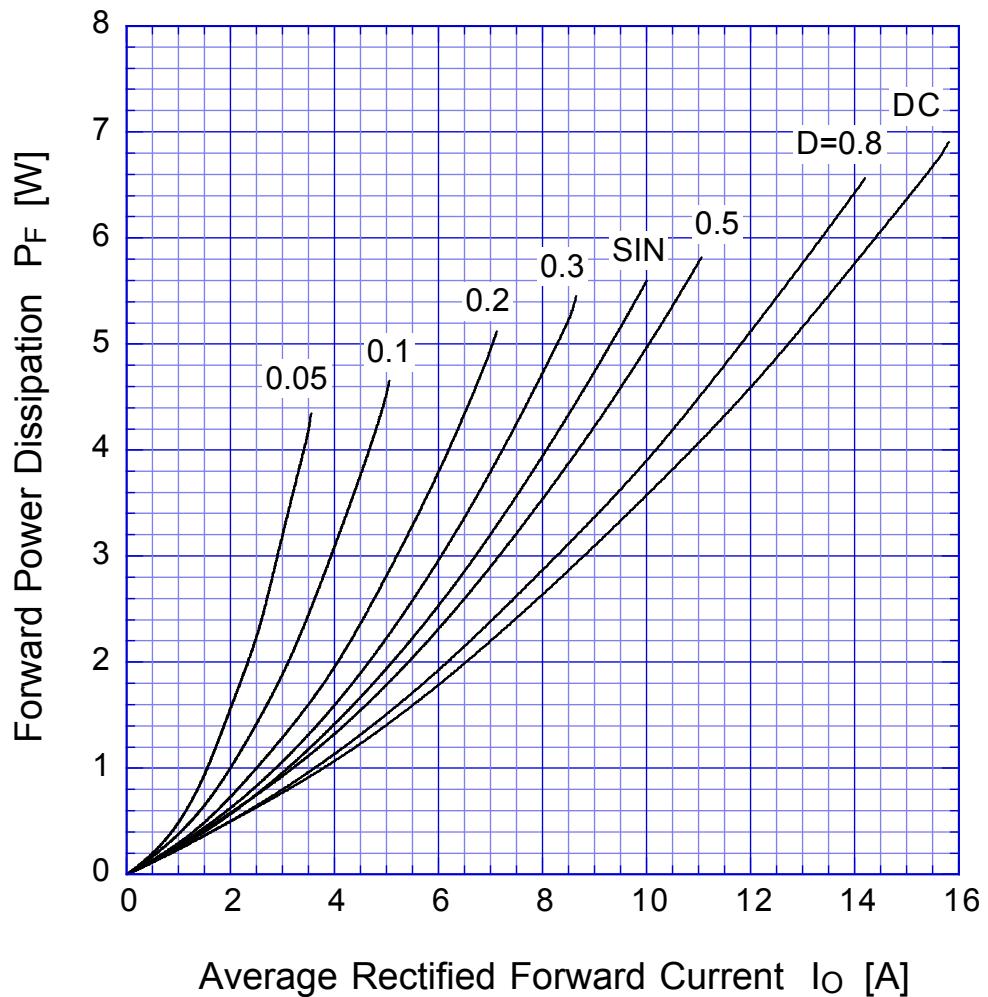
DE10S3L Reverse Power Dissipation

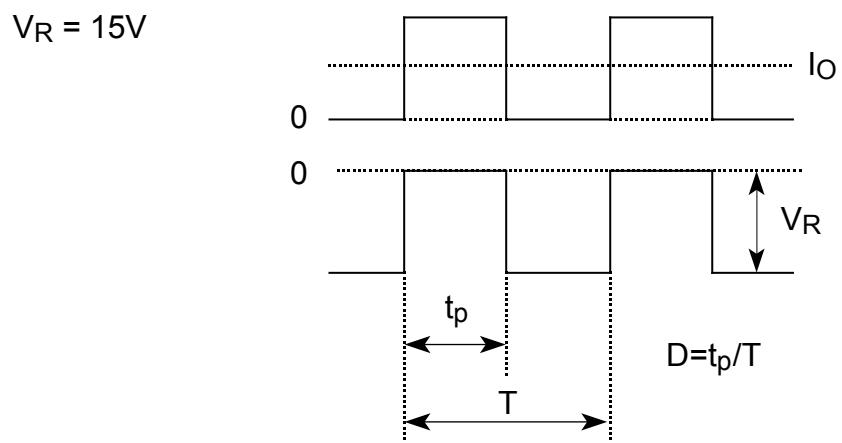
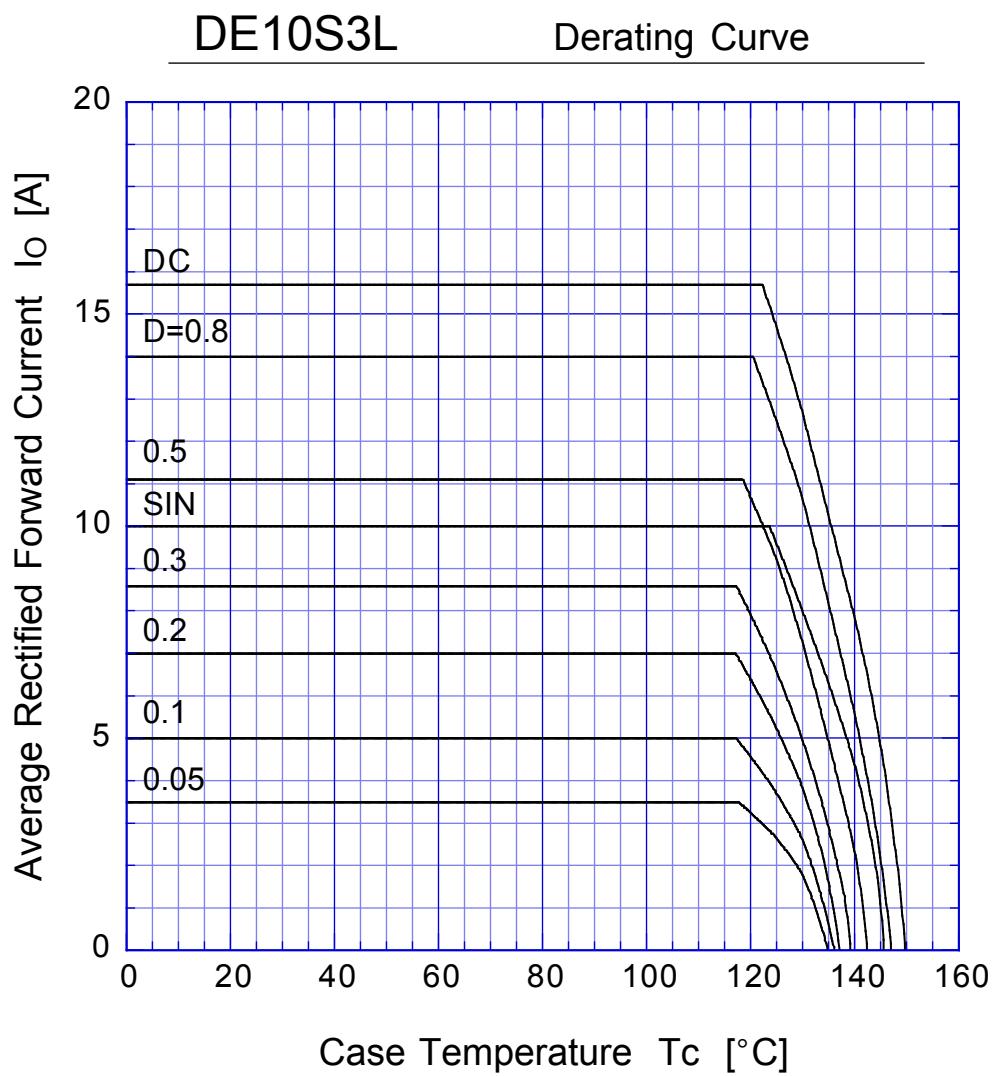


$T_j = 150^\circ\text{C}$



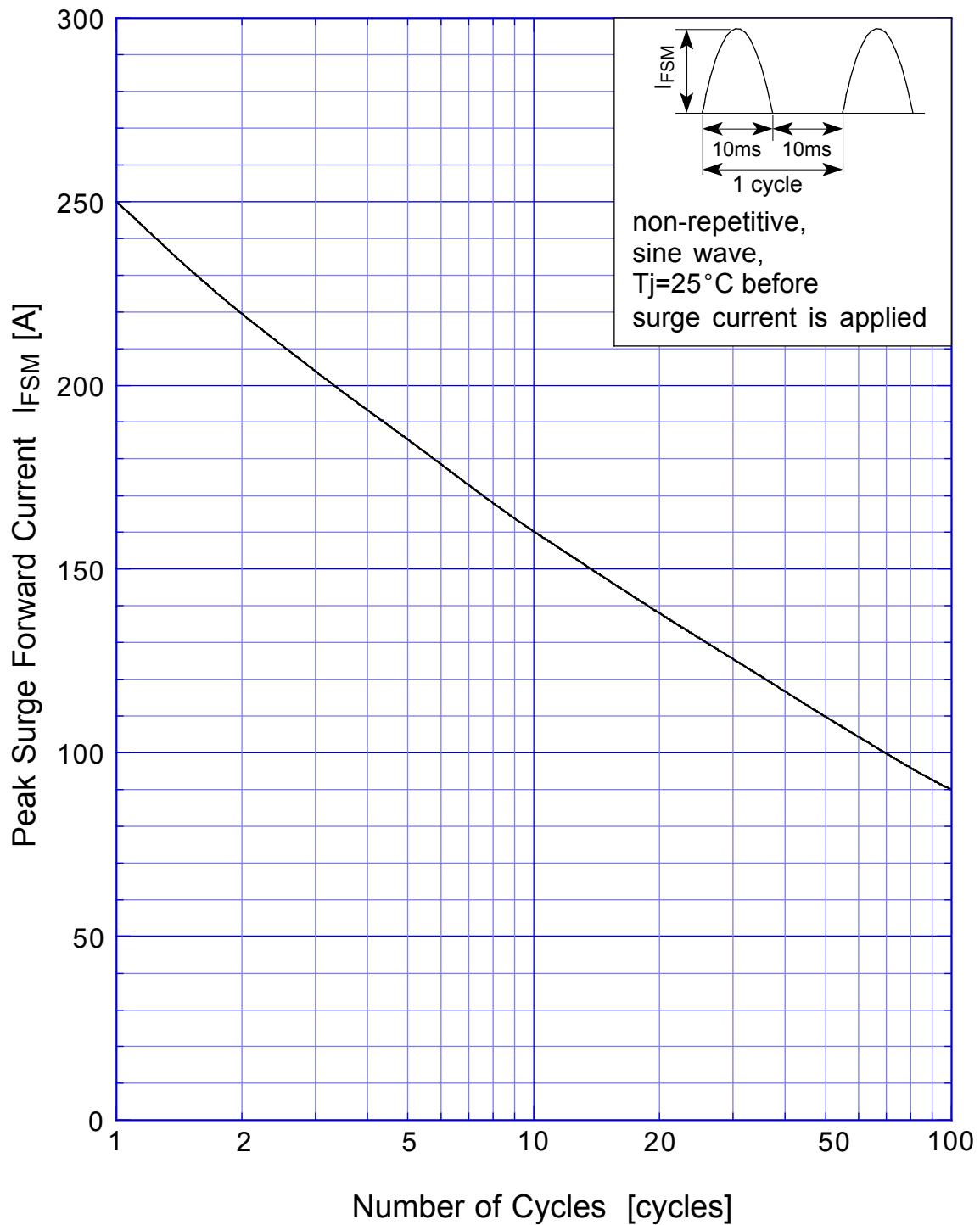
DE10S3L Forward Power Dissipation



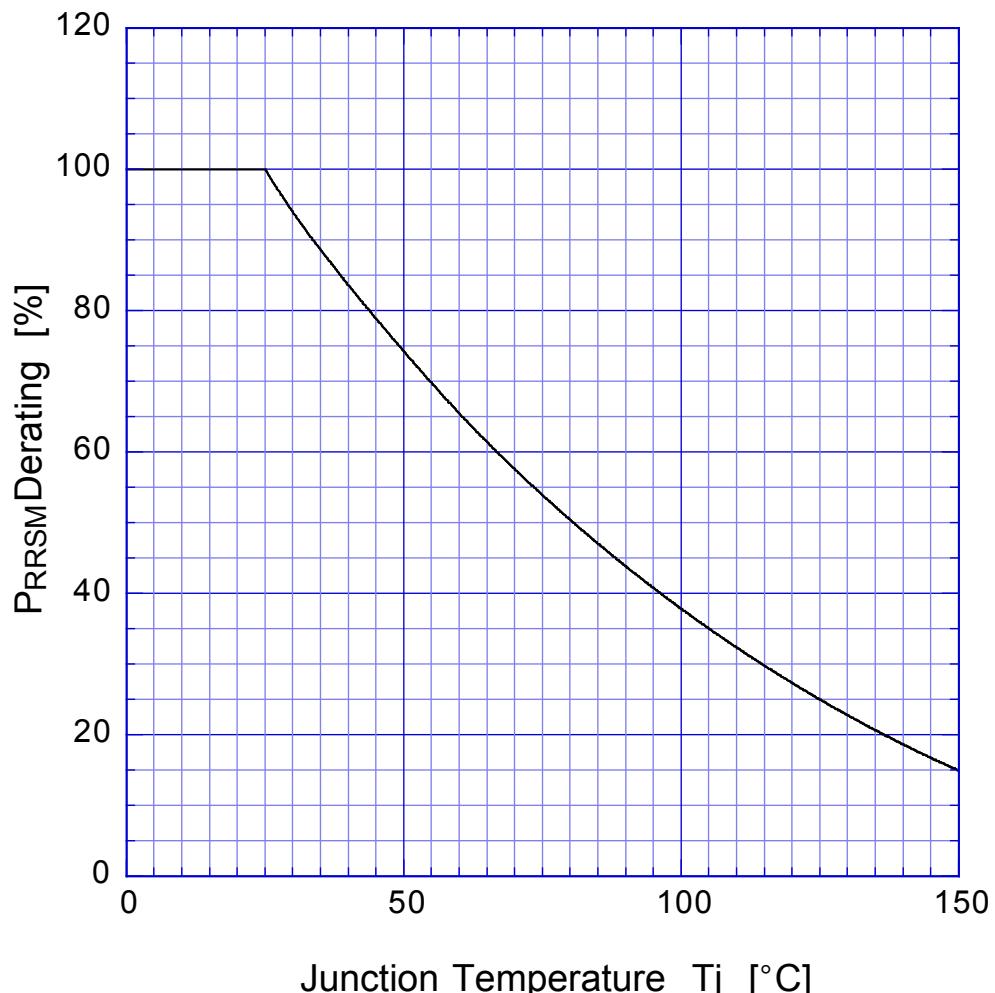


DE10S3L

Peak Surge Forward Capability



SBD Repetitive Surge Reverse Power Derating Curve



SBD Repetitive Surge Reverse Power Capability

