

SHINDENGEN

Schottky Rectifiers (SBD)

Dual

S60SC3ML

30V 60A

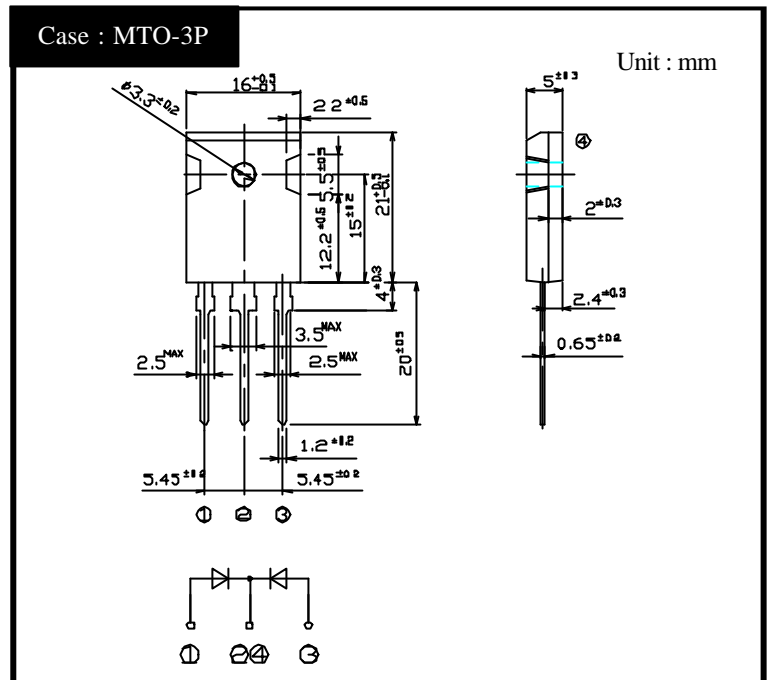
FEATURES

- Tj150
- Low $V_F=0.48V$
- P_{RRSM} avalanche guaranteed

APPLICATION

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

OUTLINE DIMENSIONS



RATINGS

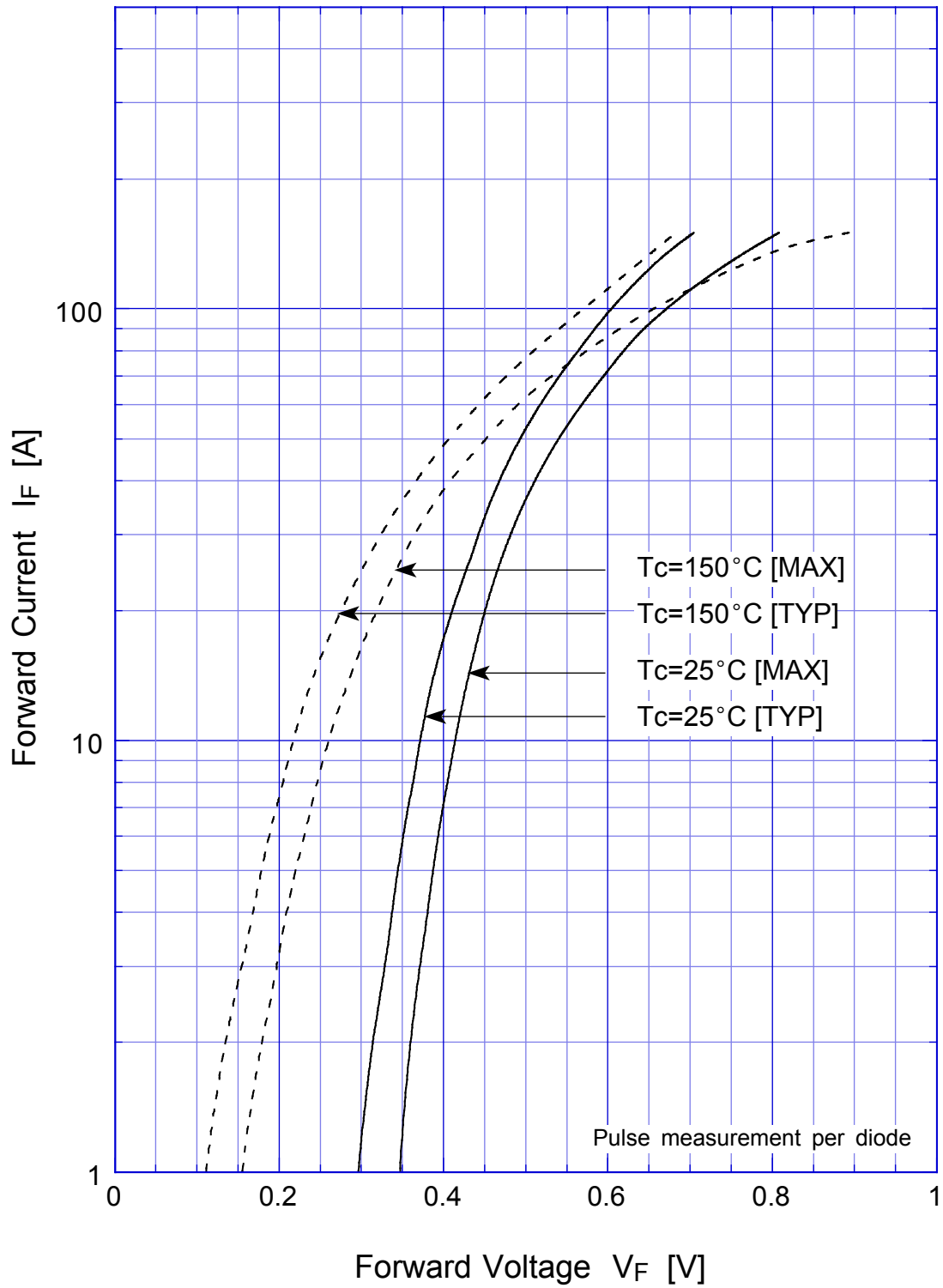
Absolute Maximum Ratings (If not specified $T_c=25$)

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T_{stg}		-40 ~ 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, duty 1/40	35	V
Average Rectified Forward Current	I_o	50Hz sine wave, R-load, Rating for each diode $I_o/2$, $T_c=130$	60	A
Peak Surge Forward Current	I_{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, $T_j=25$	500	A
Repetitive Peak Surge Reverse Power	P_{RRSM}	Pulse width 10 μ s, Rating of per diode, $T_j=25$	1000	W
Mounting Torque	TOR	(Recommended torque :0.5N·m)	0.8	N·m

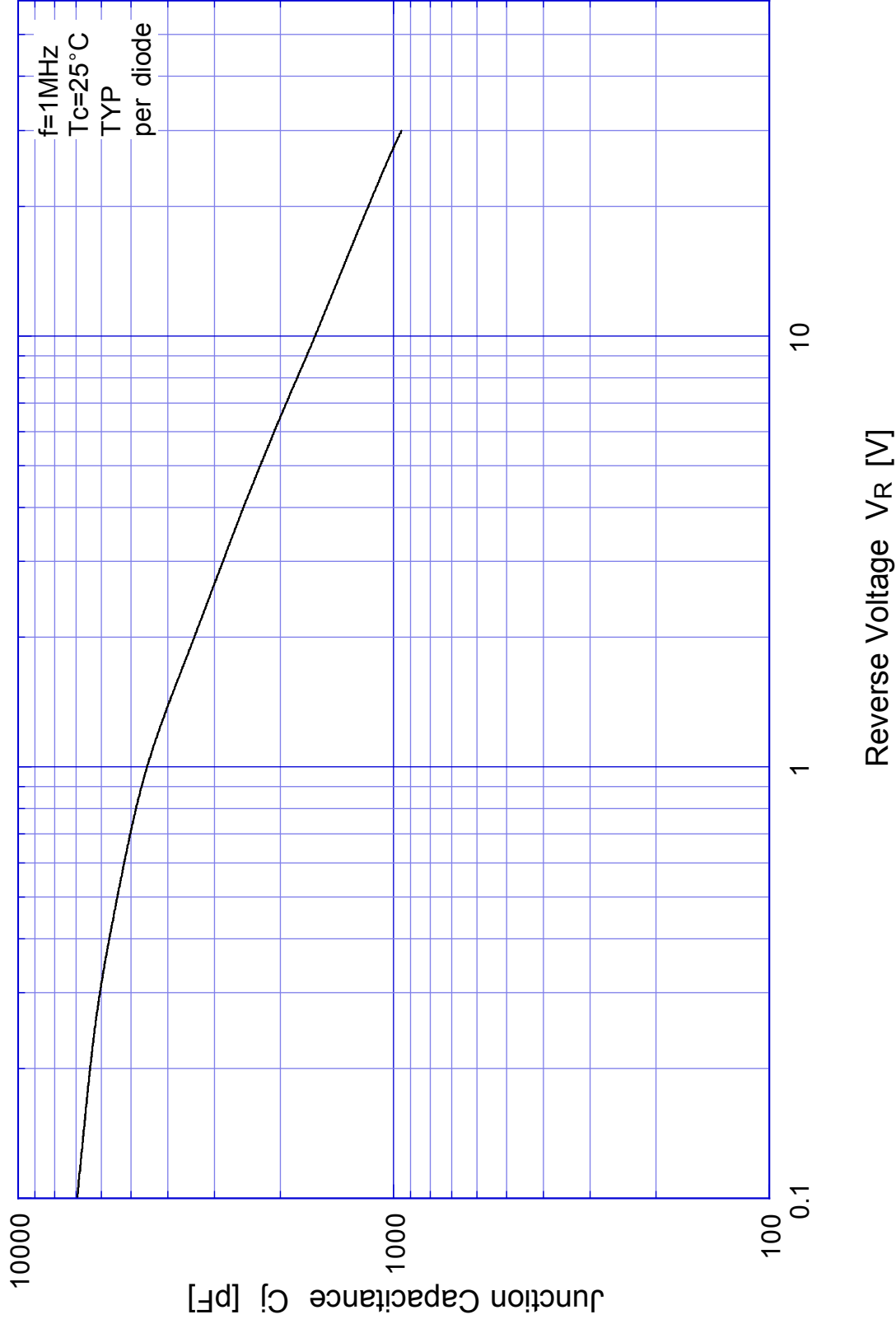
Electrical Characteristics (If not specified $T_c=25$)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V_F	$I_F=30A$, Pulse measurement, Rating of per diode	Max.0.48	V
Reverse Current	I_R	$V_R=V_{RM}$, Pulse measurement, Rating of per diode	Max.25	mA
Junction Capacitance	C_j	$f=1MHz$, $V_R=10V$, Rating of per diode	Typ.1600	pF
Thermal Resistance	θ_{jc}	junction to case	Max.0.5	/W

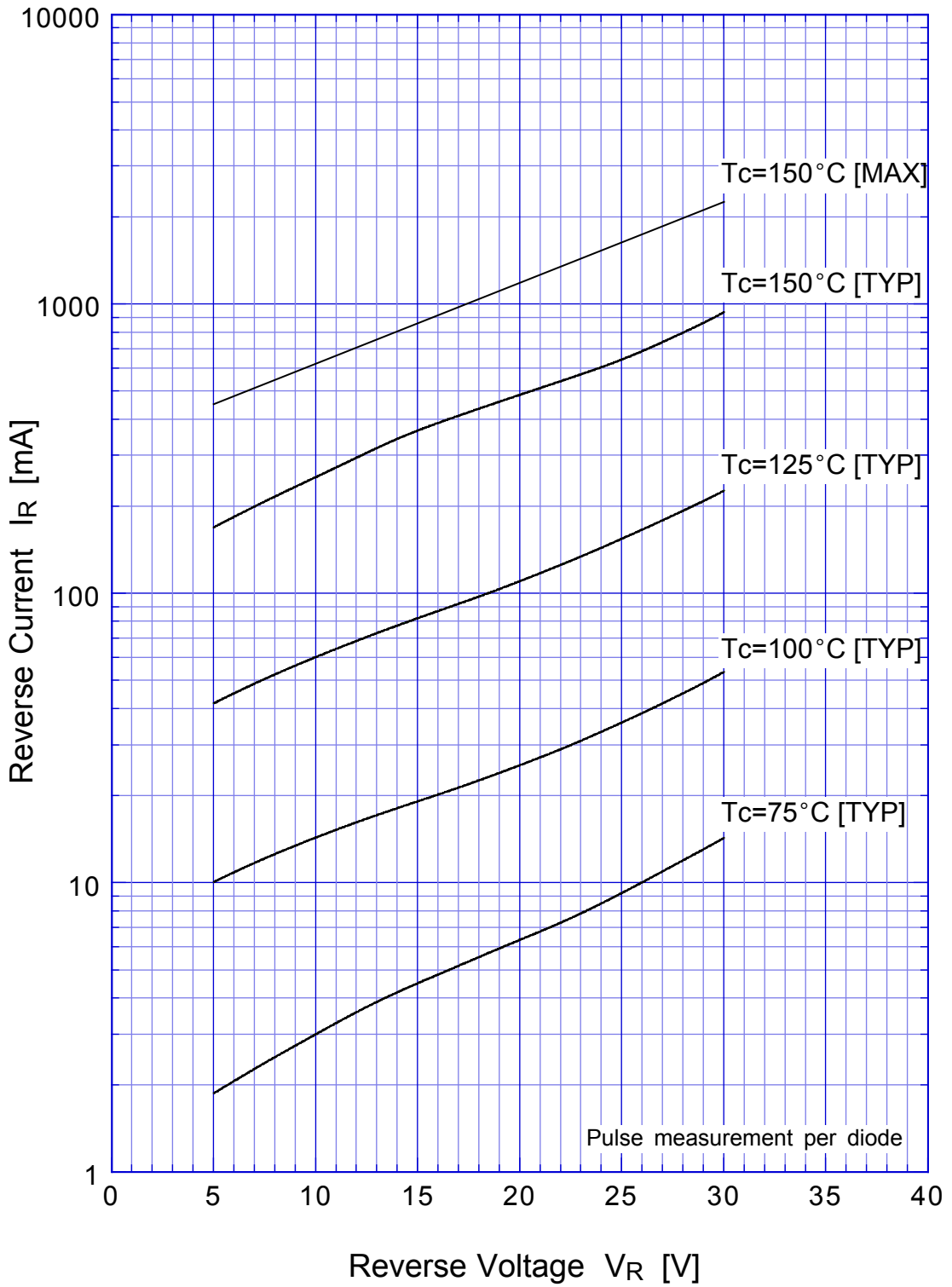
S60SC3ML Forward Voltage



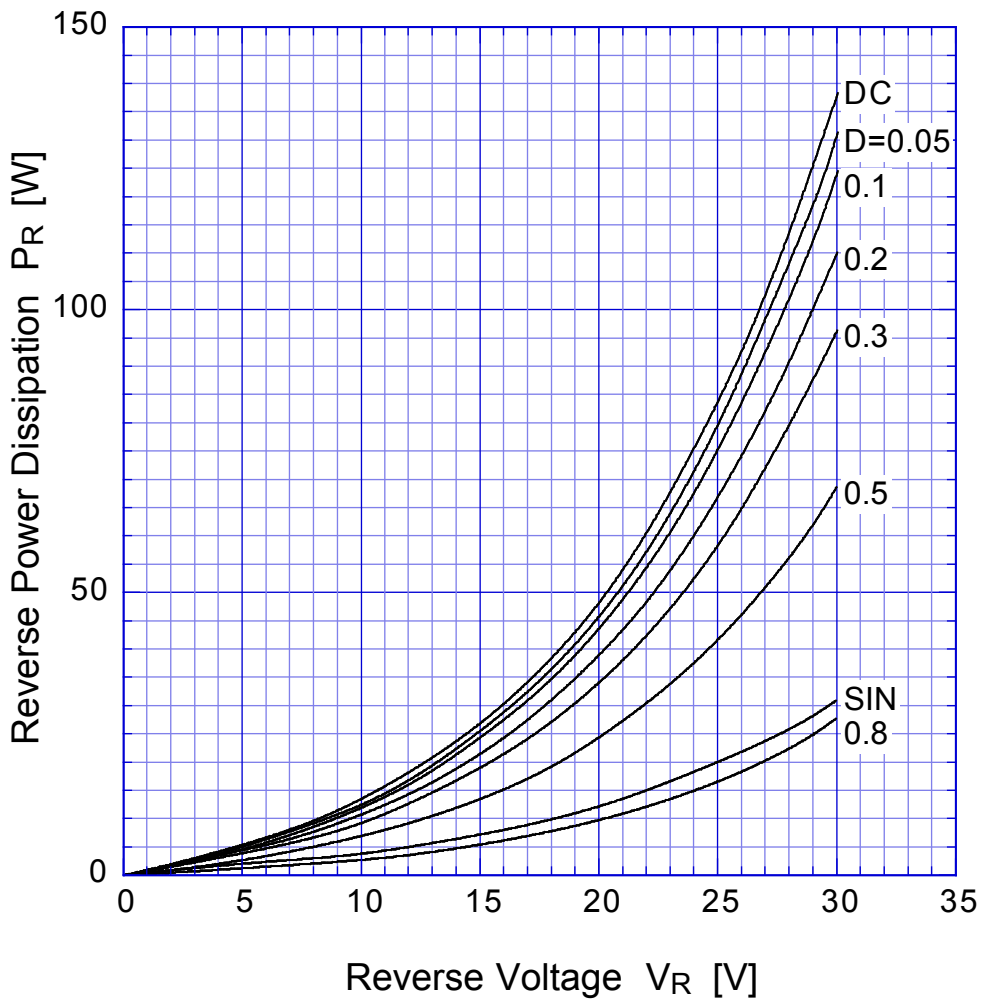
S60SC3ML Junction Capacitance



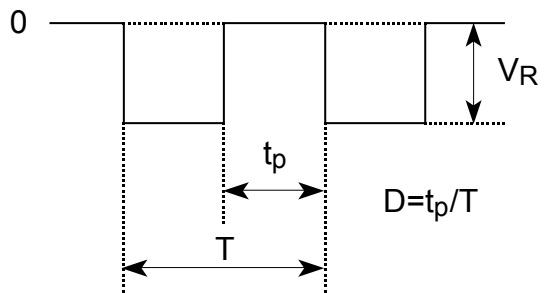
S60SC3ML Reverse Current



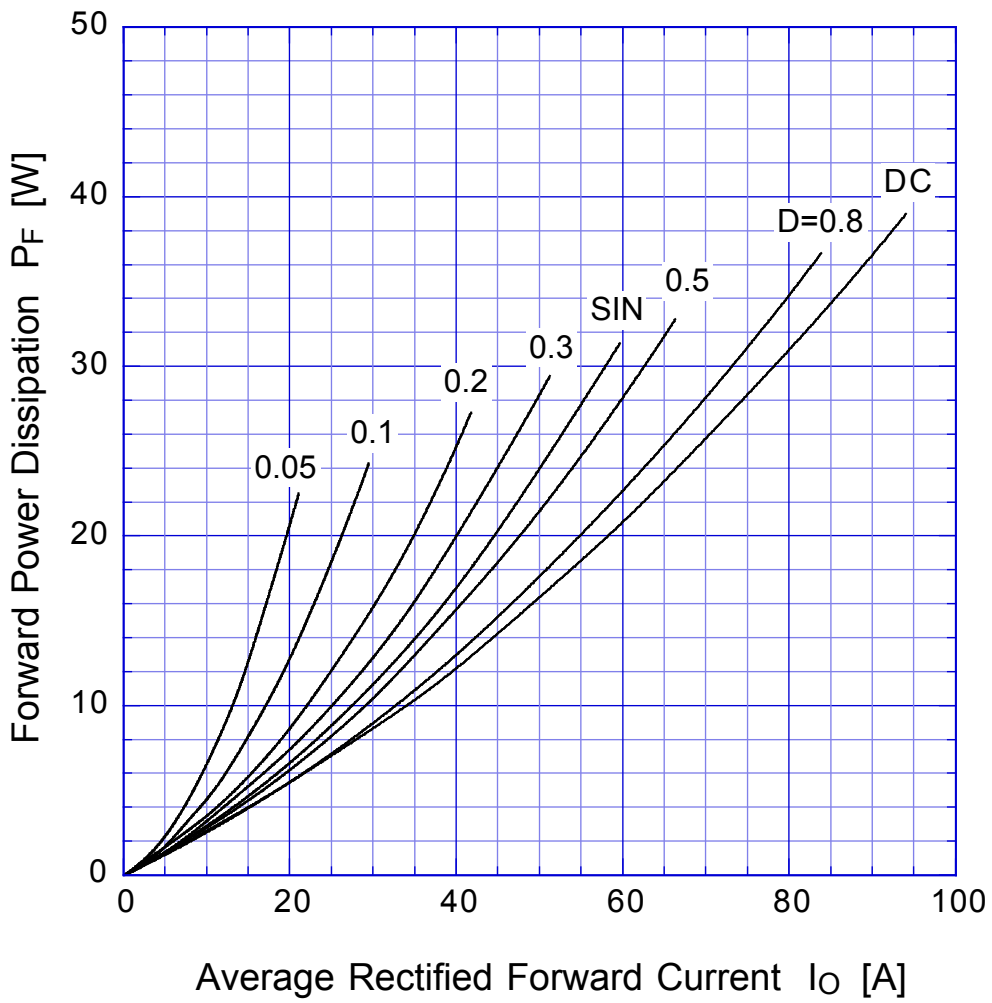
S60SC3ML Reverse Power Dissipation



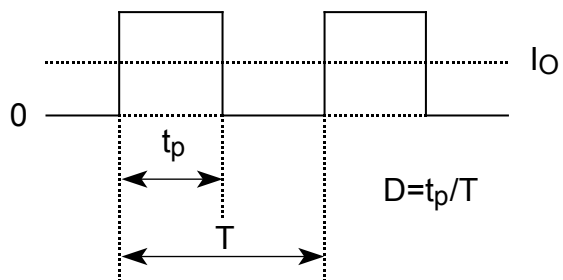
$T_j = 150^\circ\text{C}$



S60SC3ML Forward Power Dissipation

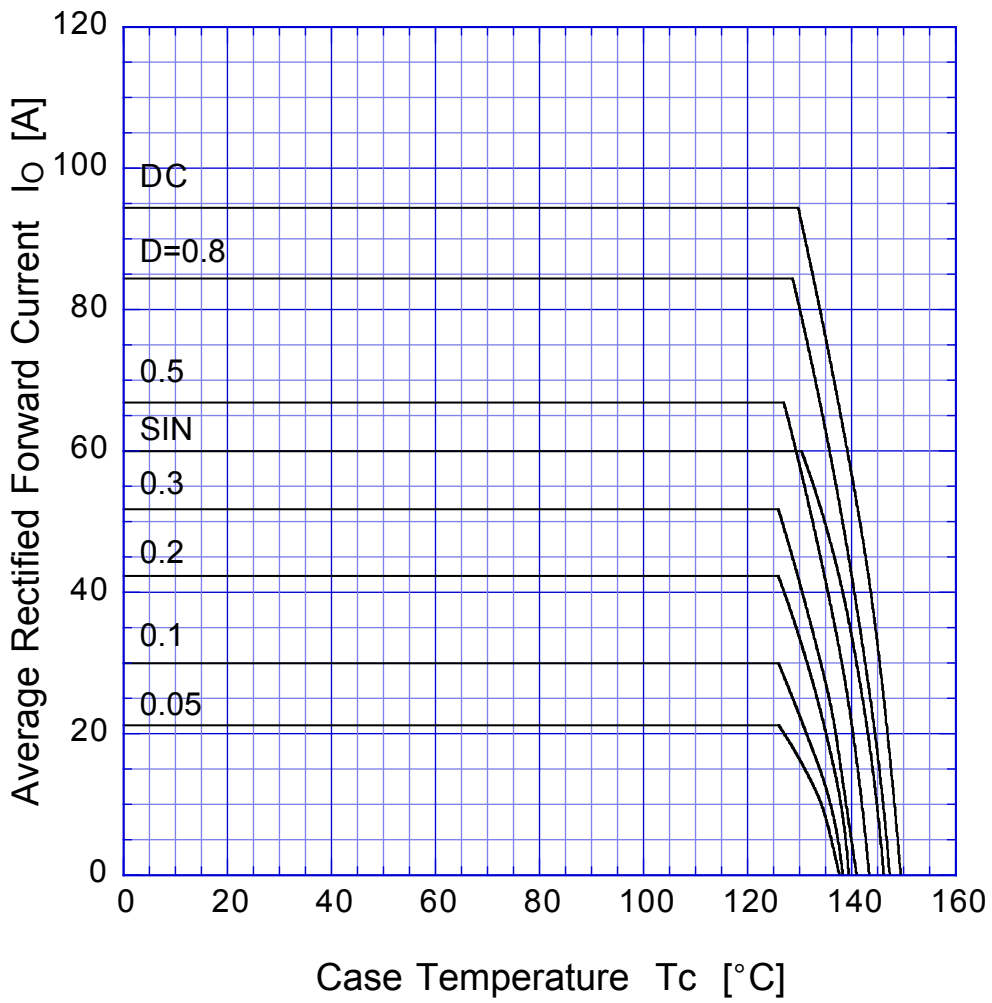


$T_j = 150^\circ\text{C}$



S60SC3ML

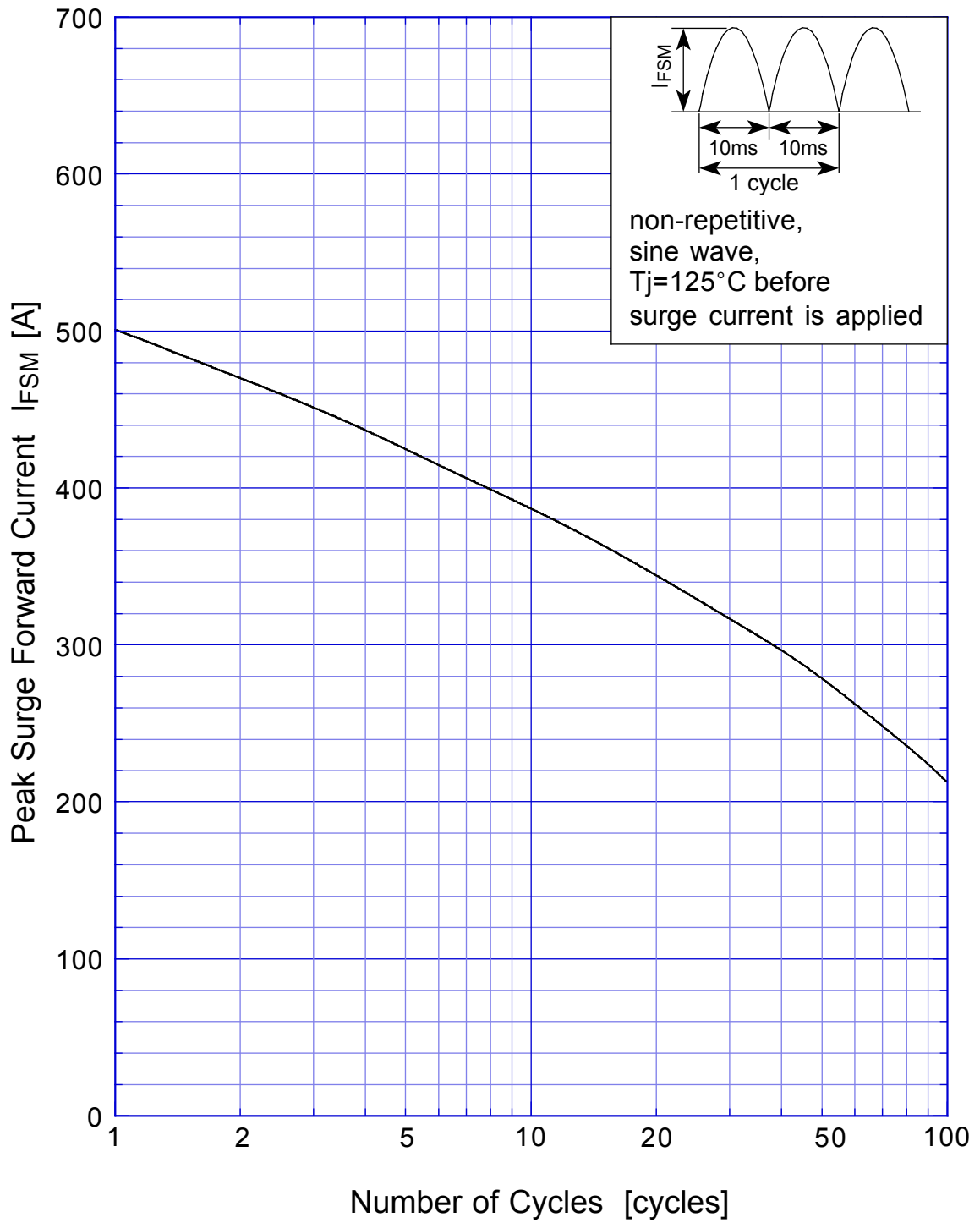
Derating Curve



$V_R = 15V$



S60SC3ML Peak Surge Forward Capability



SBD Repetitive Surge Reverse Power Derating Curve



SBD

Repetitive Surge Reverse Power Capability

