

S60SC3ML

30V 60A

FEATURES

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

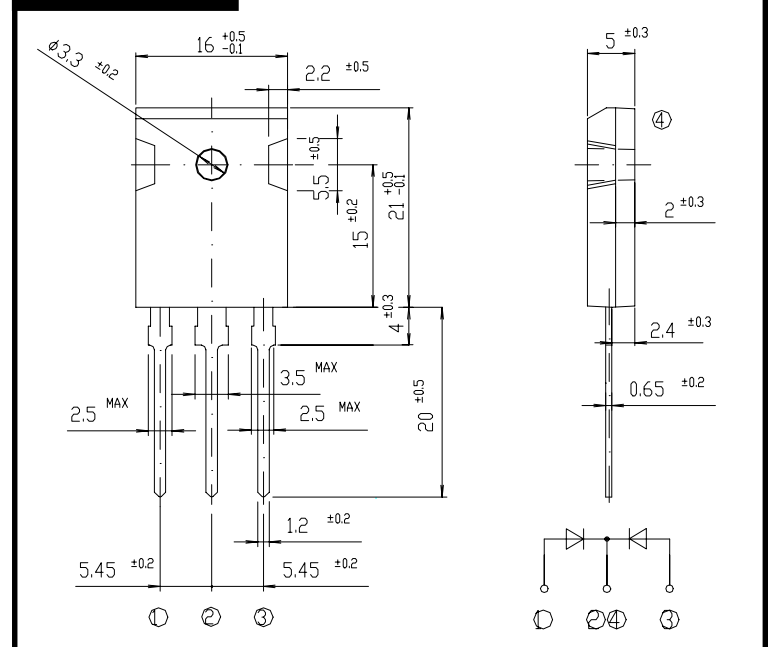
APPLICATION

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

OUTLINE DIMENSIONS

Case : MTO-3P

Unit : mm



RATINGS

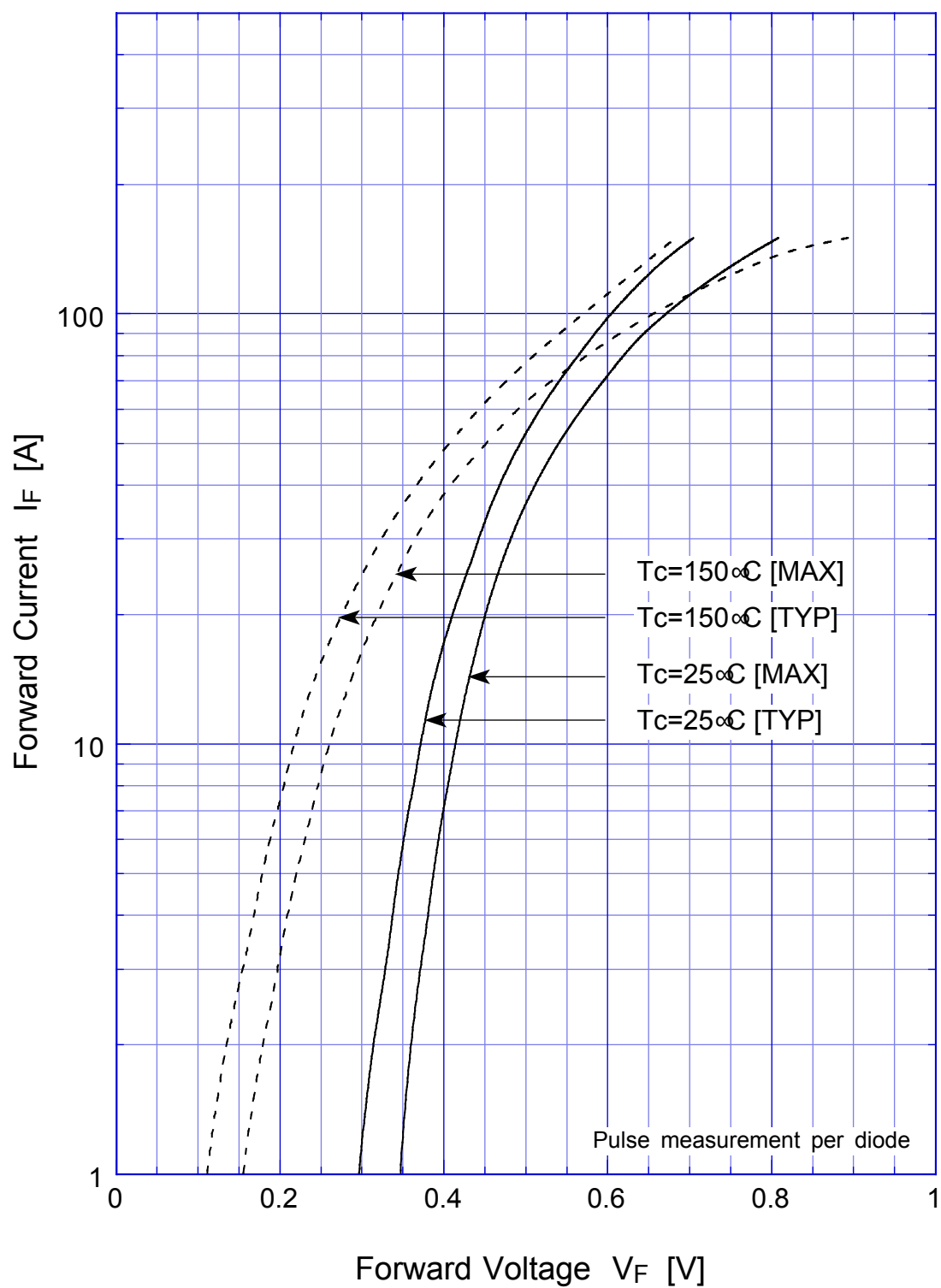
- Absolute Maximum Ratings (If not specified Tc=25°C)

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-40~150	°C
Operating Junction Temperature	Tj		150	°C
Maximum Reverse Voltage	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°C	60	A
Peak Surge Forward Current	I _{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, T _j =125°C	500	A
Repetitive Peak Surge Reverse Power	P _{RRSM}	Pulse width 10 μs, Rating of per diode, T _j =25°C	1000	W
Mounting Torque	TOR	(Recommended torque: 0.5N·m)	0.8	N·m

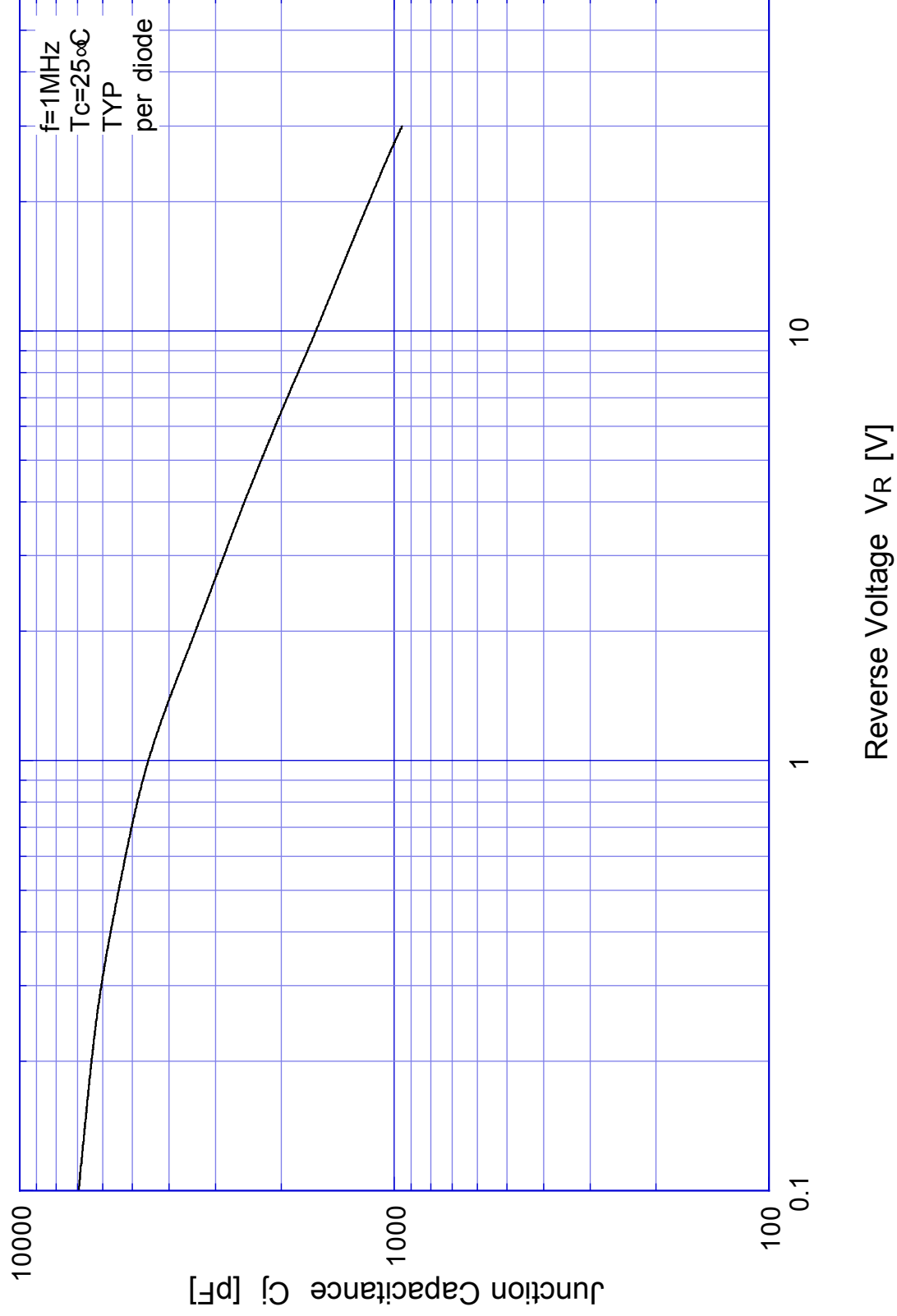
- Electrical Characteristics (If not specified Tc=25°C)

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	°C/W

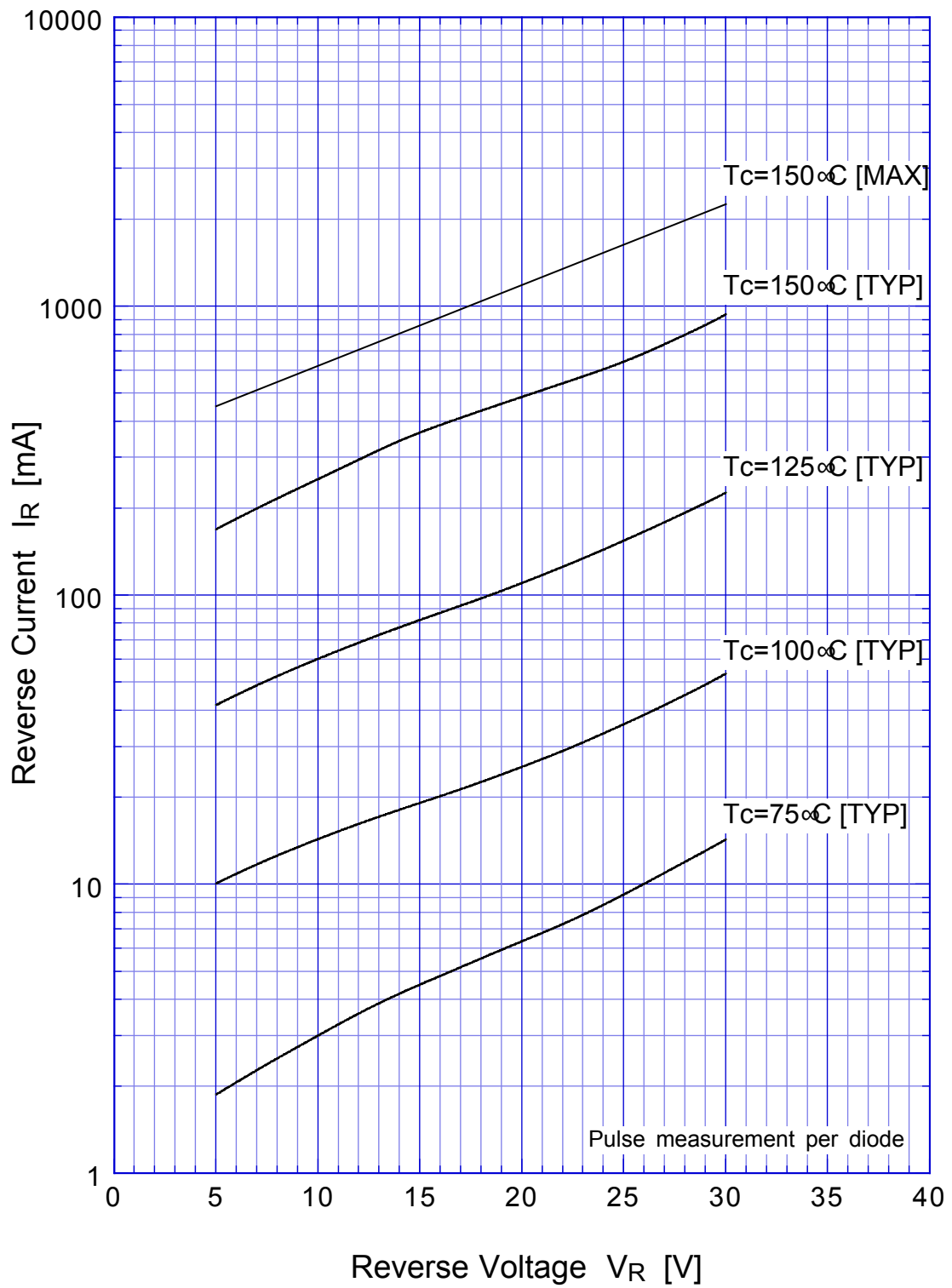
S60SC3ML Forward Voltage



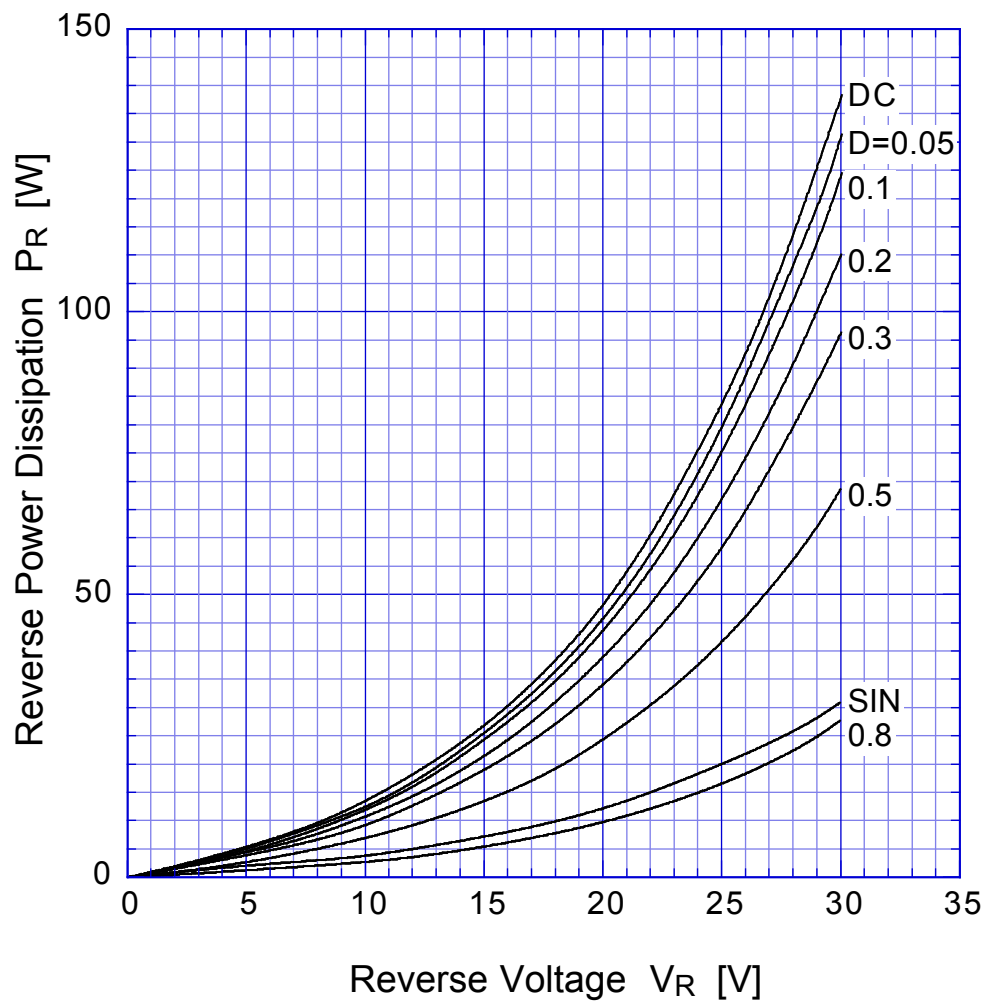
S60SC3ML Junction Capacitance



S60SC3ML Reverse Current



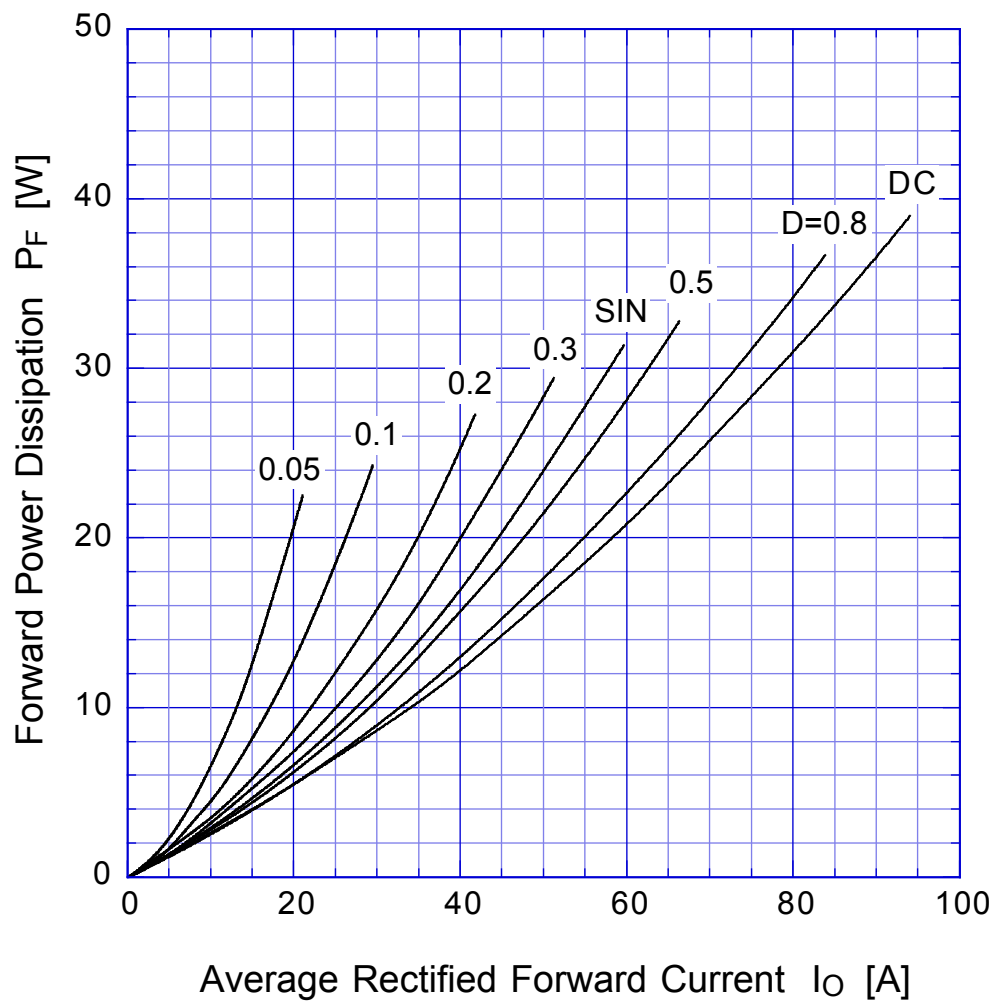
S60SC3ML Reverse Power Dissipation



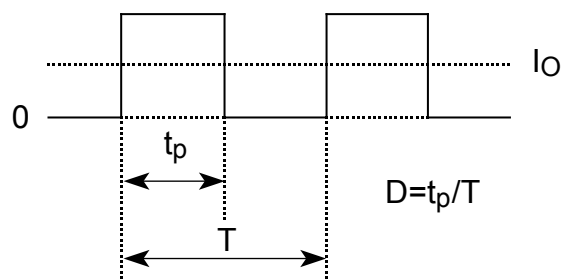
$T_j = 150^\circ\text{C}$



S60SC3ML Forward Power Dissipation

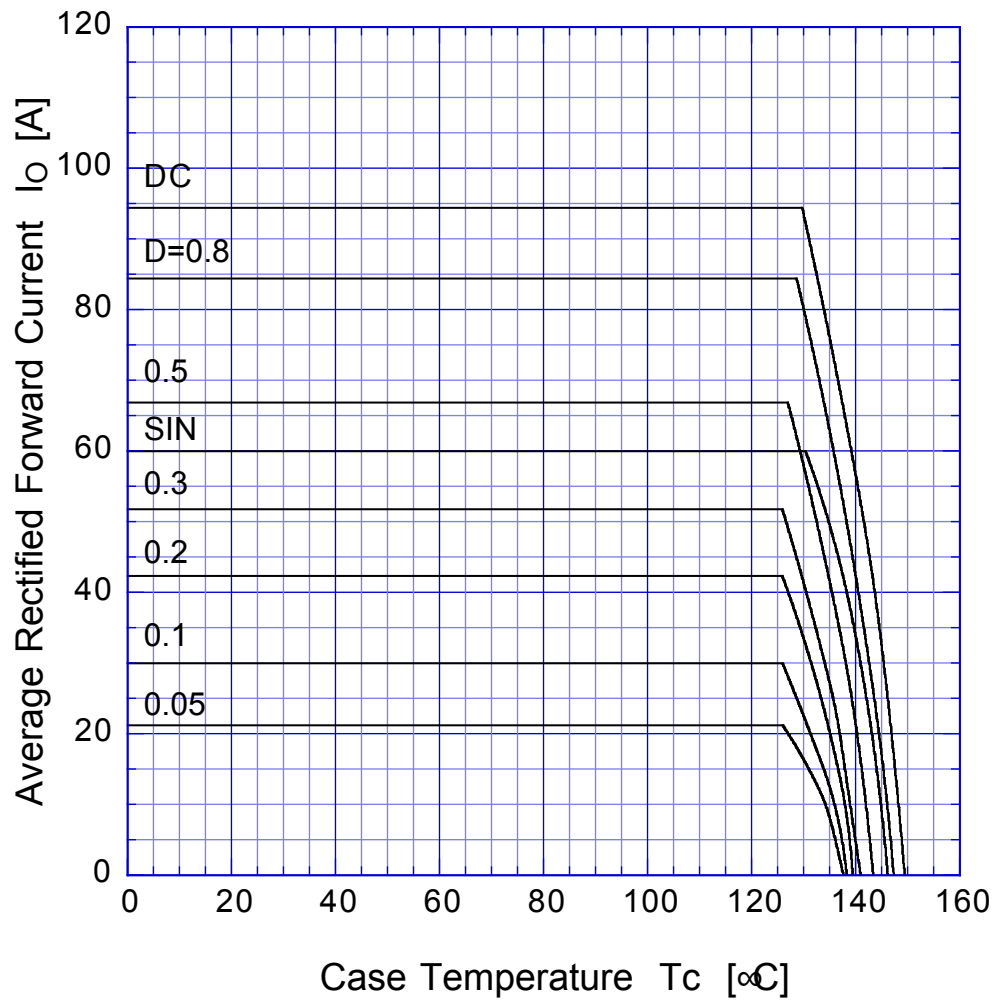


$T_j = 150^\circ\text{C}$

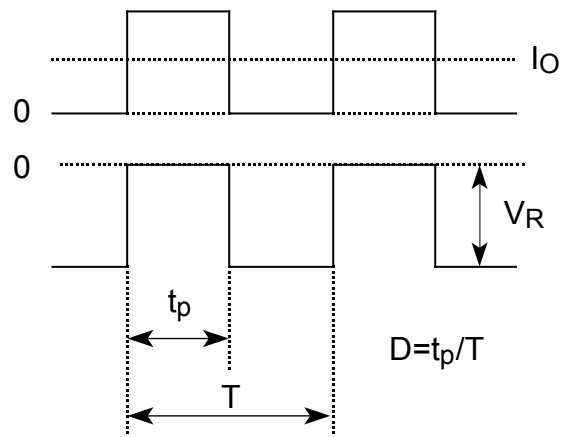


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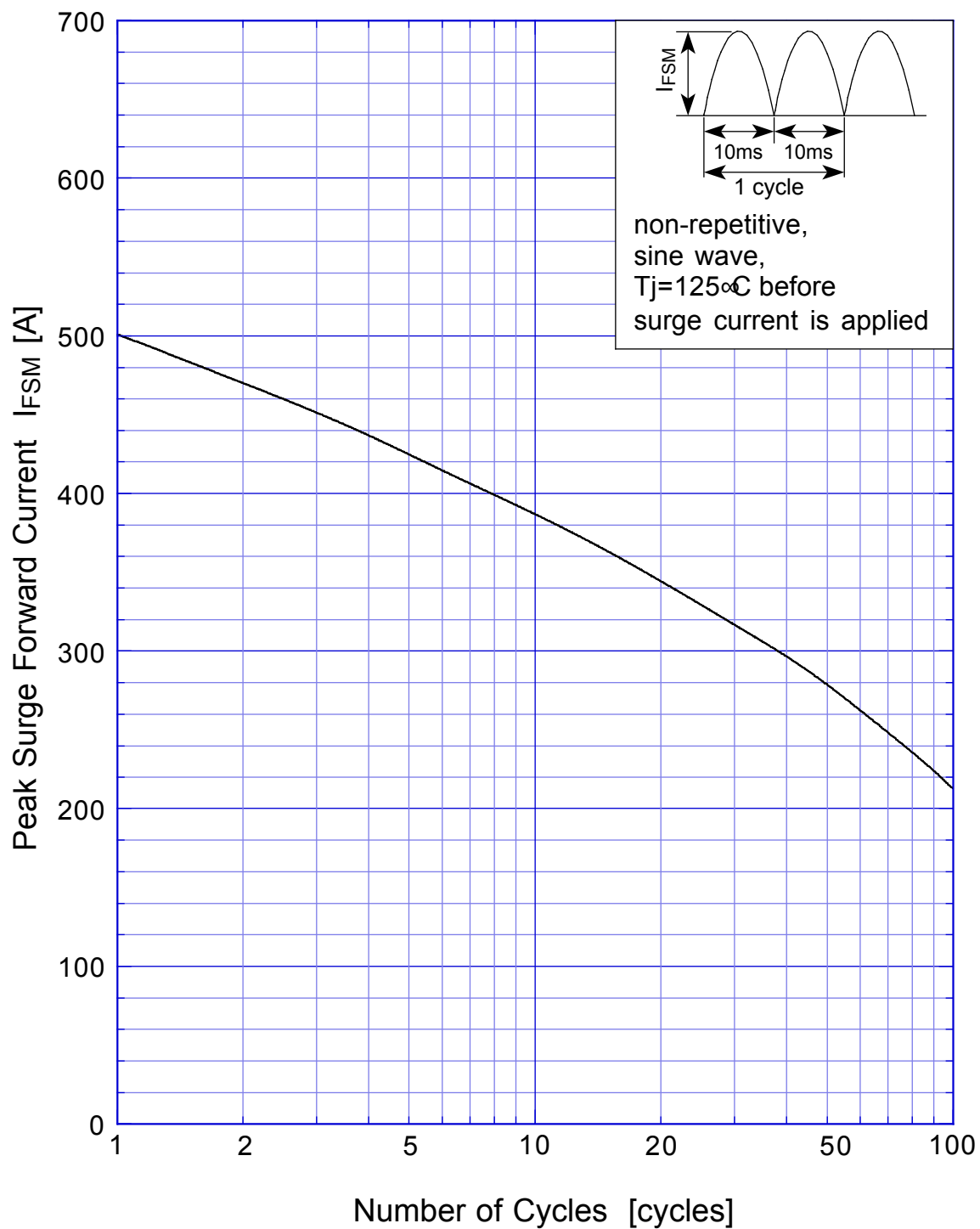
Derating Curve



$V_R = 15V$



S60SC3ML Peak Surge Forward Capability



SBD Repetitive Surge Reverse Power Derating Curve



