

D30SC4M

40V 30A

FEATURES

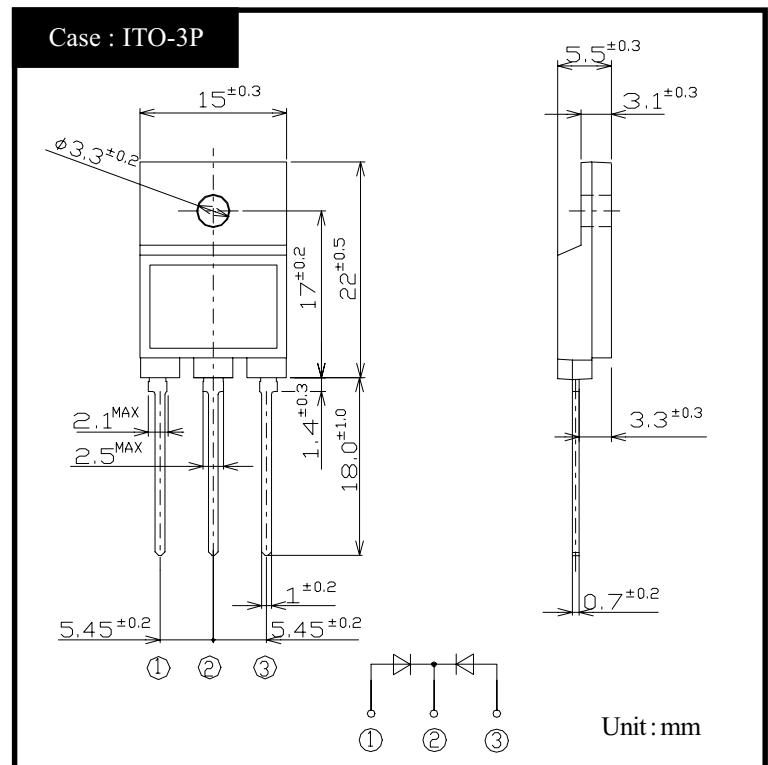
- Tj150°C
- P_{RRSM} avalanche guaranteed
- High current capacity
- Fully Isolated Molding

APPLICATION

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

OUTLINE DIMENSIONS

Case : ITO-3P



RATINGS

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

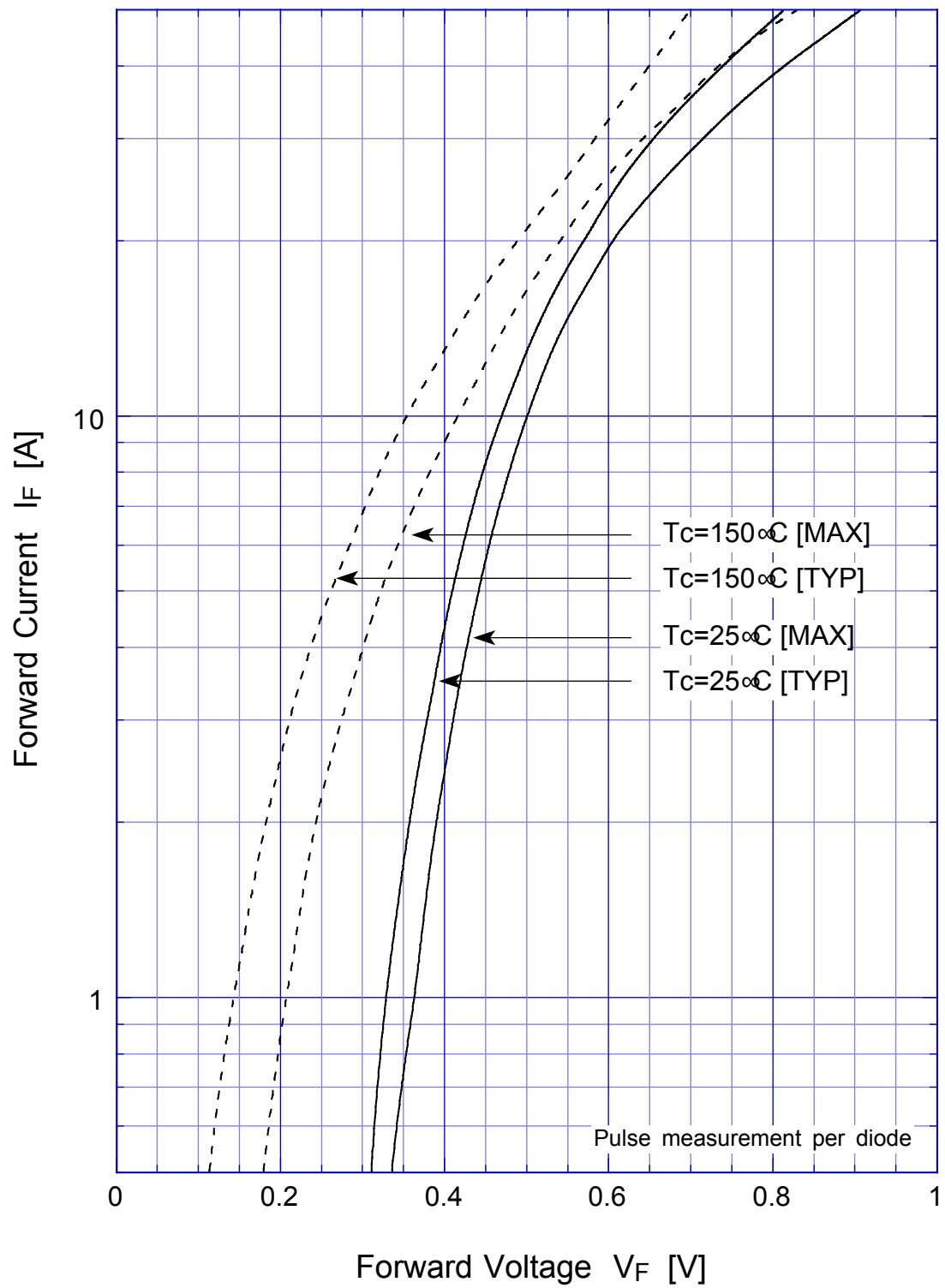
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-40~150	°C
Operating Junction Temperature	Tj		150	°C
Maximum Reverse Voltage	V _{RM}		40	V
Repetitive Peak Surge Reverse Voltage	V _{RRSM}	Pulse width 0.5ms, duty 1/40	45	V
Average Rectified Forward Current	I _O	50Hz sine wave, R-load, Rating for each diode I _O /2, T _C =112°C	30	A
Peak Surge Forward Current	I _{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, T _J =125°C	300	A
Repetitive Peak Surge Reverse Power	P _{RRSM}	Pulse width 10 μs, Rating of per diode, T _J =25°C	1000	W
Dielectric Strength	V _{dis}	Terminals to case, AC 1 minute	1.5	kV
Mounting Torque	TOR	(Recommended torque:0.5N·m)	0.8	N·m

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

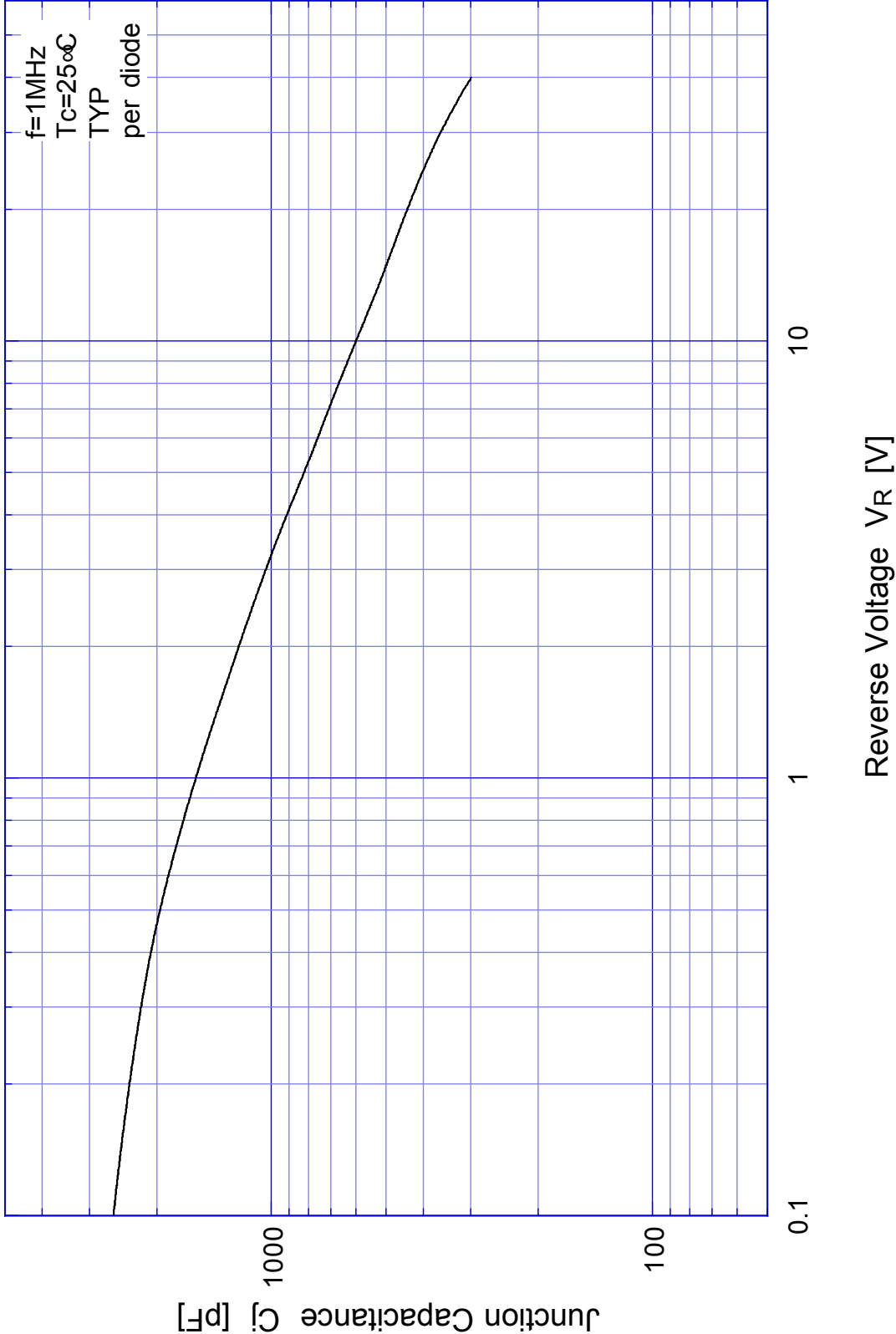
Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V_F	$I_F=15A$, Pulse measurement, Rating of per diode	Max.0.55	V
Reverse Current	I_R	$V_R=V_{RM}$, Pulse measurement, Rating of per diode	Max. 10	mA
Junction Capacitance	C_j	$f=1MHz$, $V_R=10V$, Rating of per diode	Typ.590	pF
Thermal Resistance	θ_{jc}	Junction to case	Max.1.6	°C/W

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Forward Voltage

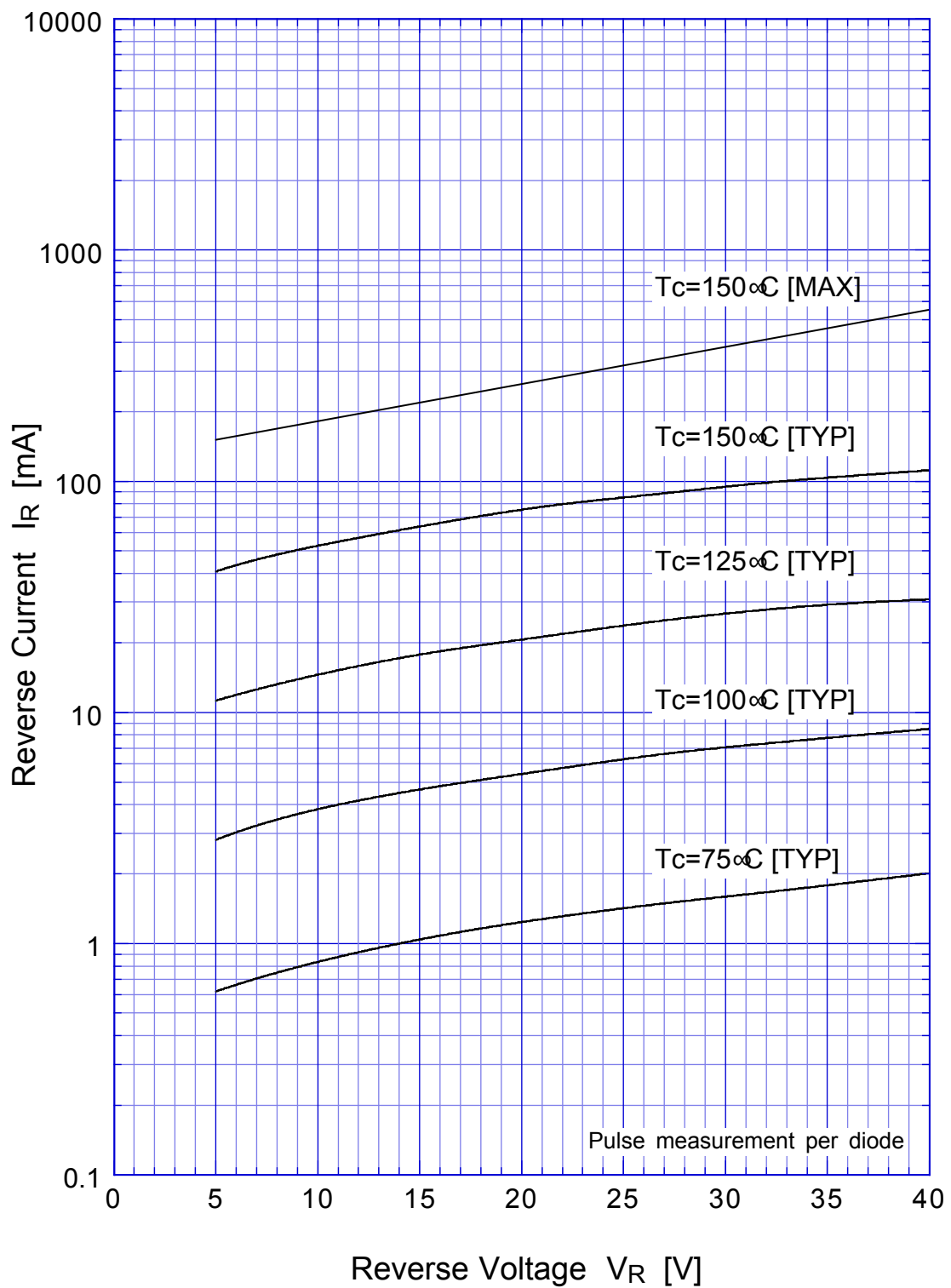


D30SC4M Junction Capacitance

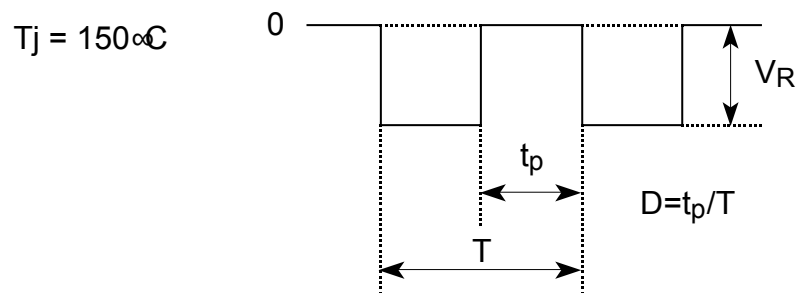
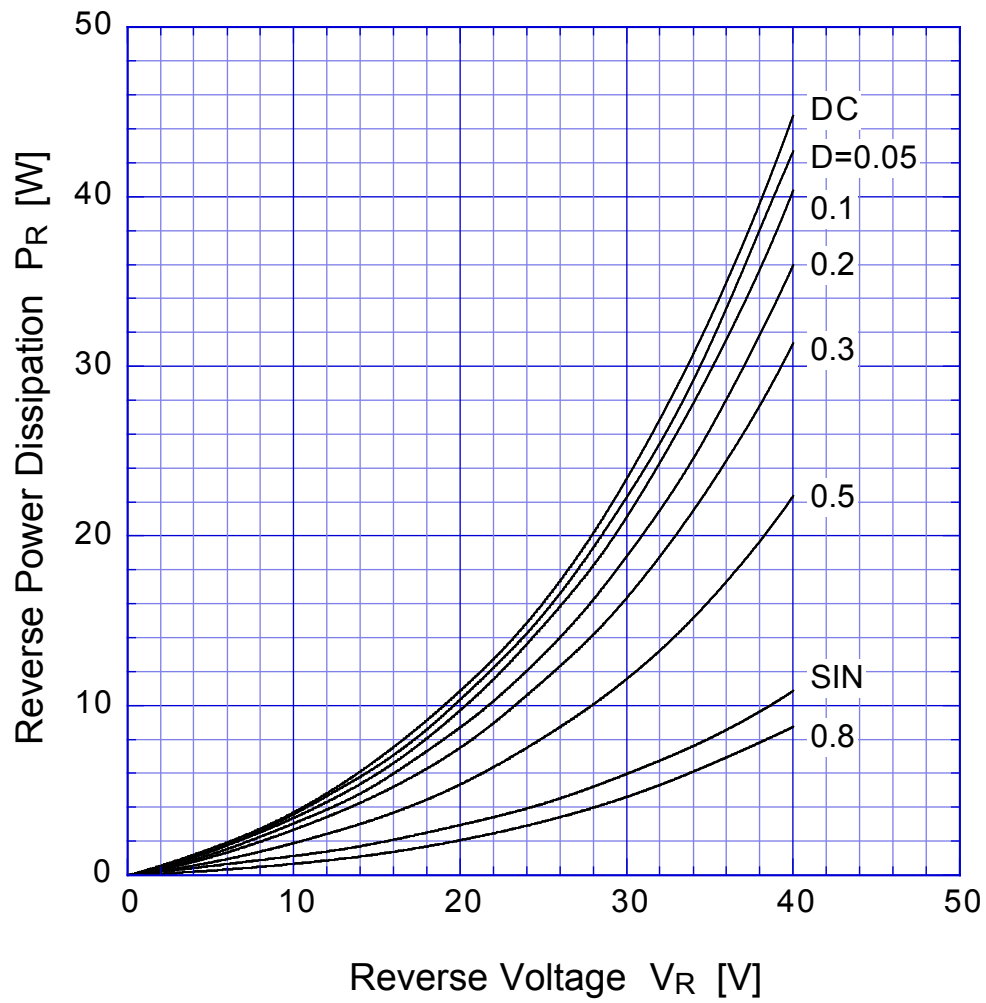


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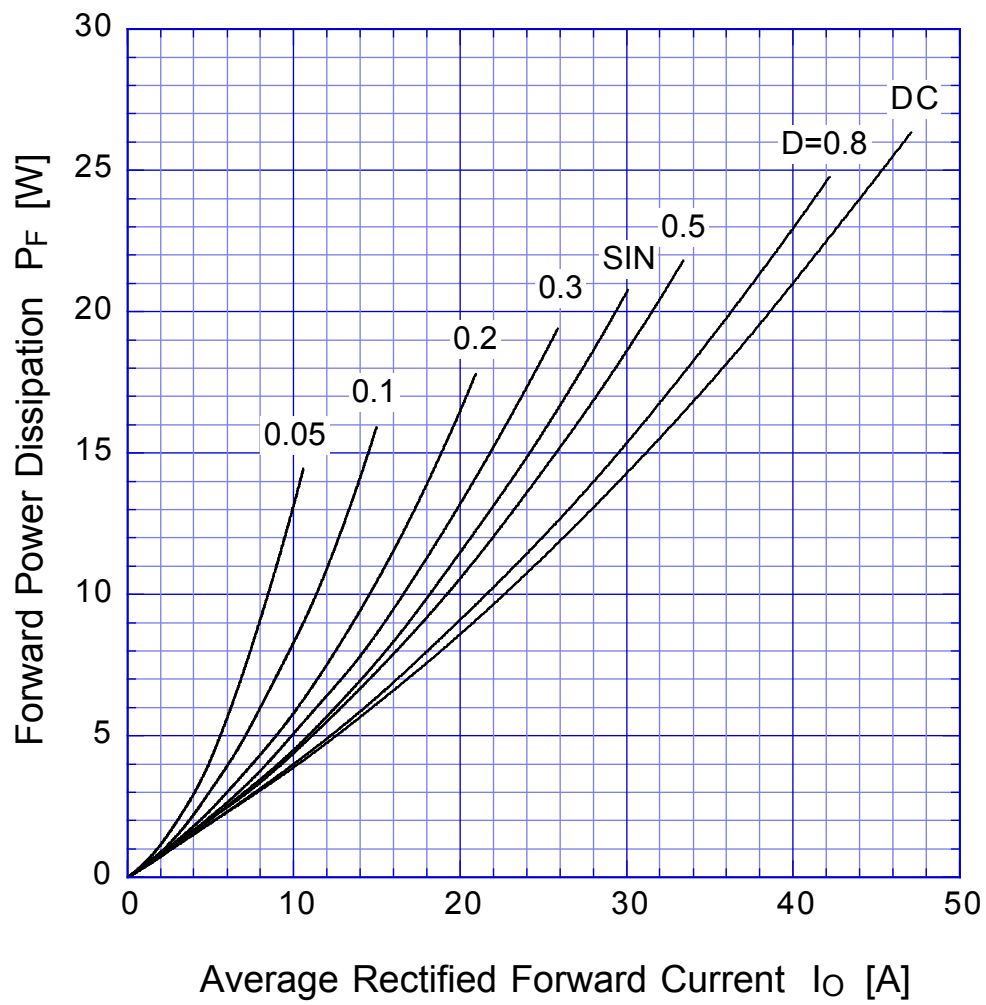
Reverse Current



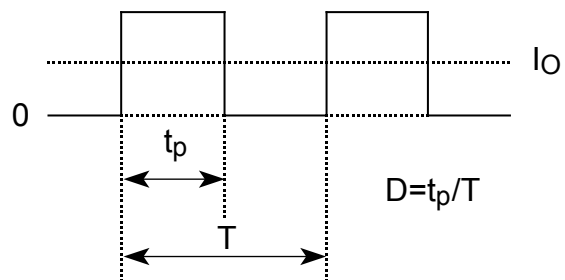
D30SC4M Reverse Power Dissipation



D30SC4M Forward Power Dissipation

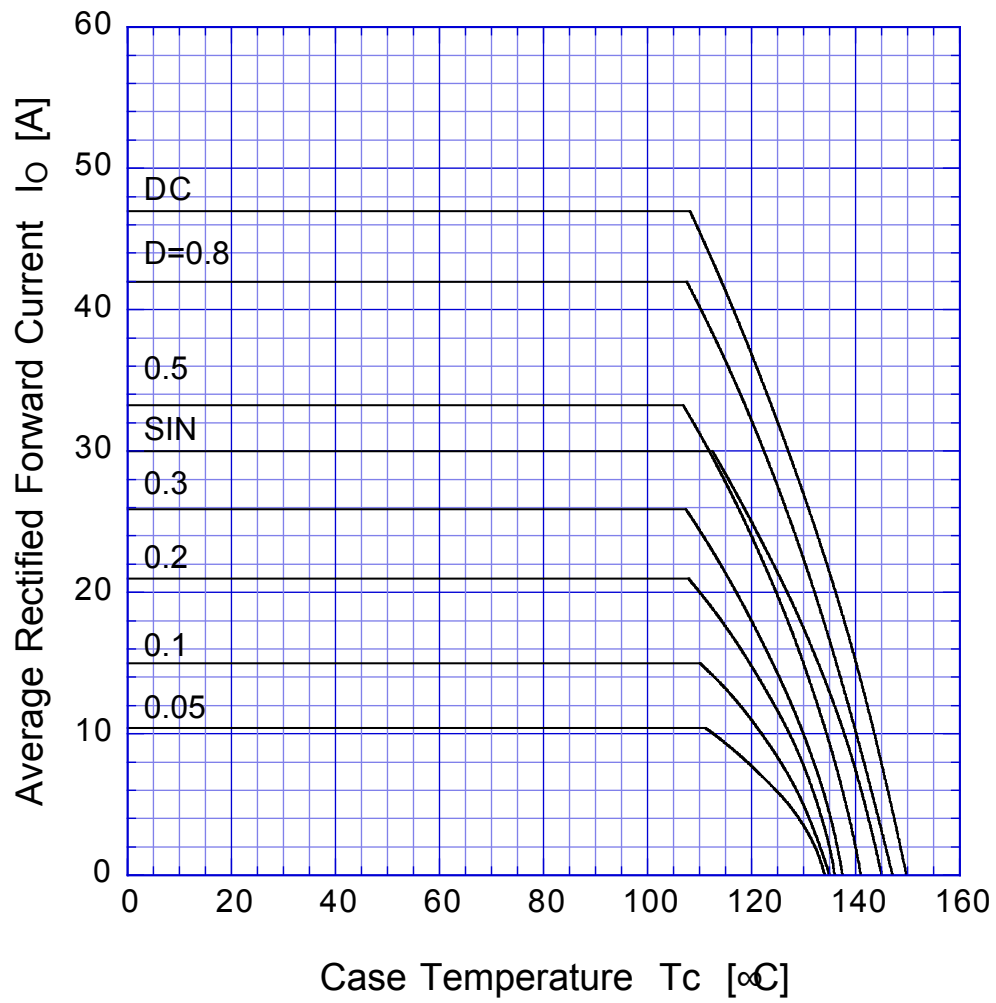


$T_j = 150^\circ\text{C}$

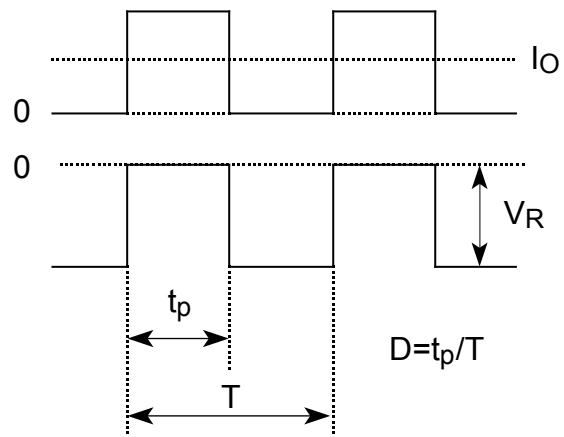


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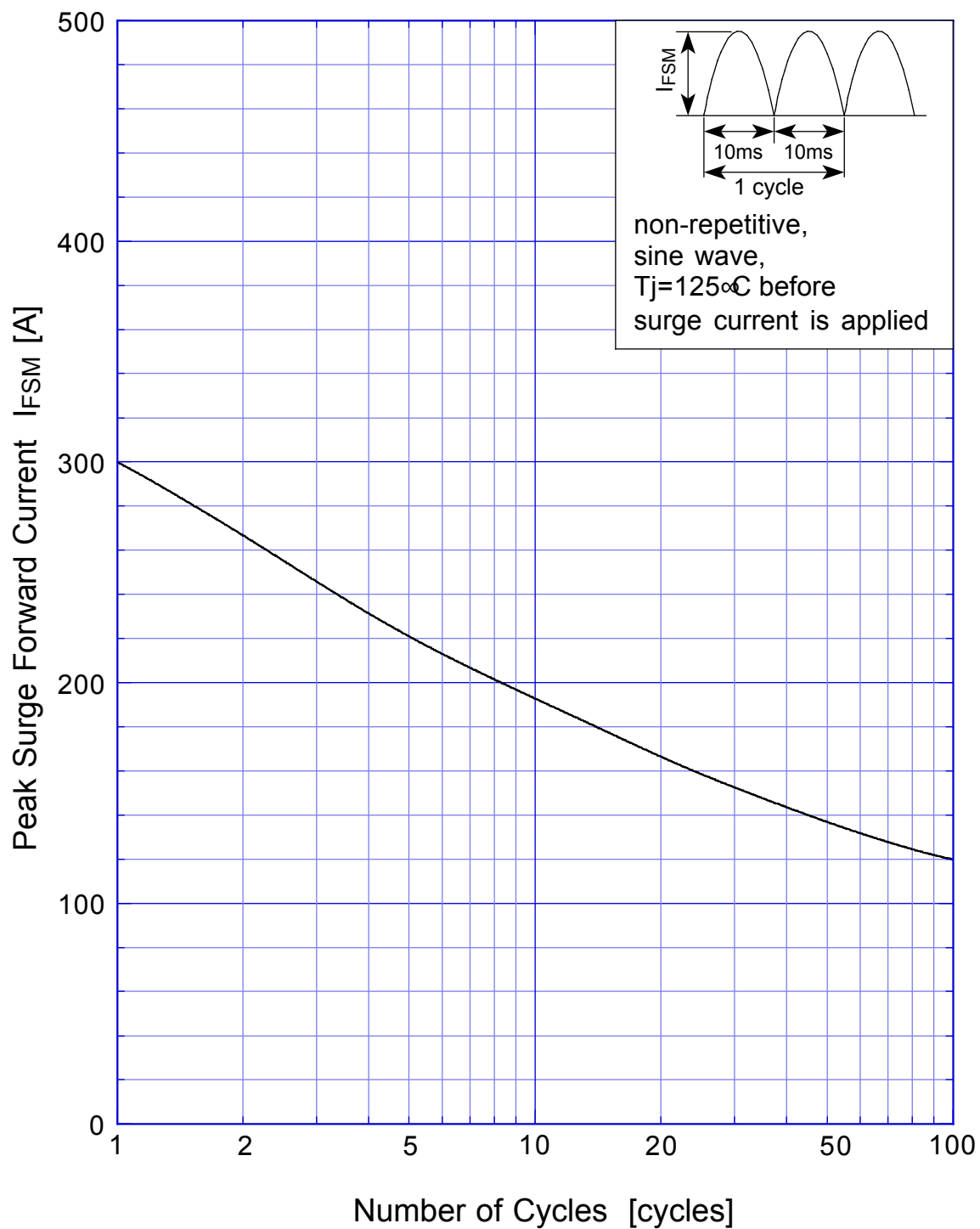
Derating Curve



$V_R = 20V$



D30SC4M Peak Surge Forward Capability



SBD Repetitive Surge Reverse Power Derating Curve

