

D5SC4M

40V 5A

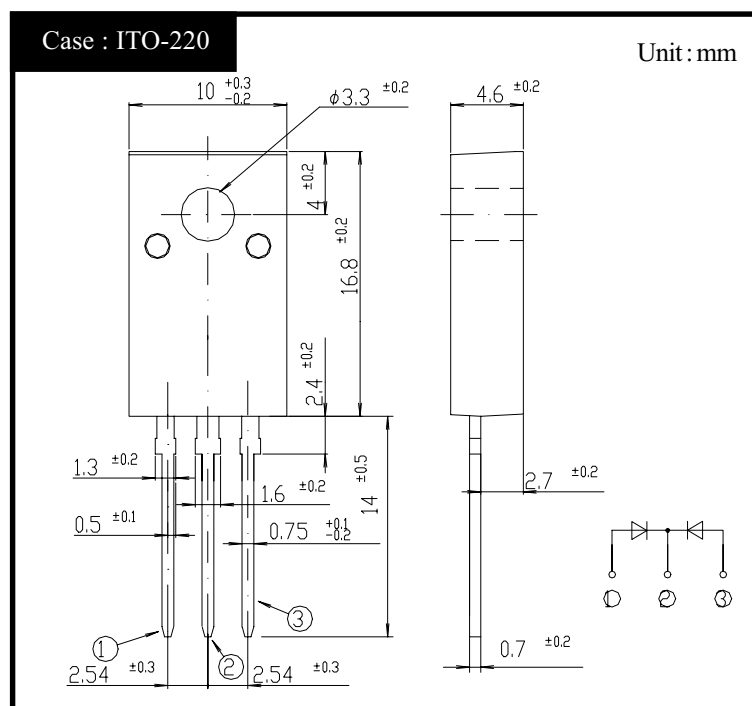
FEATURES

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

APPLICATION

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

OUTLINE DIMENSIONS



RATINGS

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

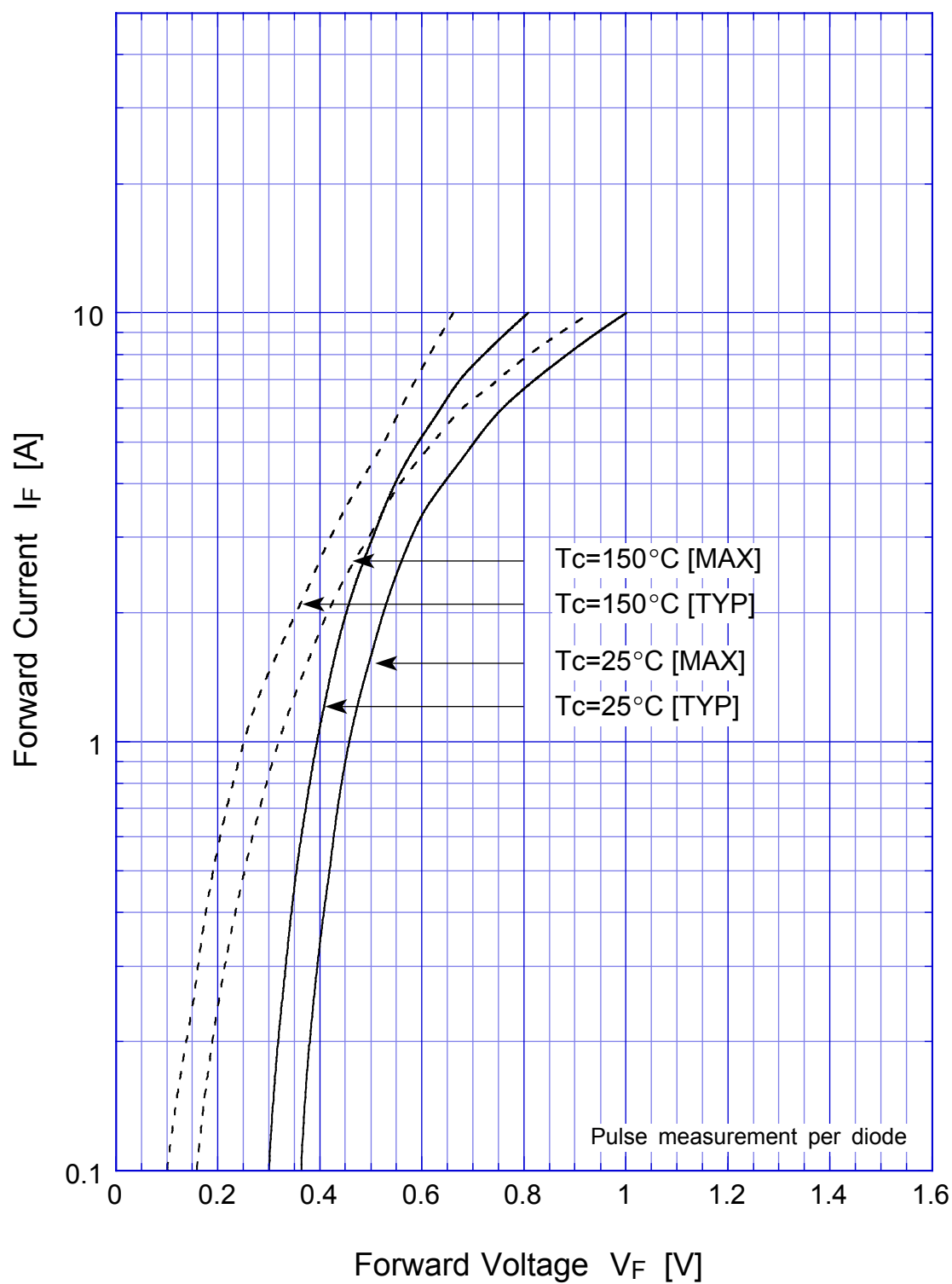
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T _{stg}		-40~150	°C
Operating Junction Temperature	T _j		150	°C
Maximum Reverse Voltage	V _{RM}		40	V
Repetitive Peak Surge Reverse Voltage	V _{RRSM}	Pulse width 0.5ms, duty 1/40	45	V
Average Rectified Forward Current	I _O	50Hz sine wave, R-load, Rating for each diode I _O /2, T _c =136°C	5	A
Peak Surge Forward Current	I _{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, T _j =125°C	50	A
Repetitive Peak Surge Reverse Power	P _{RRSM}	Pulse width 10 μs, Rating of per diode, T _j =25°C	330	W
Dielectric Strength	V _{dis}	Terminals to case, AC 1 minute	1.5	kV
Mounting Torque	TOR	(Recommended torque: 0.3N·m)	0.5	N·m

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

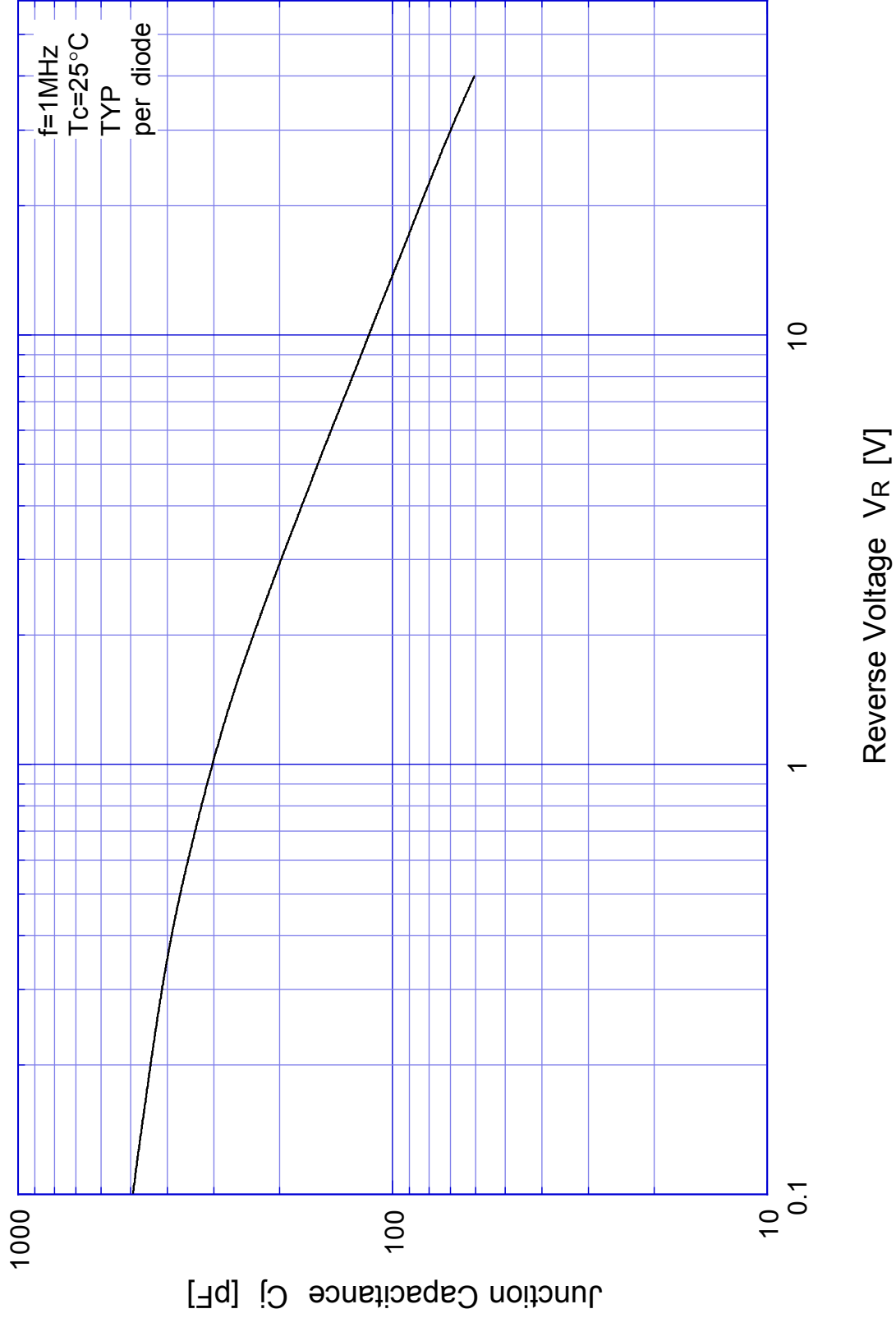
Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V _F	I _F =2.5A, Pulse measurement, Rating of per diode	Max 0.55	V
Reverse Current	I _R	V _R =V _{RM} , Pulse measurement, Rating of per diode	Max 2.5	mA
Junction Capacitance	C _j	f=1MHz, V _R =10V, Rating of per diode	Typ 116	pF
Thermal Resistance	θ _{jc}	junction to case	Max 3.3	°C/W
	θ _{jf}	junction to heatsink (reference value)	Max 4.8	

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Forward Voltage

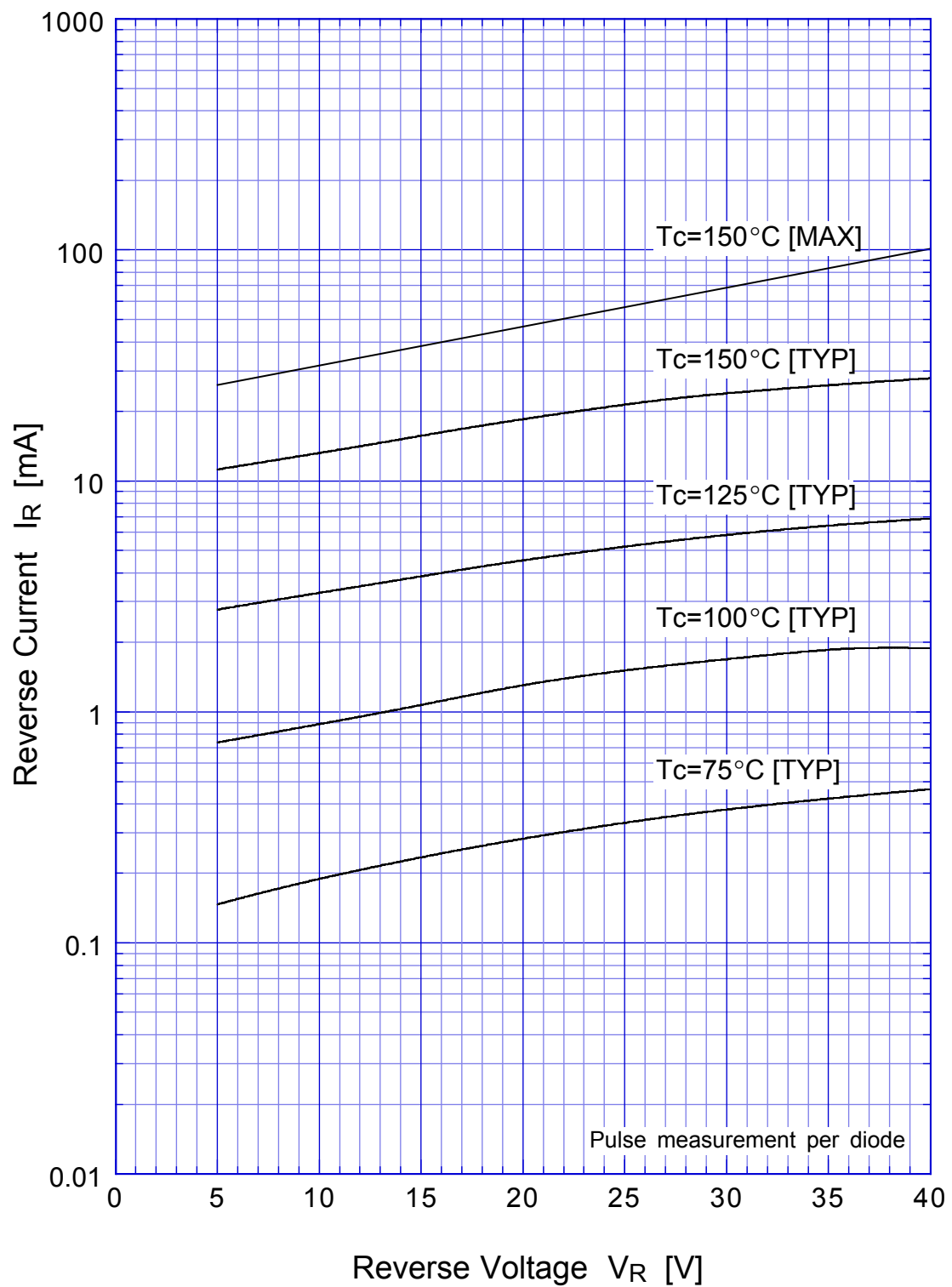


D5SC4M Junction Capacitance

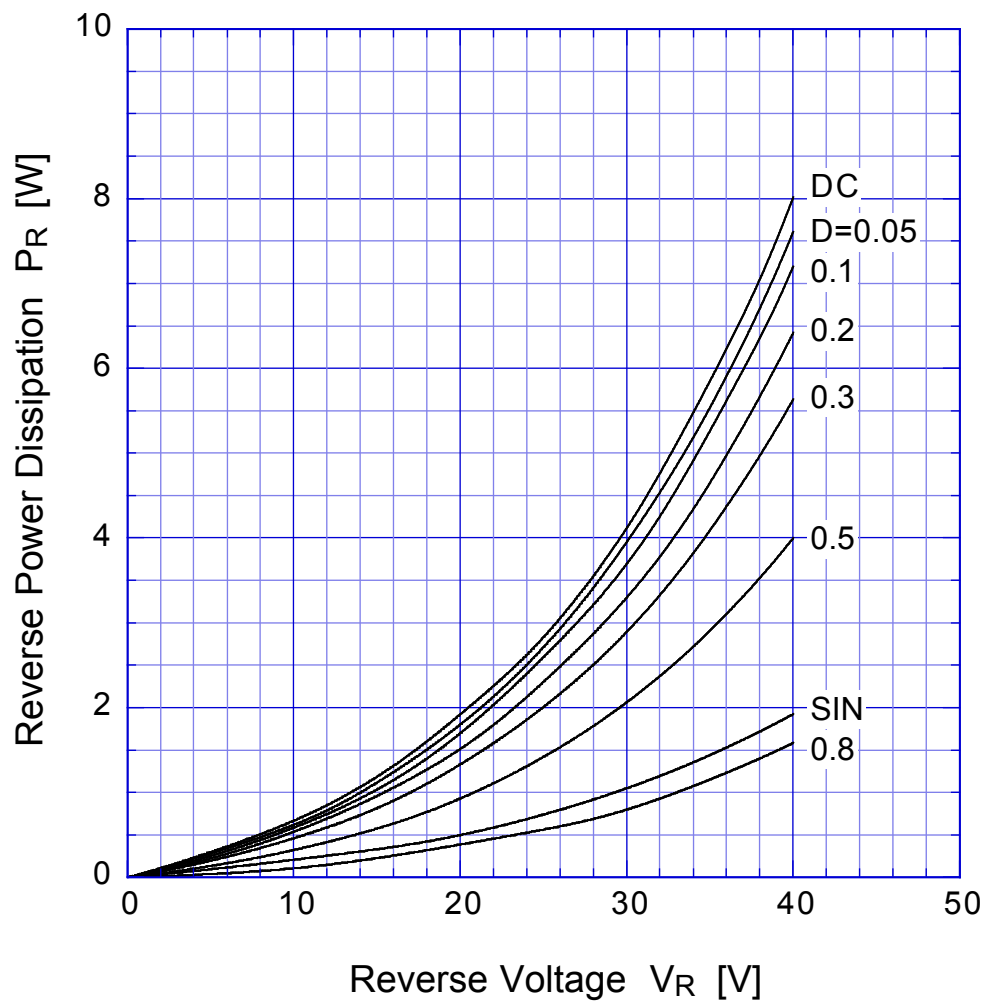


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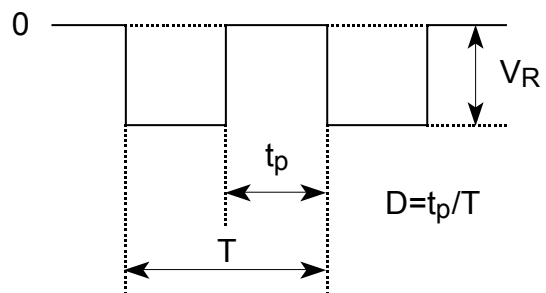
Reverse Current



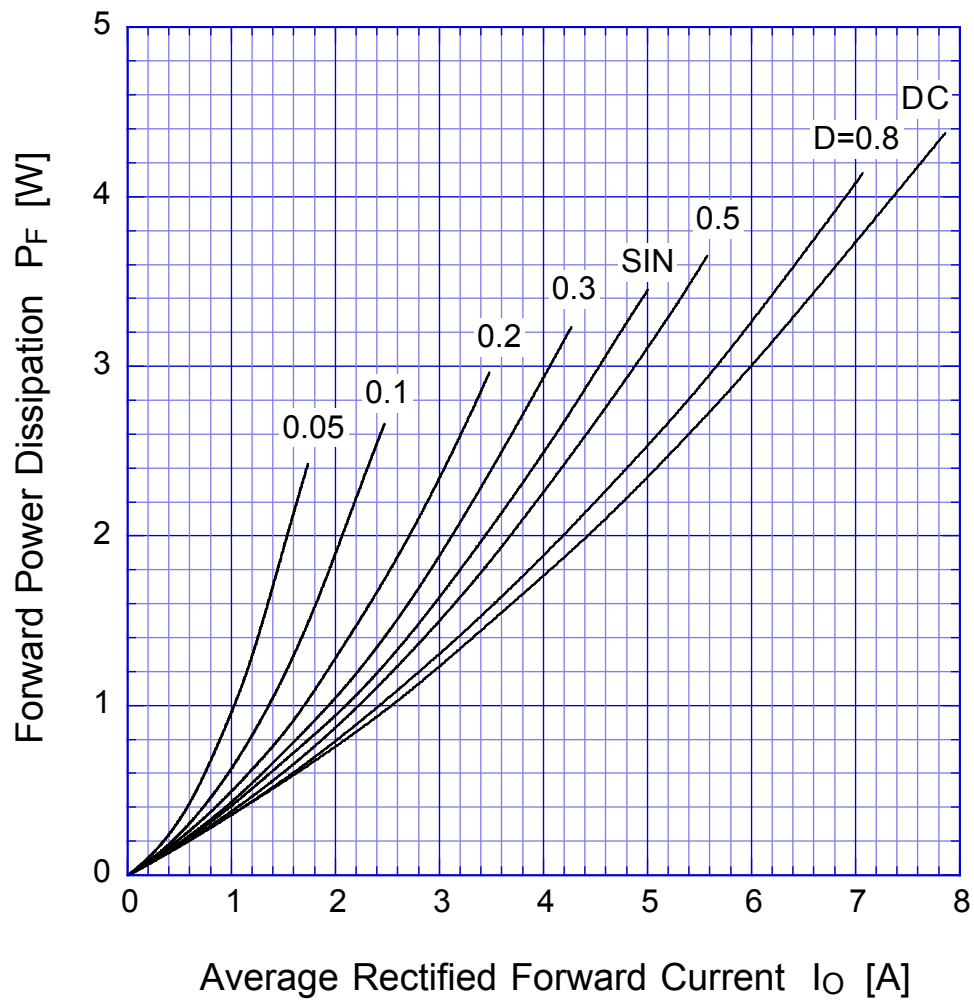
D5SC4M Reverse Power Dissipation



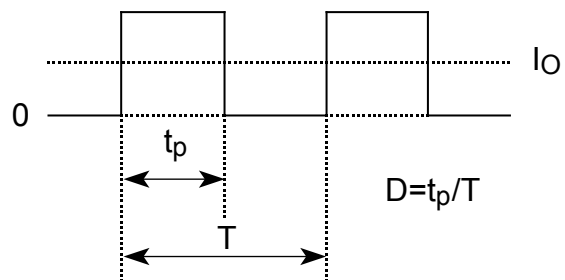
$T_j = T_{jmax}$



D5SC4M Forward Power Dissipation

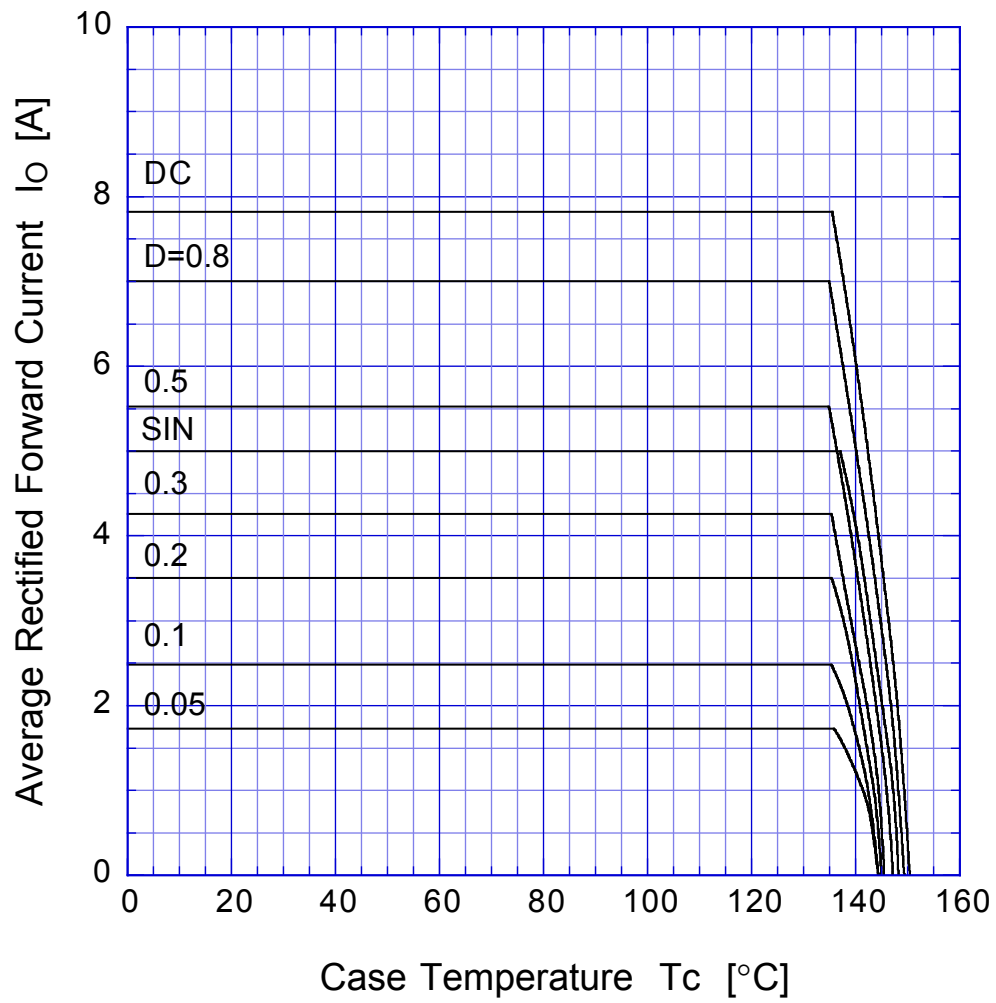


$T_j = T_{jmax}$

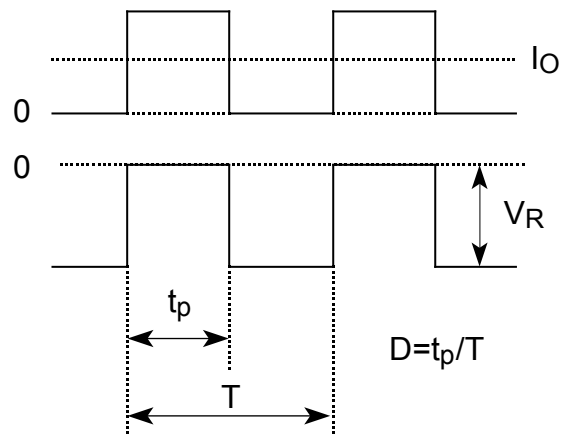


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Derating Curve

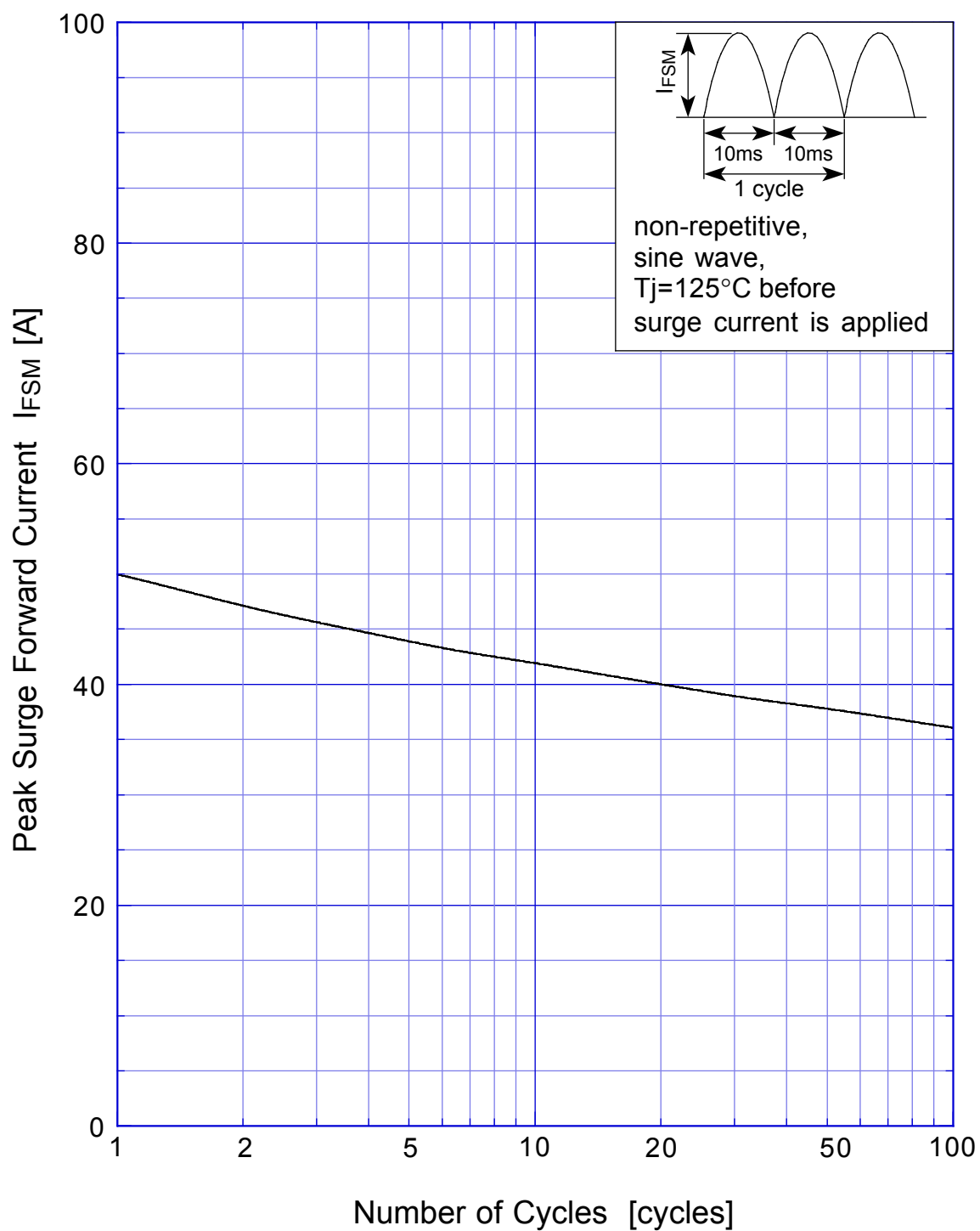


$$V_R = V_{RM}/2$$



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Peak Surge Forward Capability



SBD Repetitive Surge Reverse Power Derating Curve

