

D15SCA4M

40V 15A

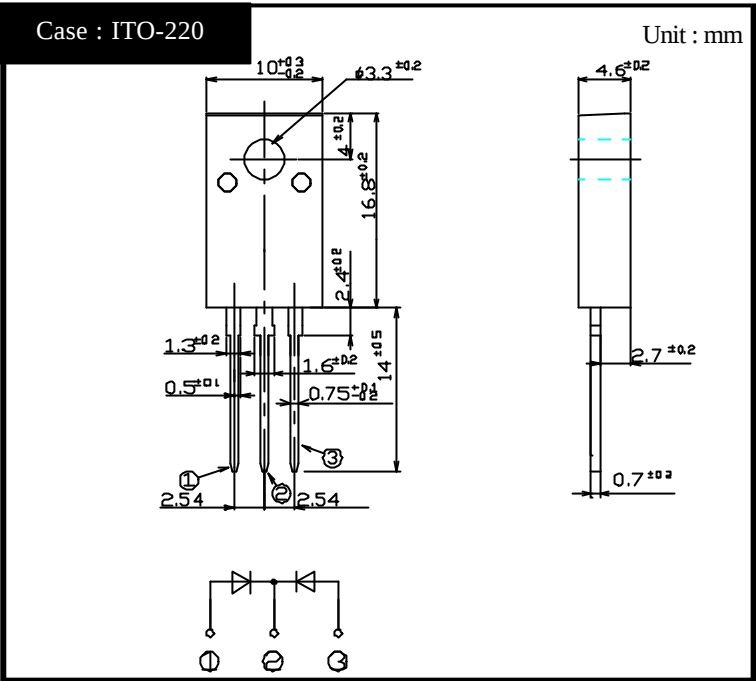
FEATURES

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

APPLICATION

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

OUTLINE DIMENSIONS



RATINGS

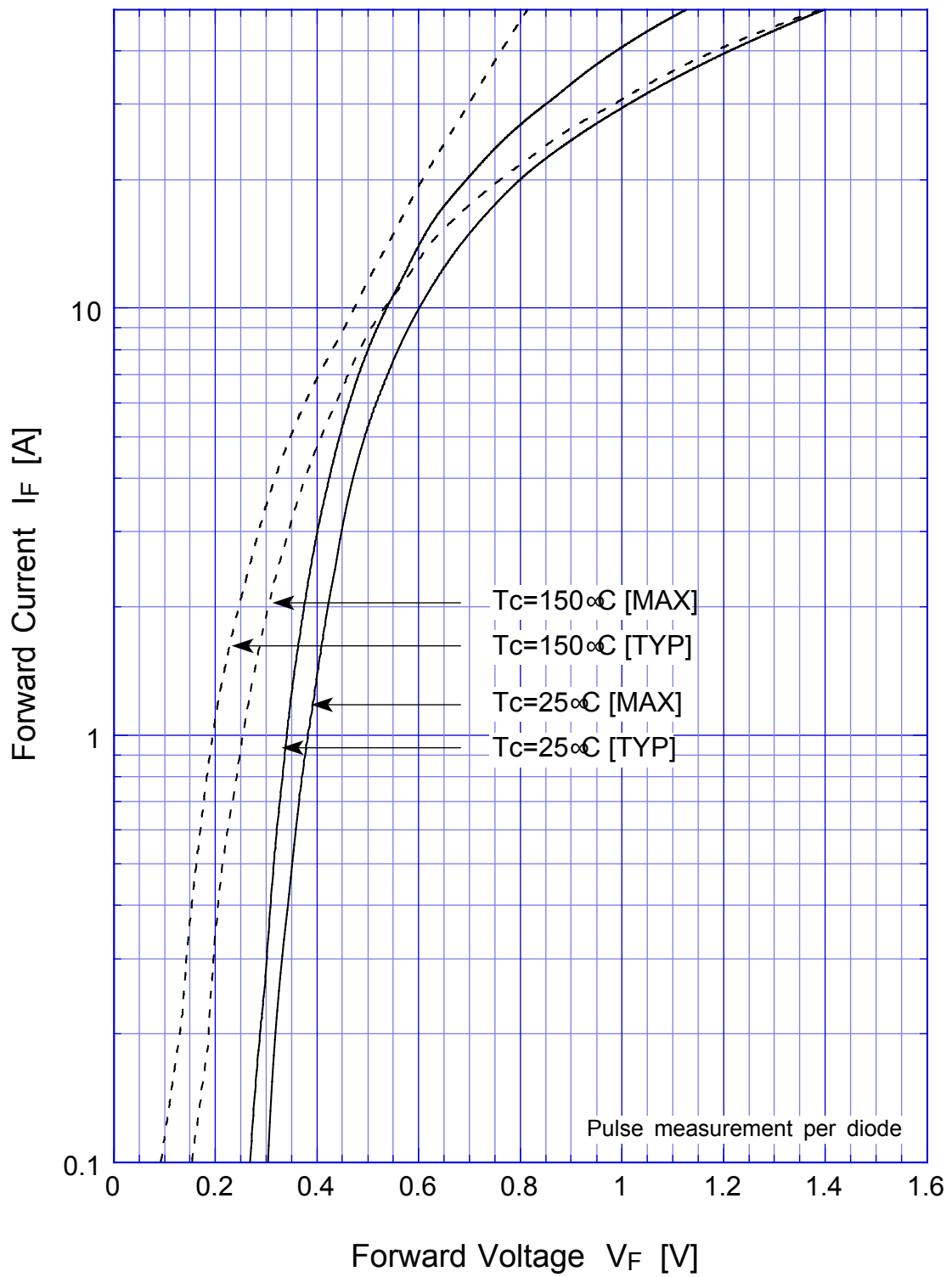
• Absolute Maximum Ratings (If not specified Tc=25)

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-40 ~ 150	
Operating Junction Temperature	Tj		150	
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, Tc=117	15	A
Peak Surge Forward Current	I _{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=125	150	A
Repetitive Peak Surge Reverse Power	P _{RRSM}	Pulse width 10 μ s, Rating of per diode, Tj= 25	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

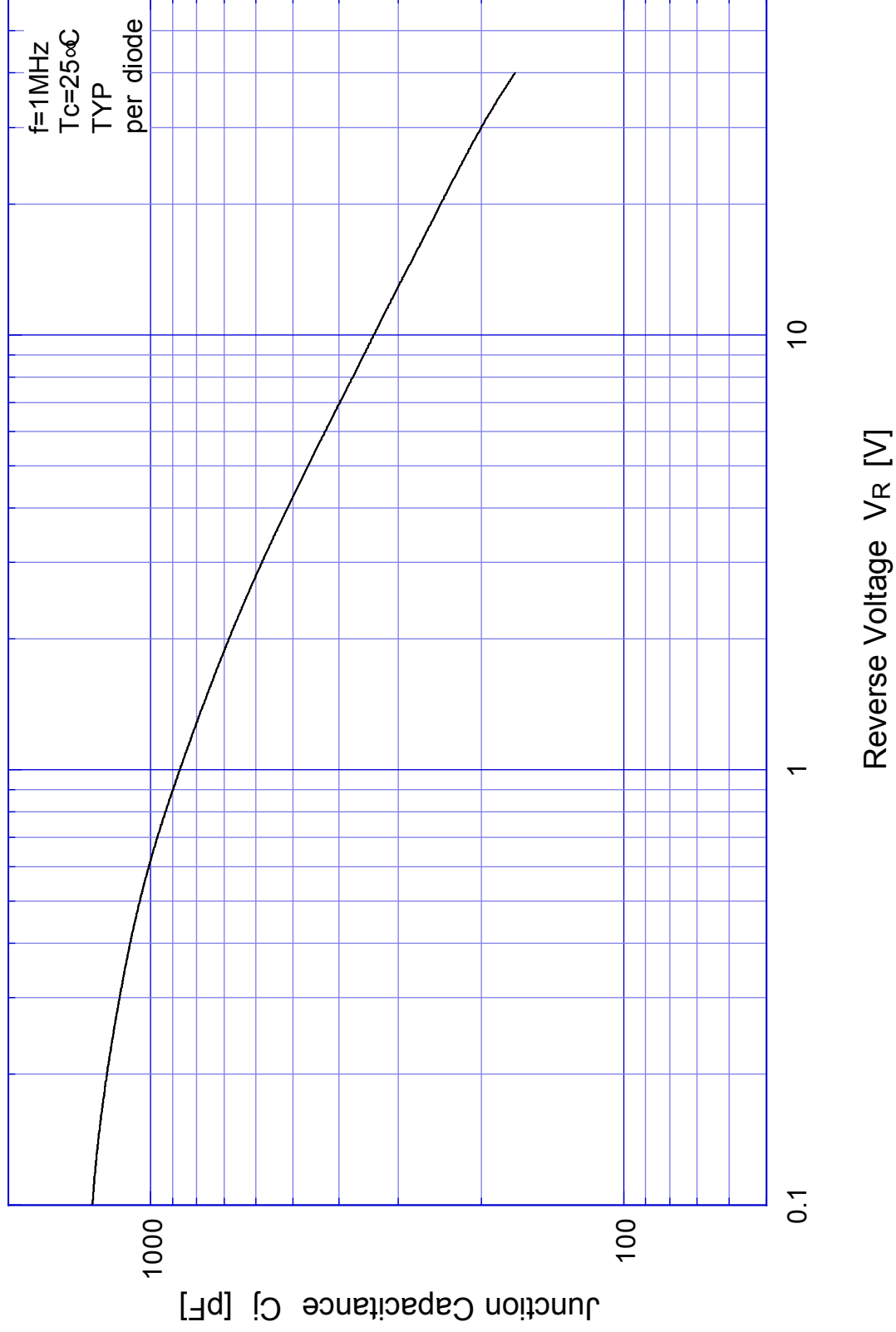
• Electrical Characteristics (If not specified Tc=25)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V _F	I _F =7.5A, 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. 5	mA
Junction Capacitance	C _j	f=1MHz, V _R =10V, Rating of per diode	Typ.340	pF
Thermal Resistance	θ_{jc}	junction to case	Max.2.8	/W
	θ_{cf}	case to heatsink, Mounting torque=0.5N·m	Max.1.5	

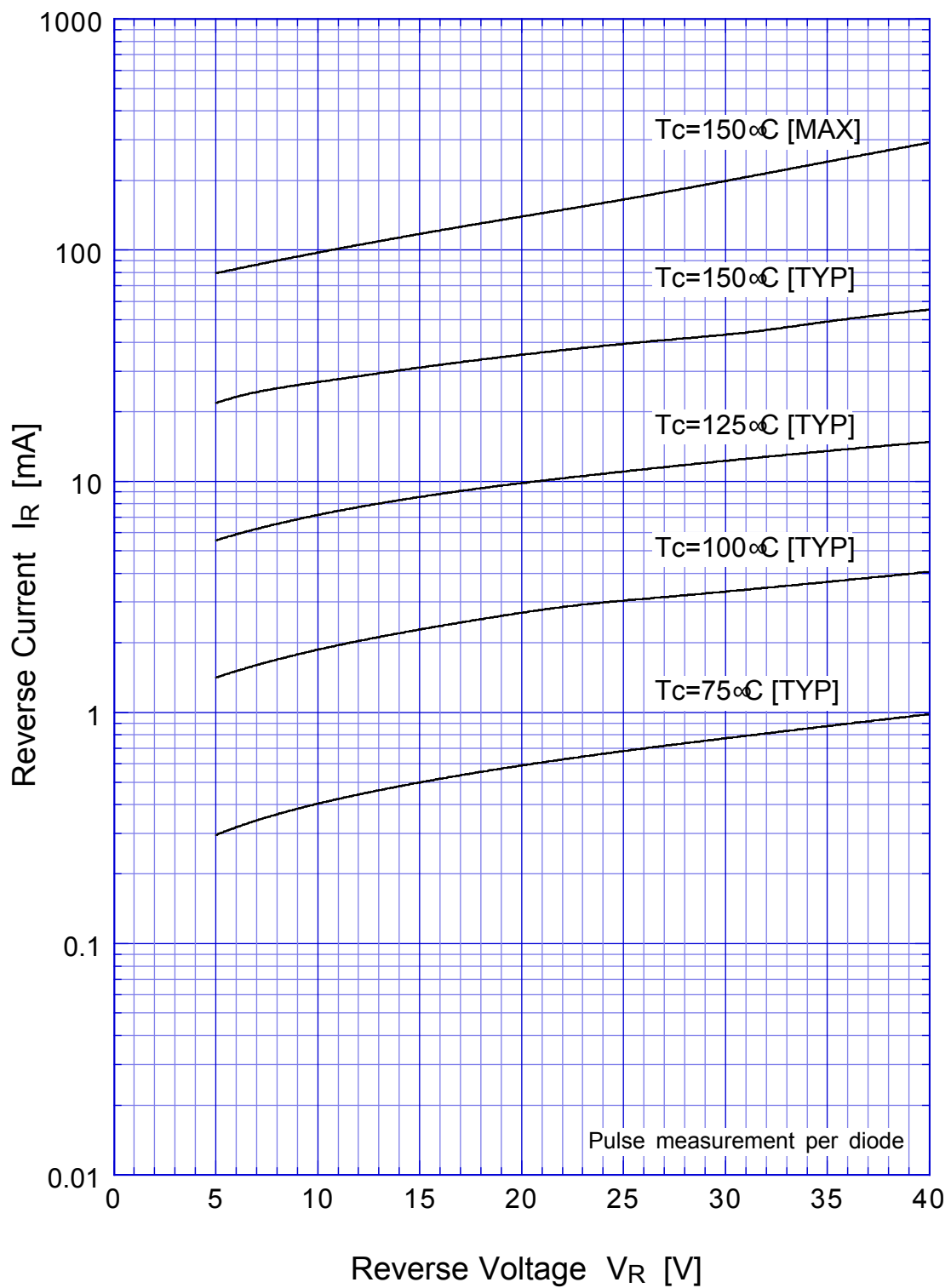
D15SCA4M Forward Voltage



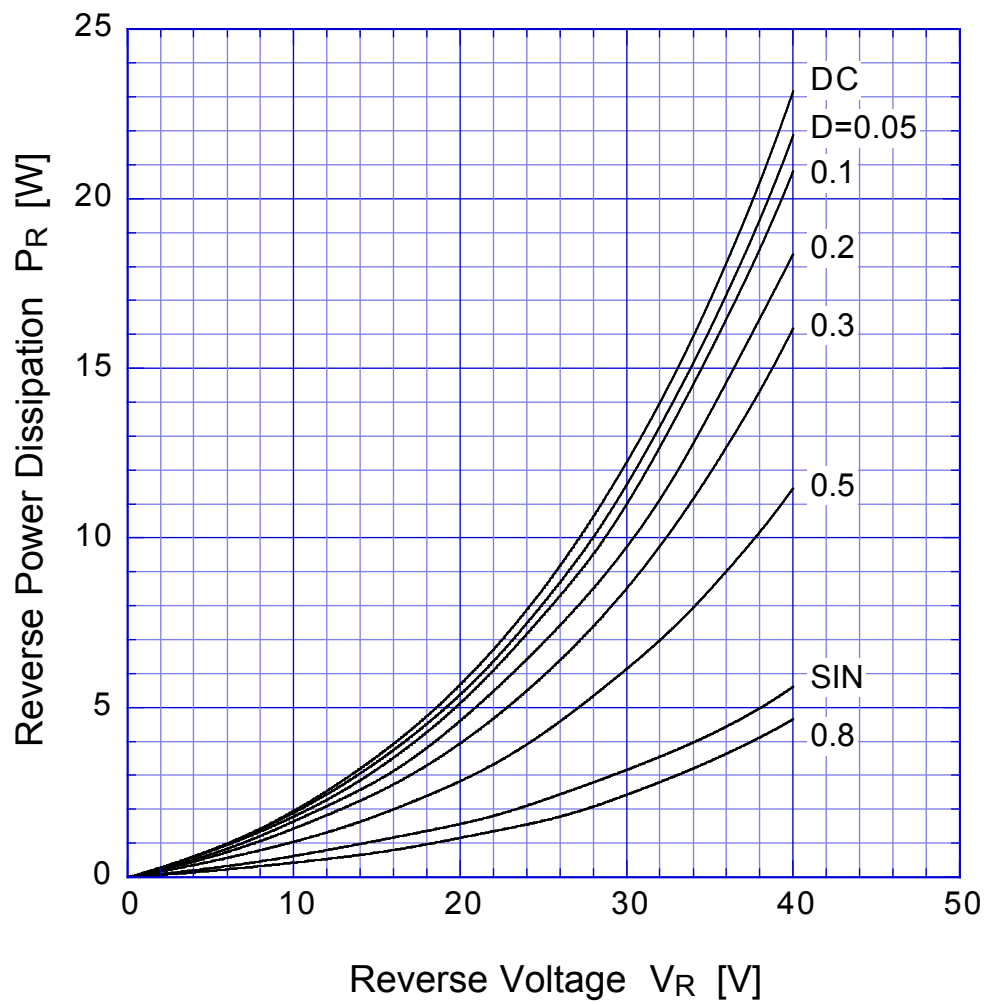
D15SCA4M Junction Capacitance



D15SCA4M Reverse Current



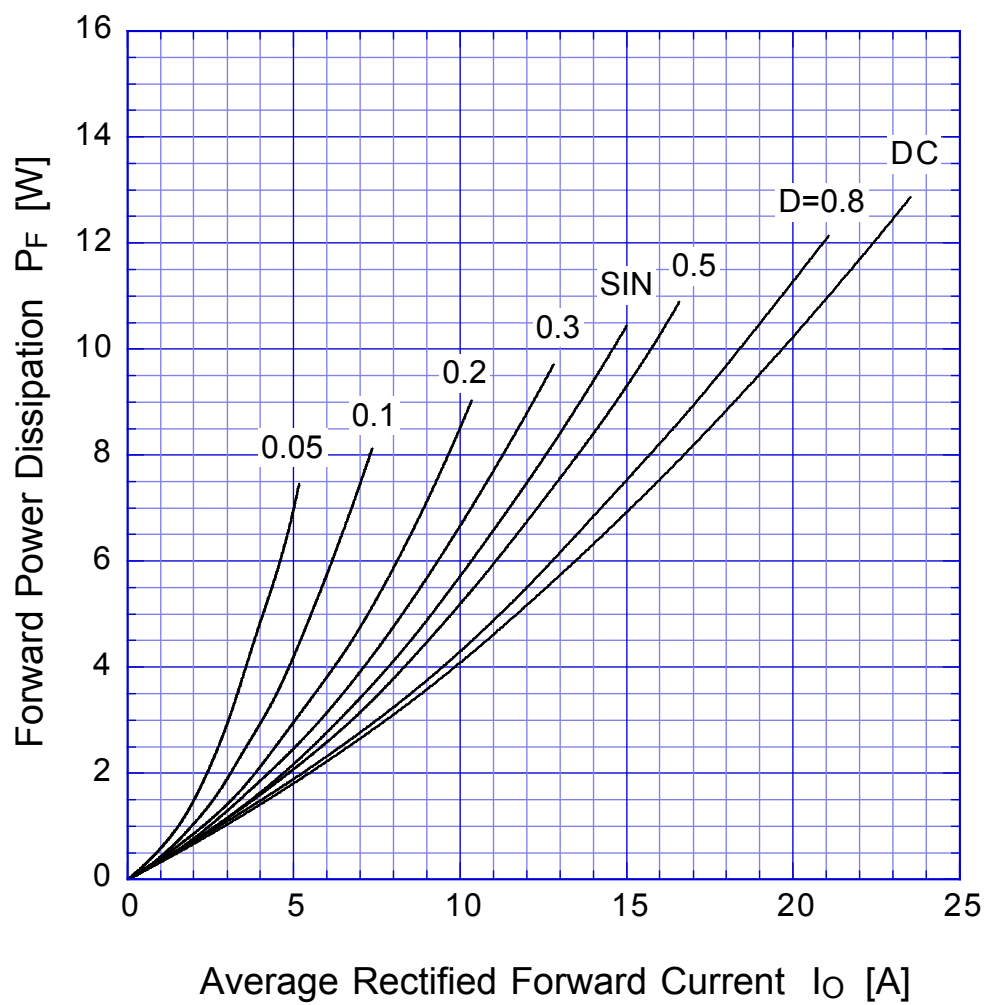
D15SCA4M Reverse Power Dissipation



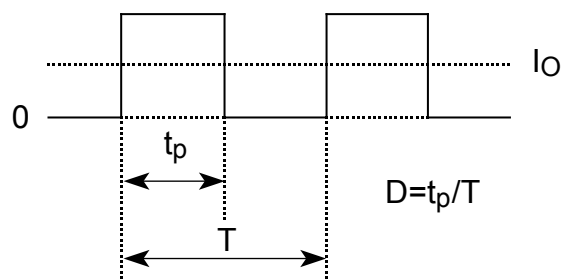
$T_j = 150^\circ\text{C}$



D15SCA4M Forward Power Dissipation

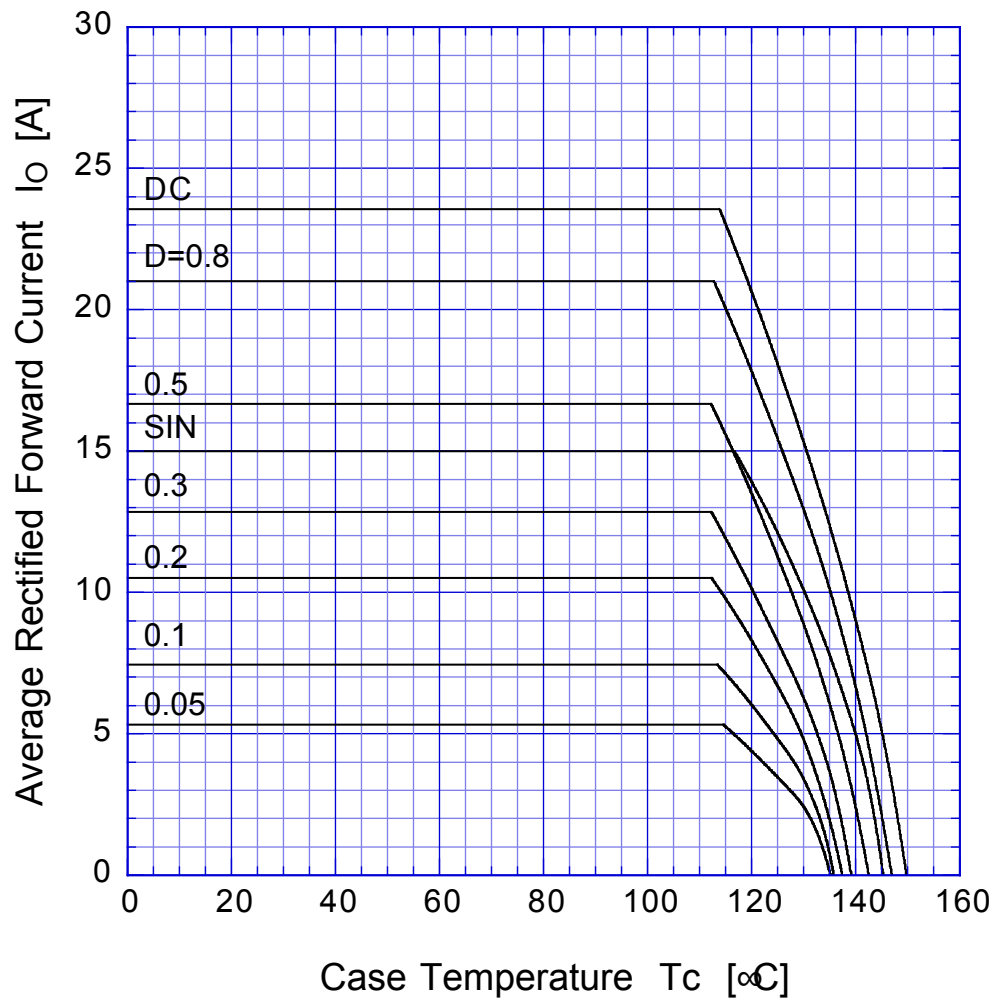


$T_j = 150^\circ\text{C}$

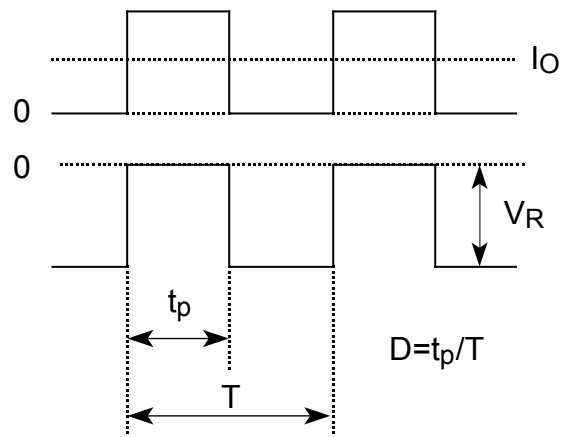


D15SCA4M

Derating Curve

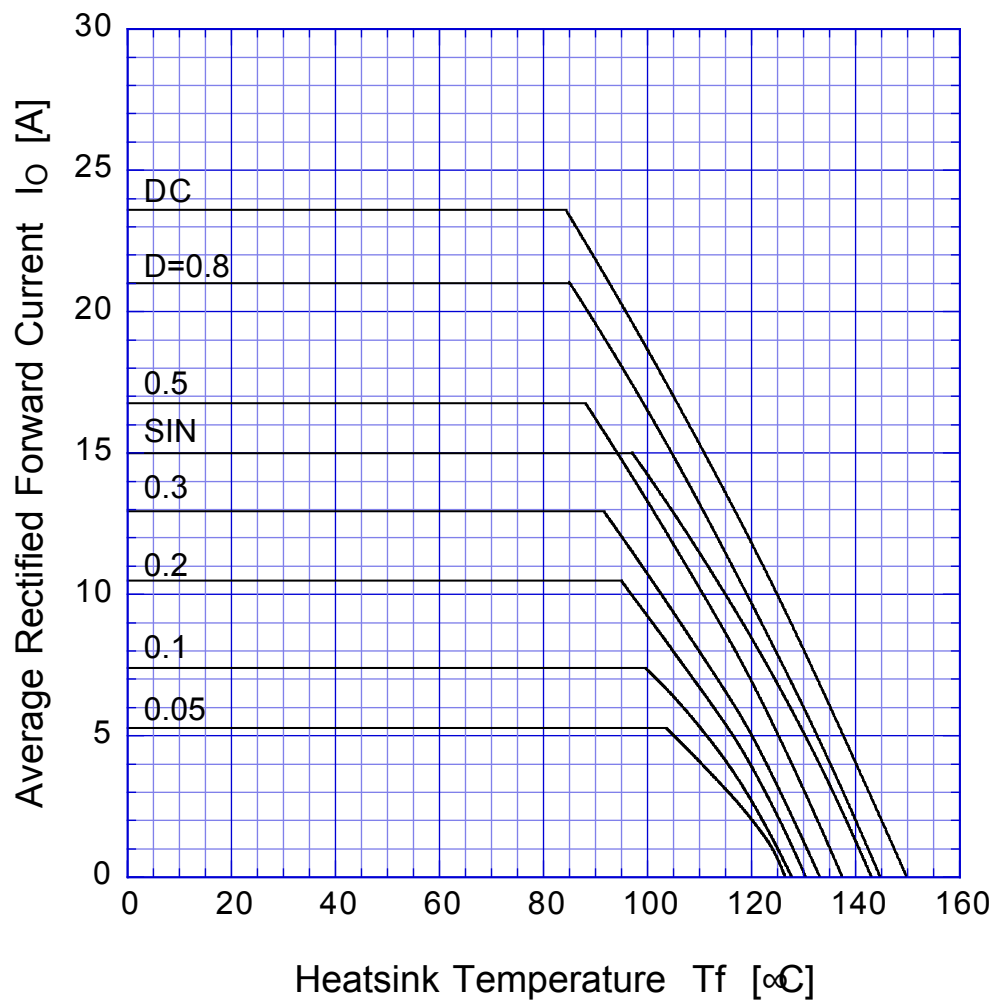


$V_R = 20V$

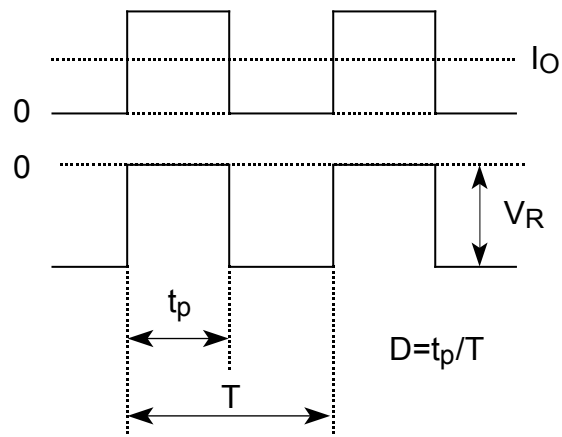


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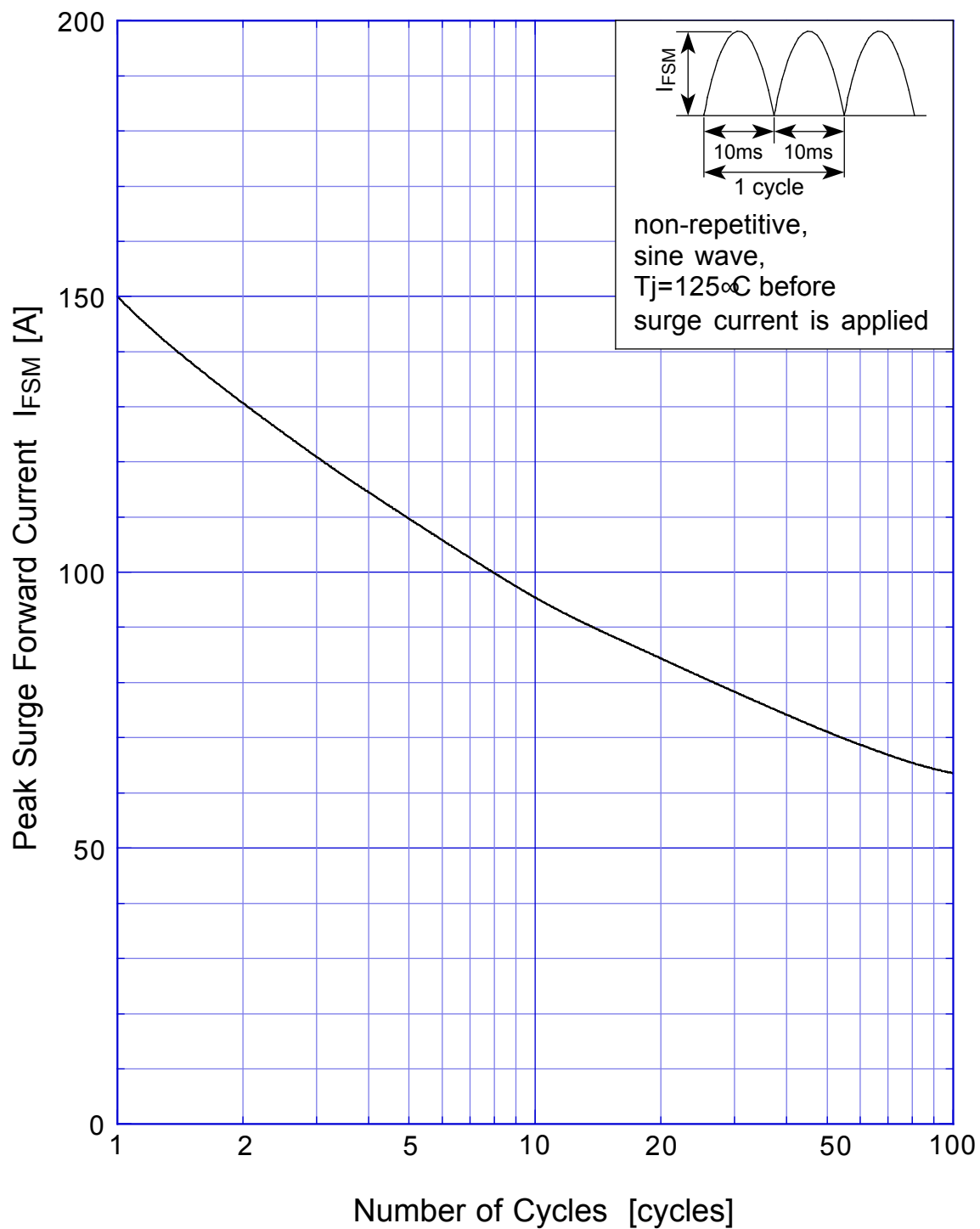
Derating Curve



$V_R = 20V$



D15SCA4M Peak Surge Forward Capability



SBD Repetitive Surge Reverse Power Derating Curve

