

D3S4M

40V 3A

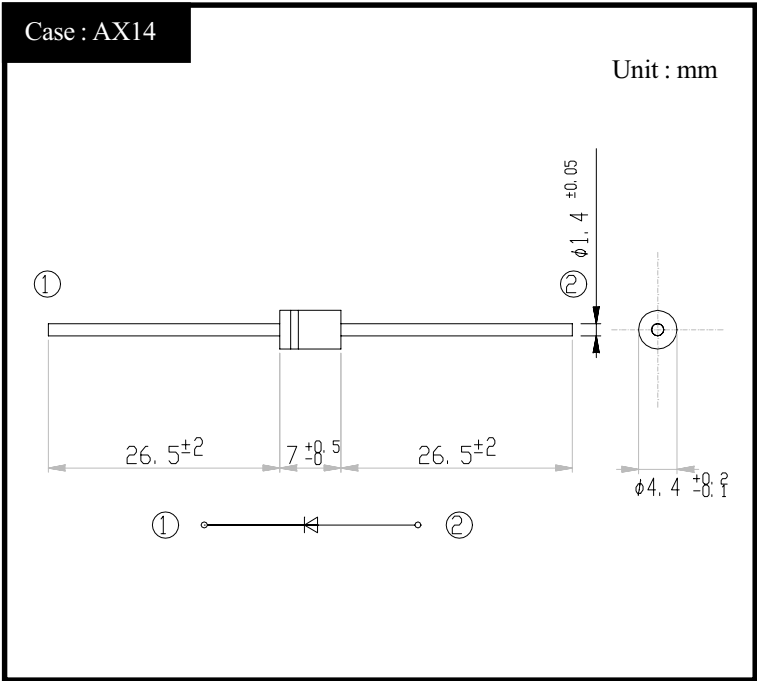
FEATURES

- Tj150°C
- PRRSM avalanche guaranteed
- 1.4 ϕ lead

APPLICATION

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

OUTLINE DIMENSIONS



RATINGS

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

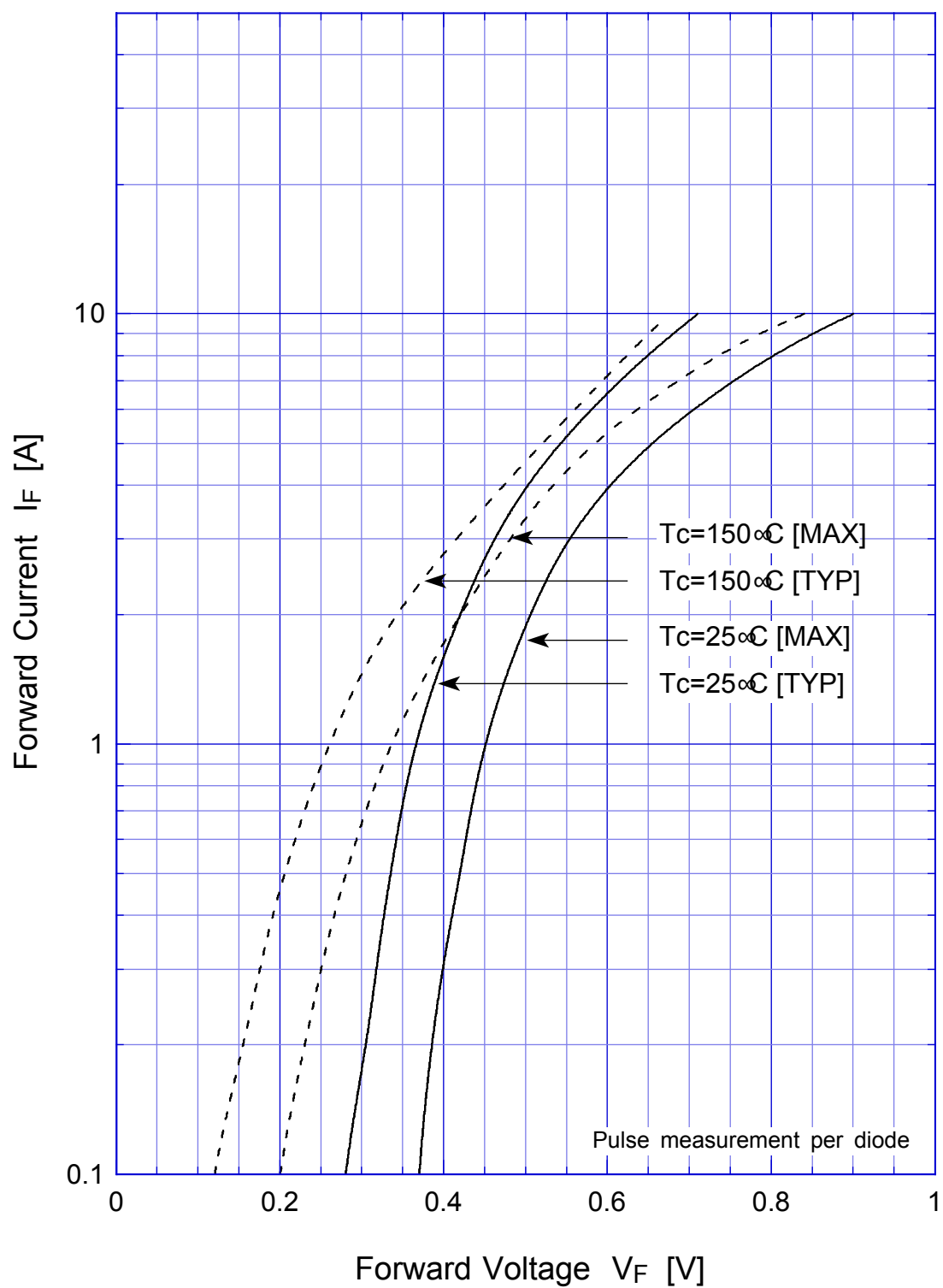
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T stg		-40 ~ 150	°C
Operating Junction Temperature	T j		150	°C
Maximum Reverse Voltage	V RM		40	V
Repetitive Peak Surge Reverse Voltage	V RRSM	Pulse width 0.5ms, duty 1/40	45	V
Average Rectified Forward Current	I O	50Hz sine wave, R-load With heatsink Ta=63°C	3	A
		50Hz sine wave, R-load Without heatsink Ta=58°C	2	
Peak Surge Forward Current	I FSM	50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=125°C	80	A
Repetitive Peak Surge Reverse Power	P RRSM	Pulse width 10 μ s, Tj=25°C	330	W

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

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V F	I F=3A, Pulse measurement	Max 0.55	V
Reverse Current	I R	V R=V RM, Pulse measurement	Max 3.5	mA
Junction Capacitance	C j	f=1MHz, V R=10V	Typ 150	pF
Thermal Resistance	θ j l	junction to lead	Max 6.5	°C/W
	θ j a	junction to ambient On glass-epoxy substrate	Max 64	
	θ j a	junction to ambient With heatsink (20mm×20mm×1mm)	Max 36	

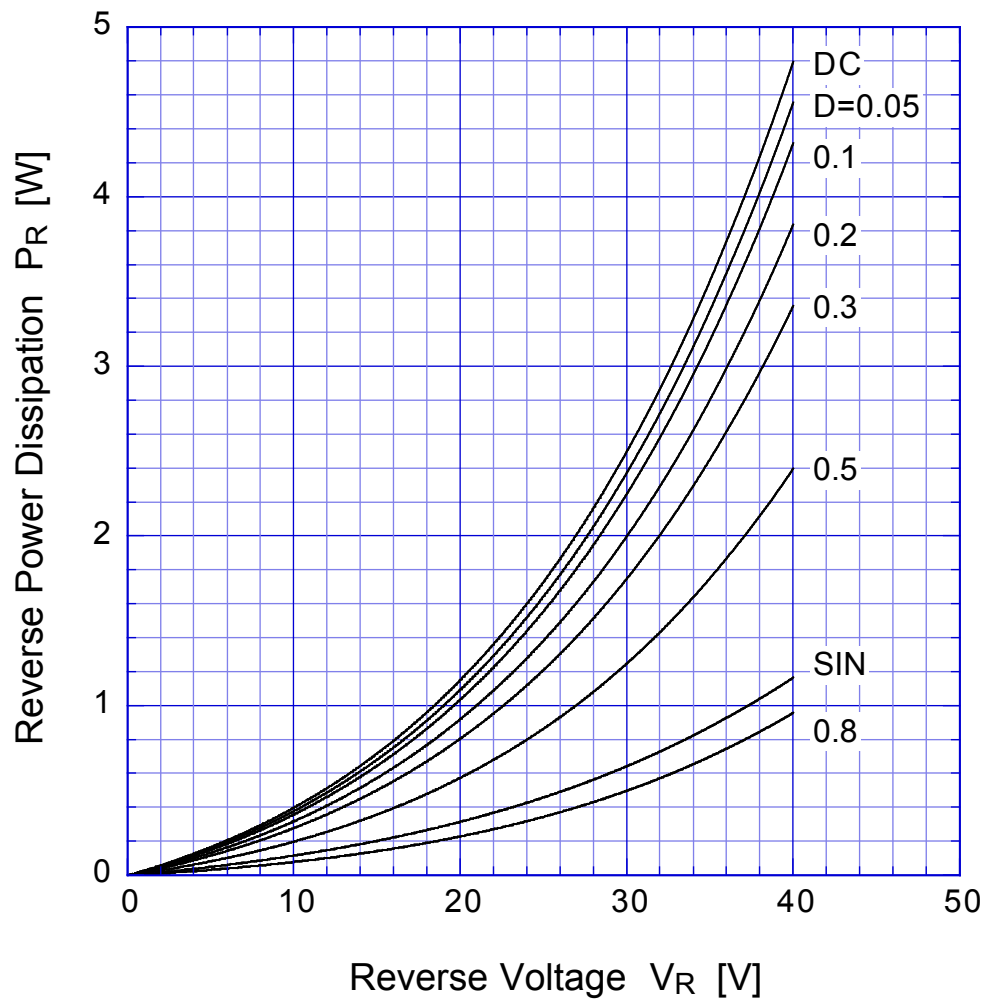
D3S4M

Forward Voltage

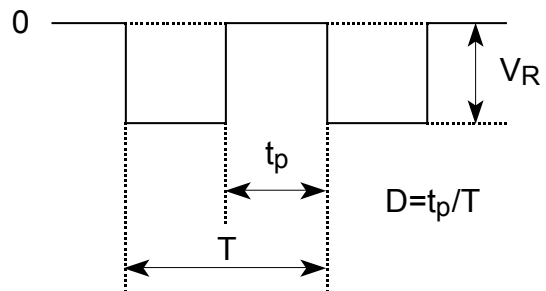


D3S4M

Reverse Power Dissipation

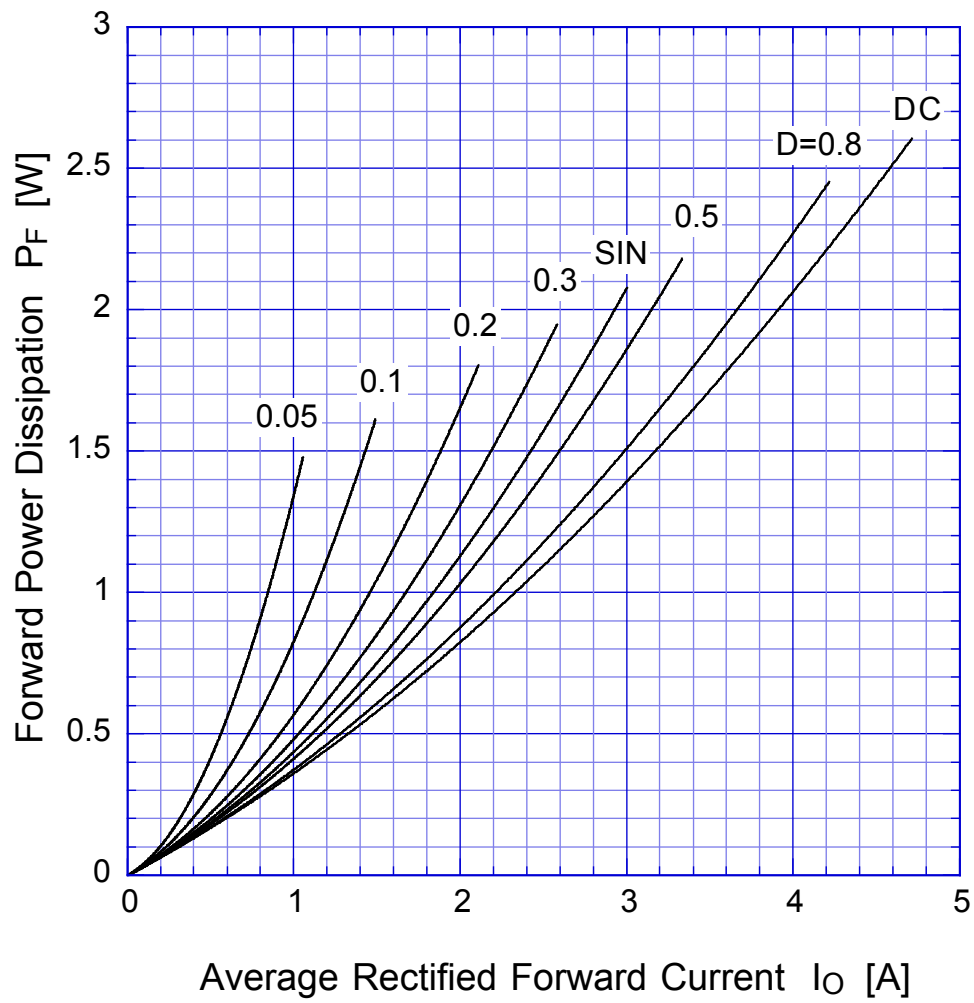


$T_j = 150^\circ\text{C}$

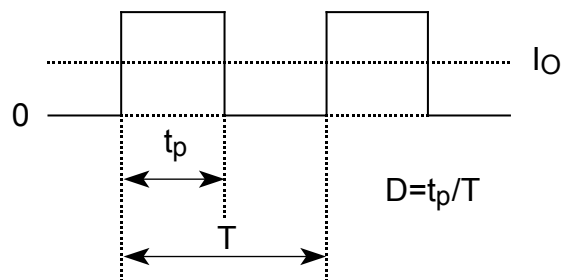


D3S4M

Forward Power Dissipation

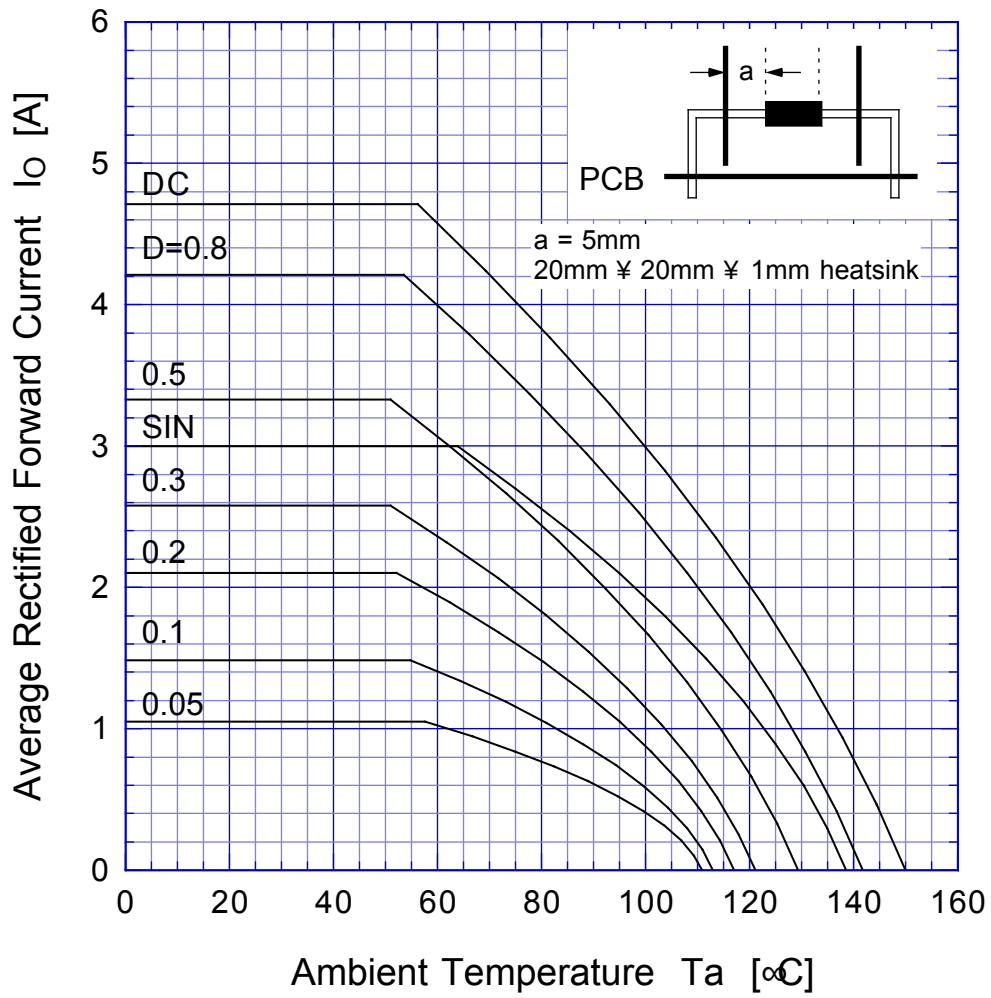


$T_j = 150^\circ\text{C}$

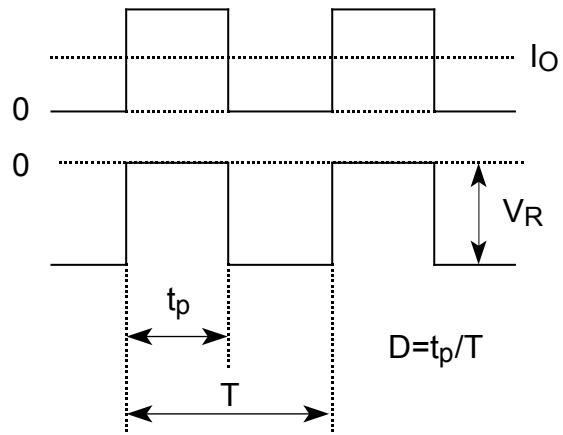


D3S4M

Derating Curve

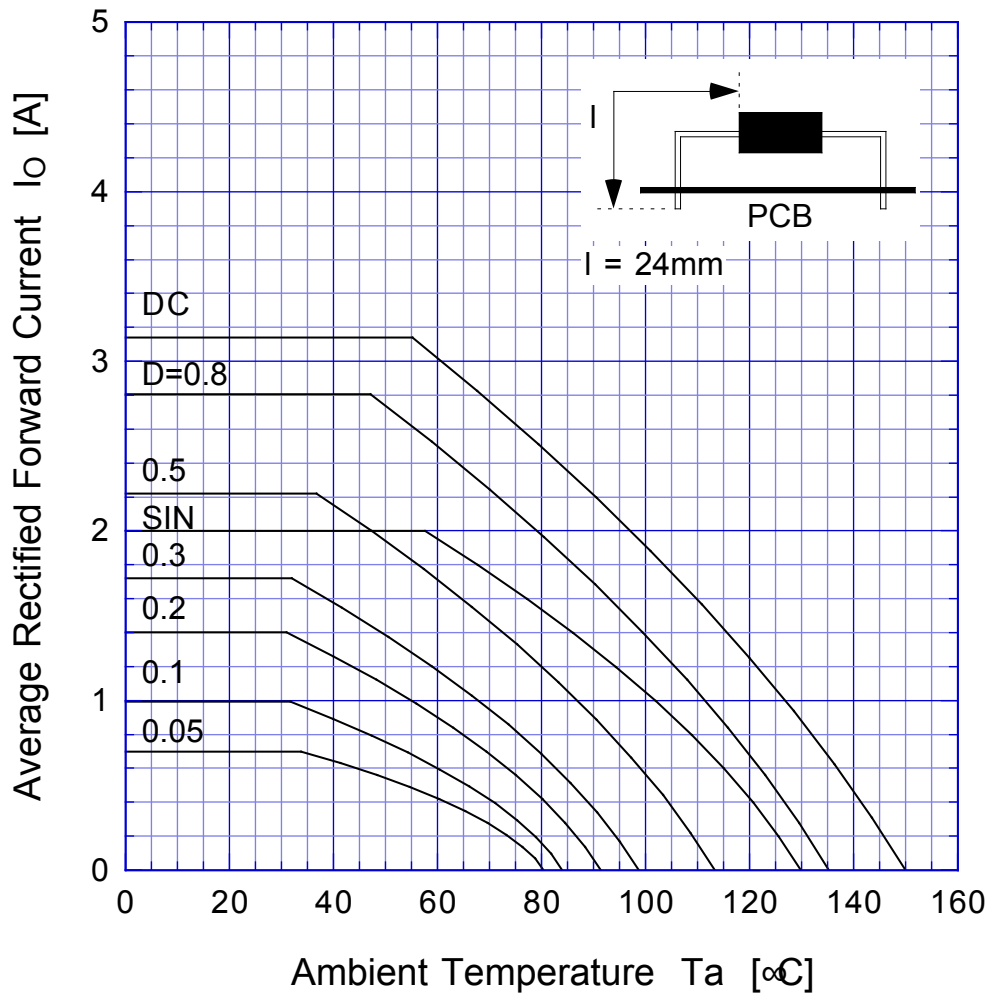


$V_R = 20\text{V}$

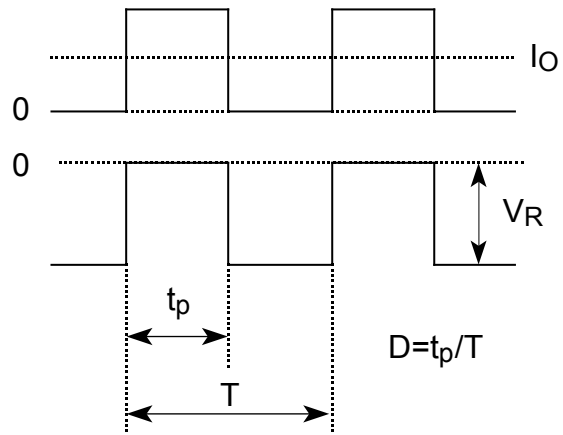


D3S4M

Derating Curve

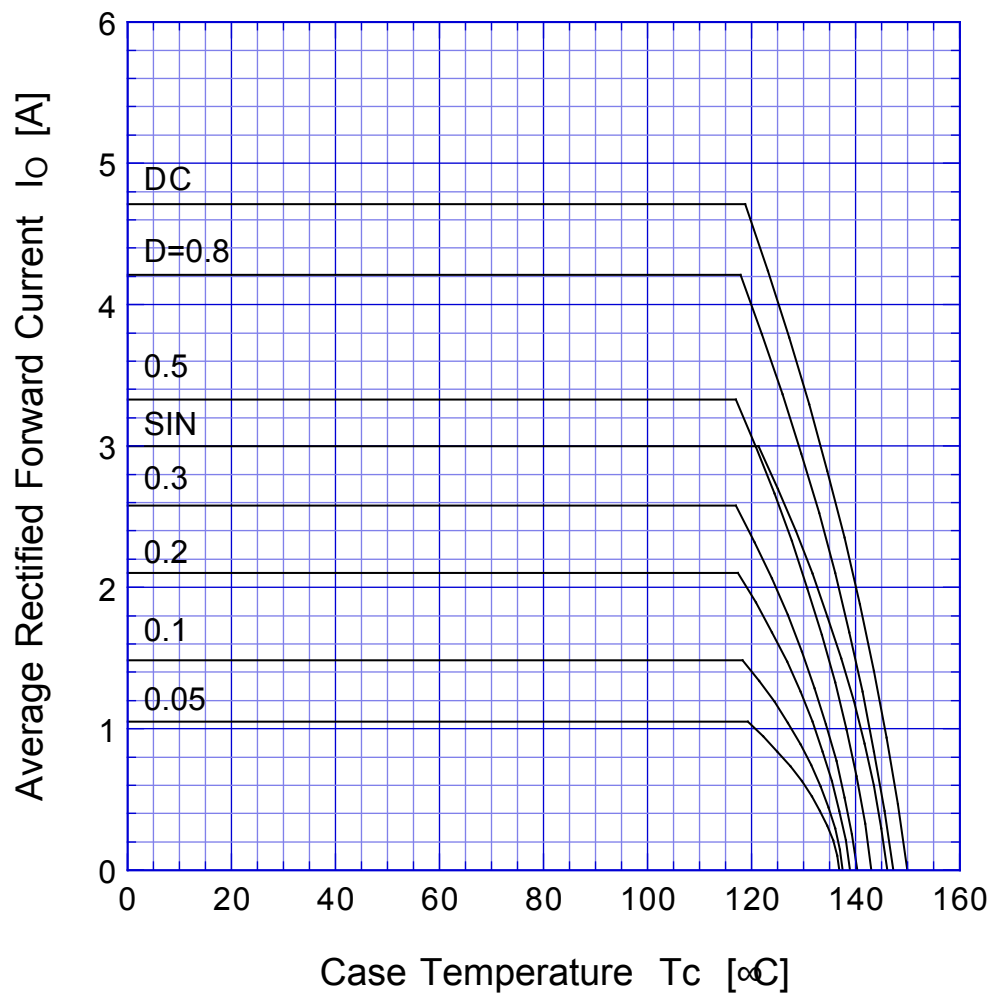


$V_R = 20\text{V}$



D3S4M

Derating Curve

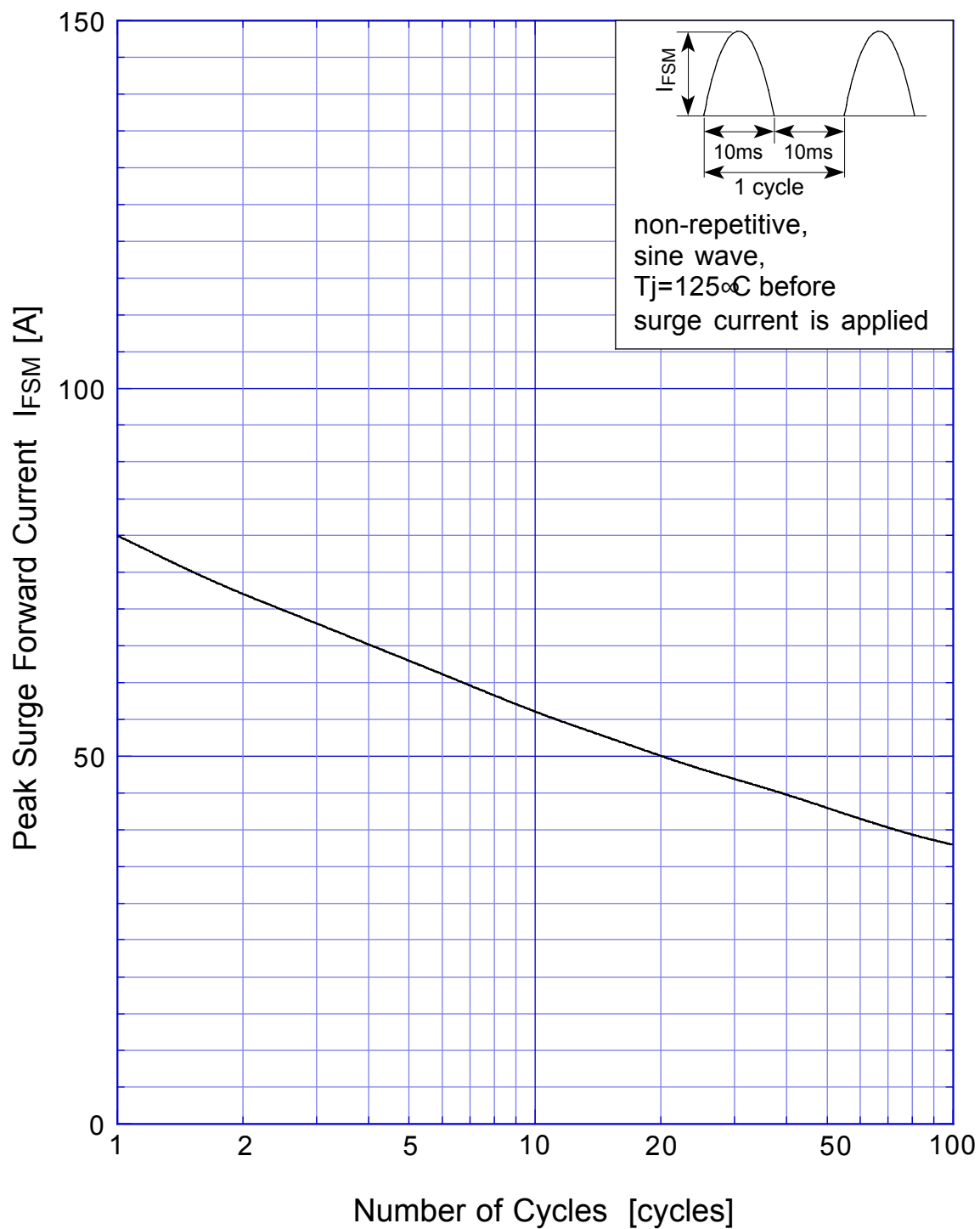


$V_R = 20\text{V}$



D3S4M

Peak Surge Forward Capability



SBD Repetitive Surge Reverse Power Derating Curve



