

D4SBS6

60V 4A

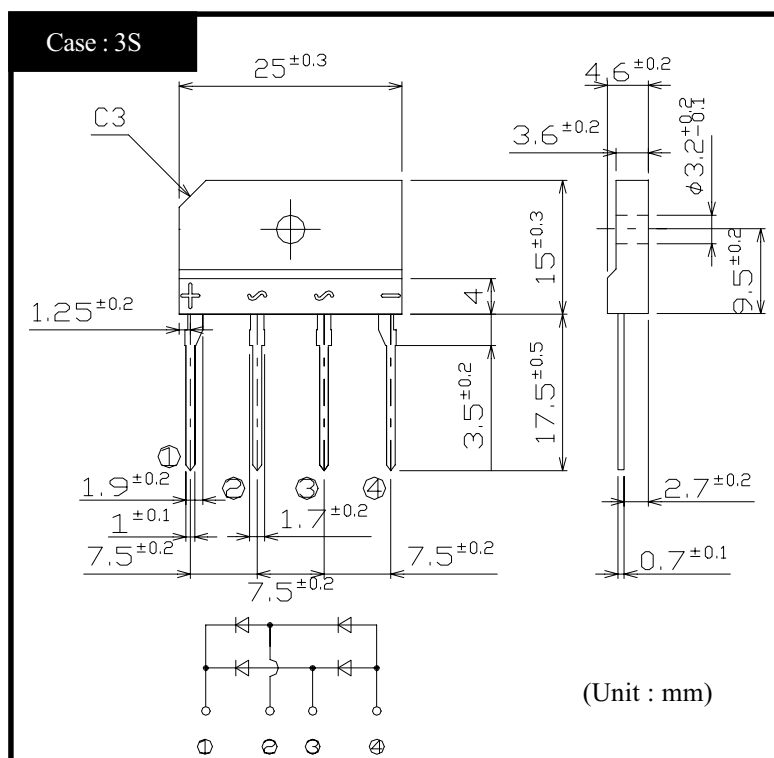
FEATURES

- Thin Single In-Line Package
- SBD Bridge
- Low VF

APPLICATION

- Switching power supply
- Home Appliances, Office Equipment
- Telecommunication, Factory Automation

OUTLINE DIMENSIONS



RATINGS

● Absolute Maximum Ratings (If not specified $T_c=25^\circ\text{C}$)

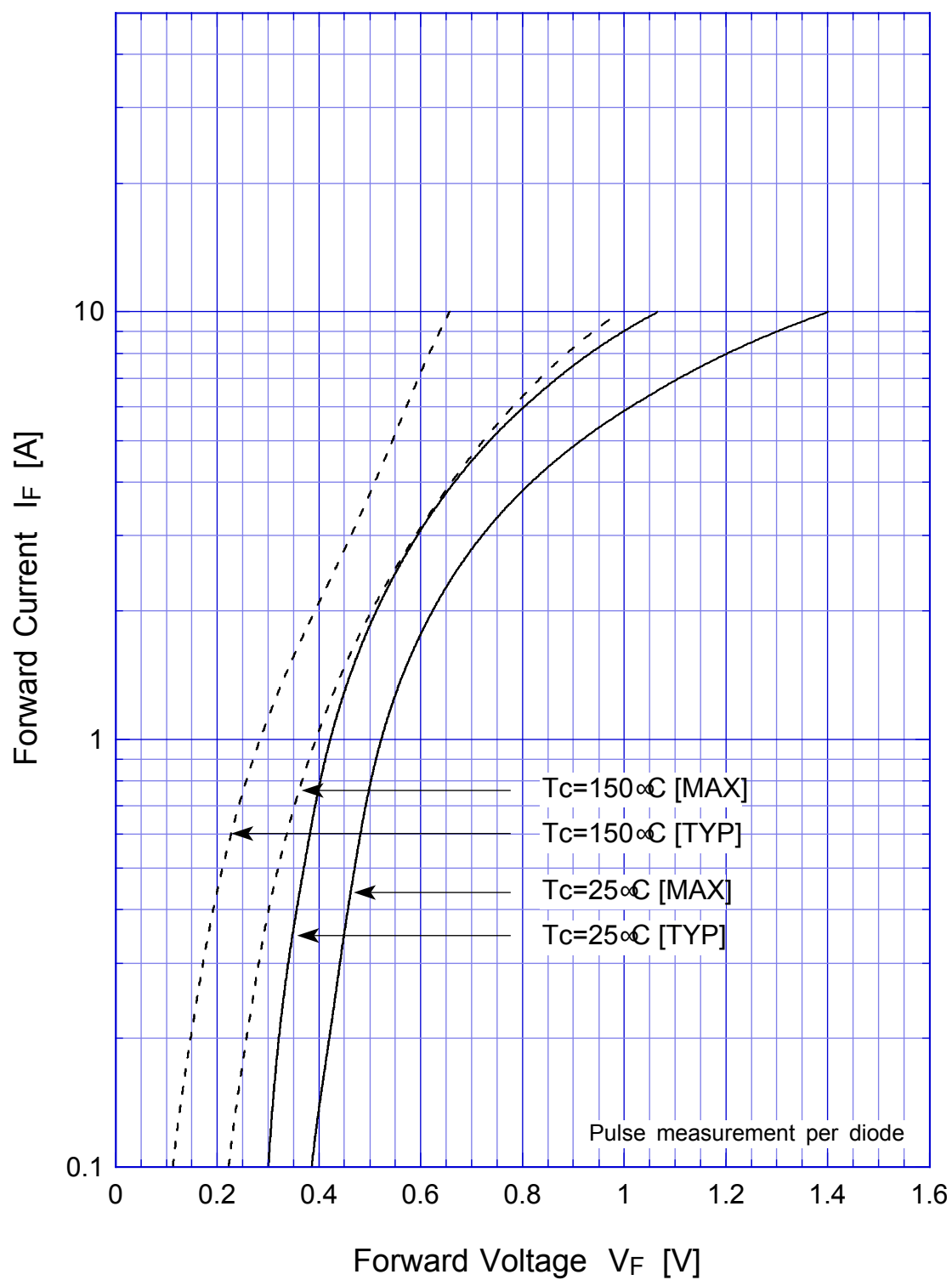
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T_{stg}		$-40 \sim 150$	$^\circ\text{C}$
Operating Junction Temperature	T_j		150	$^\circ\text{C}$
Maximum Reverse Voltage	V_{RM}		60	V
Repetitive Peak Surge Reverse Voltage	V_{RRSM}	Pulse width 0.5ms, duty 1/40	65	V
Average Rectified Forward Current	I_O	50Hz sine wave, R-load With heatsink $T_c=114^\circ\text{C}$	4	A
		50Hz sine wave, R-load Without heatsink $T_a=46^\circ\text{C}$	2.3	
Peak Surge Forward Current	I_{FSM}	50Hz sine wave, Non-repetitive 1cycle peak value, $T_j=125^\circ\text{C}$	60	A
Repetitive Peak Surge Reverse Power	P_{RRSM}	Pulse width $10 \mu\text{s}$, Rating of per diode, $T_j=25^\circ\text{C}$	330	W
Dielectric Strength	V_{dis}	Terminals to case, AC 1 minute	2	kV
Mounting Torque	TOR	(Recommended torque: $0.5\text{N}\cdot\text{m}$)	0.8	$\text{N}\cdot\text{m}$

● Electrical Characteristics (If not specified $T_c=25^\circ\text{C}$)

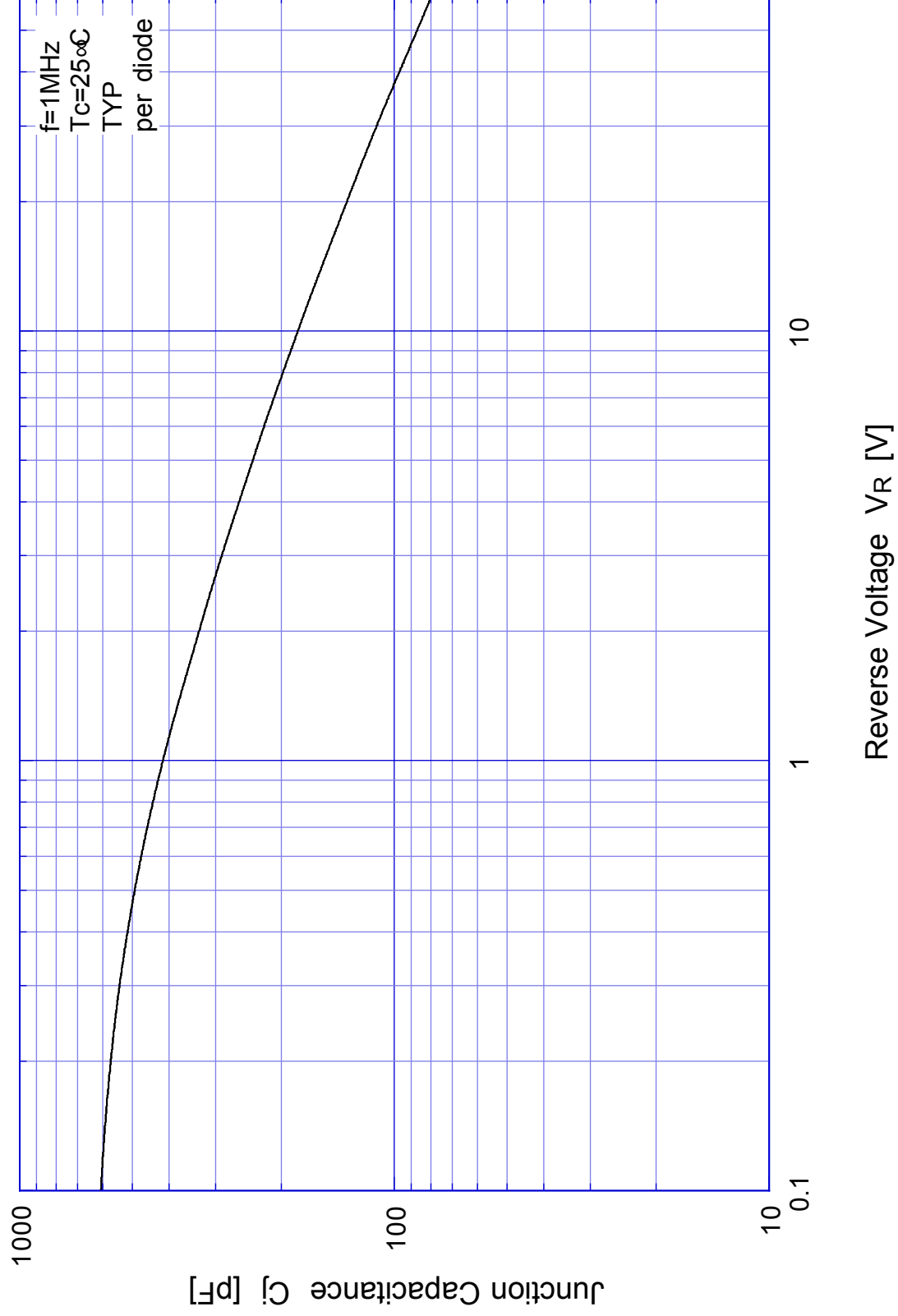
Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V_F	$I_F=2\text{A}$, Pulse measurement, Rating of per diode	Max.0.62	V
Reverse Current	I_R	$V_R=V_{RM}$, Pulse measurement, Rating of per diode	Max.2	mA
Junction Capacitance	C_j	$f=1\text{MHz}$, $V_R=10\text{V}$, Rating of per arm	TYP 180	pF
Thermal Resistance	θ_{jc}	junction to case With heatsink	Max.5.5	$^\circ\text{C}/\text{W}$
	θ_{jl}	junction to lead Without heatsink	Max.6	
	θ_{ja}	junction to ambient Without heatsink	Max.30	

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Forward Voltage

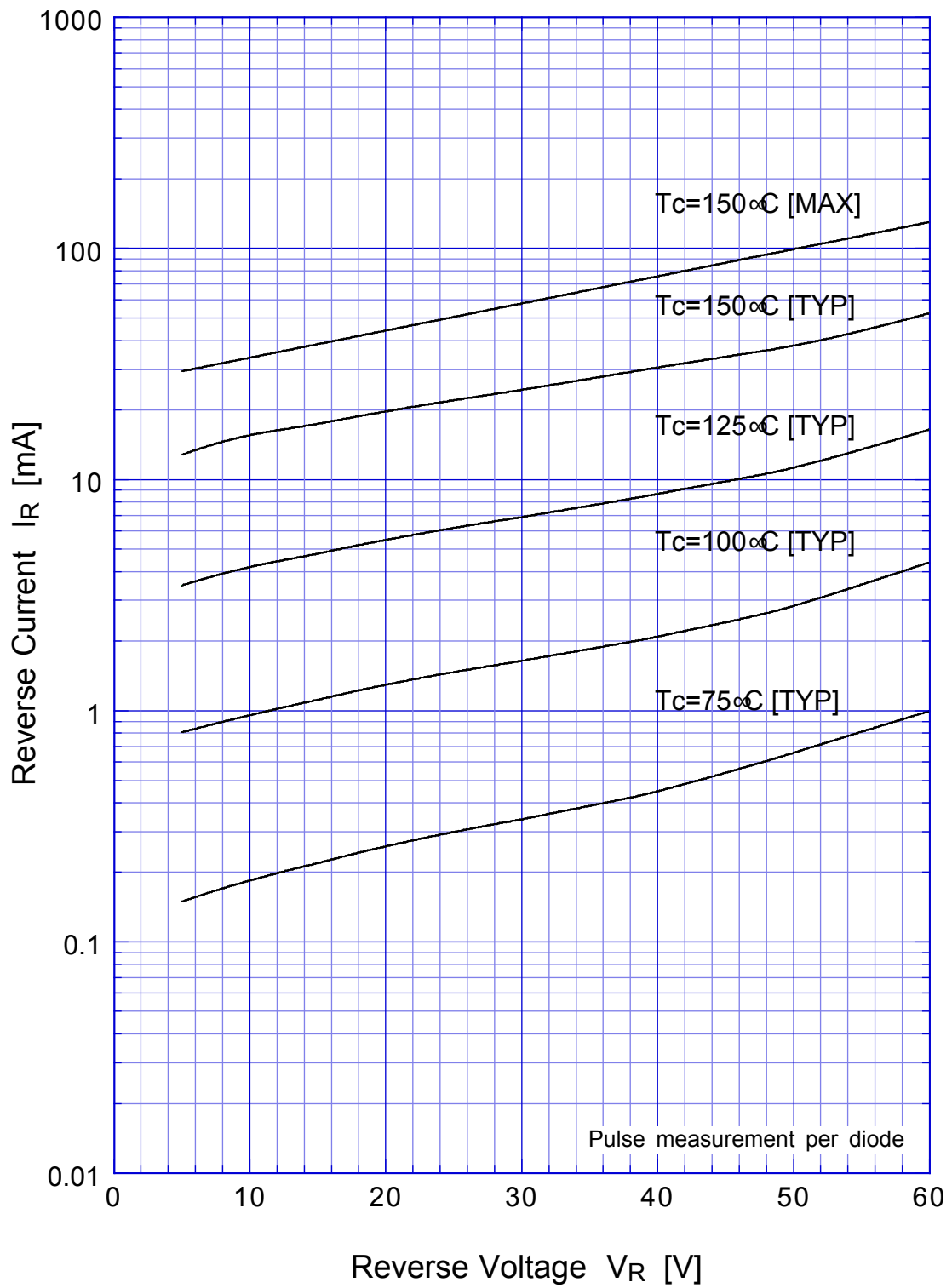


D4SBS6 Junction Capacitance



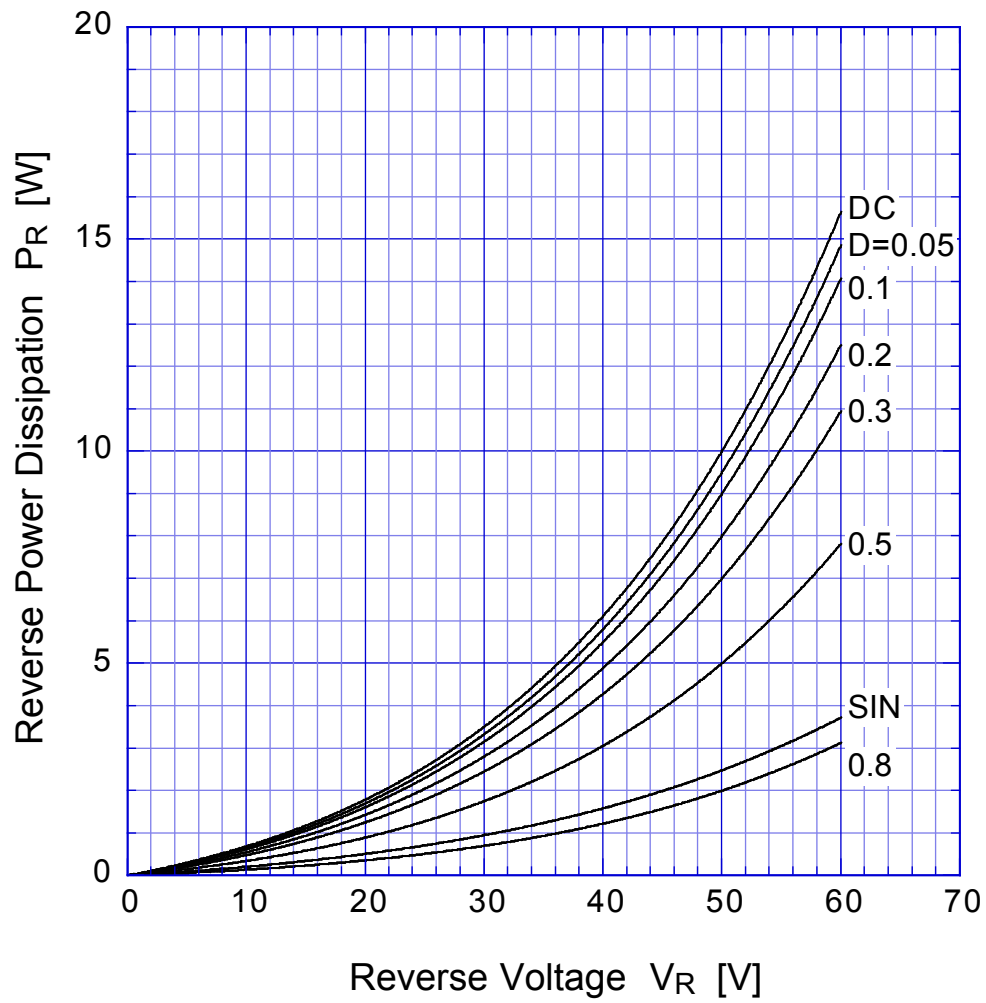
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Reverse Current

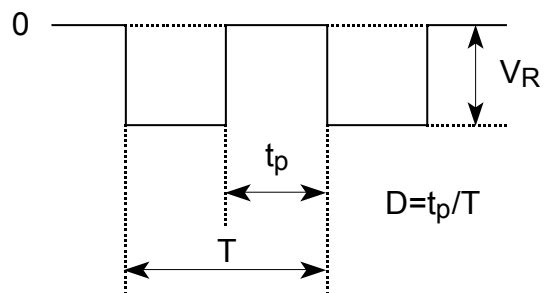


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Reverse Power Dissipation

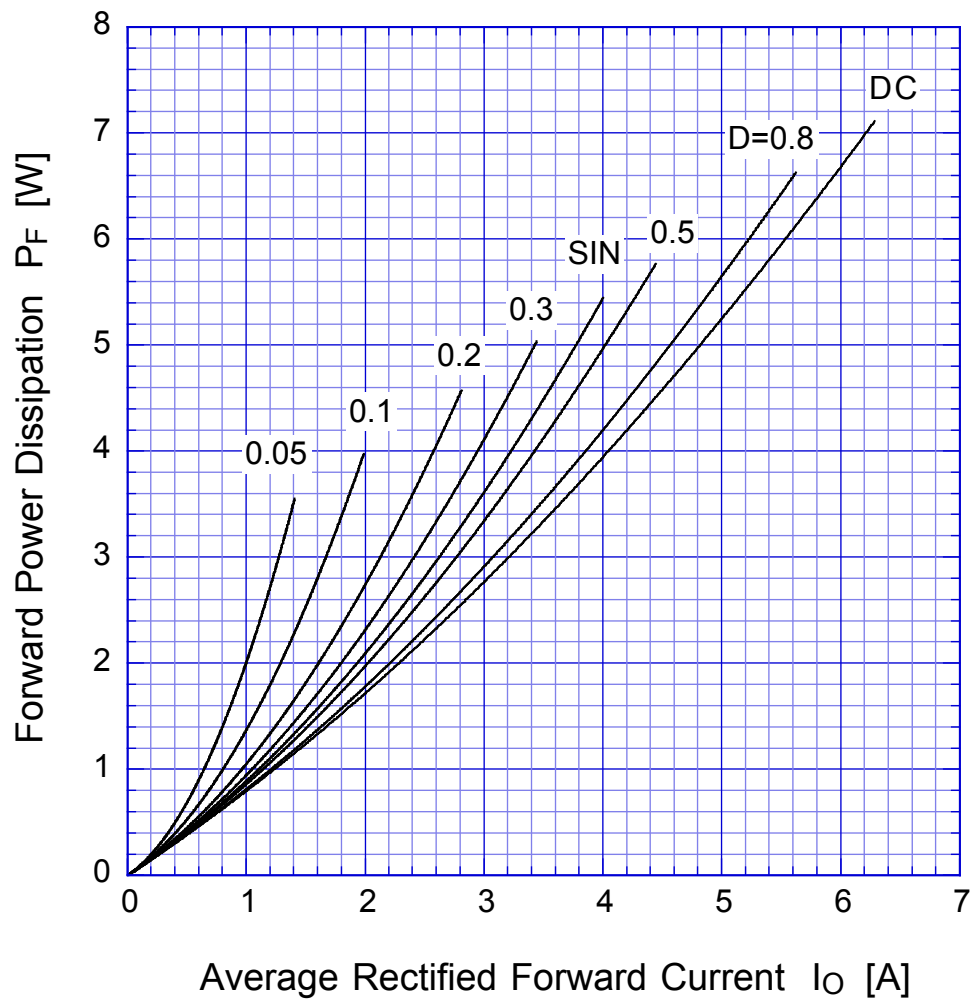


$T_j = 150^\circ\text{C}$



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Forward Power Dissipation

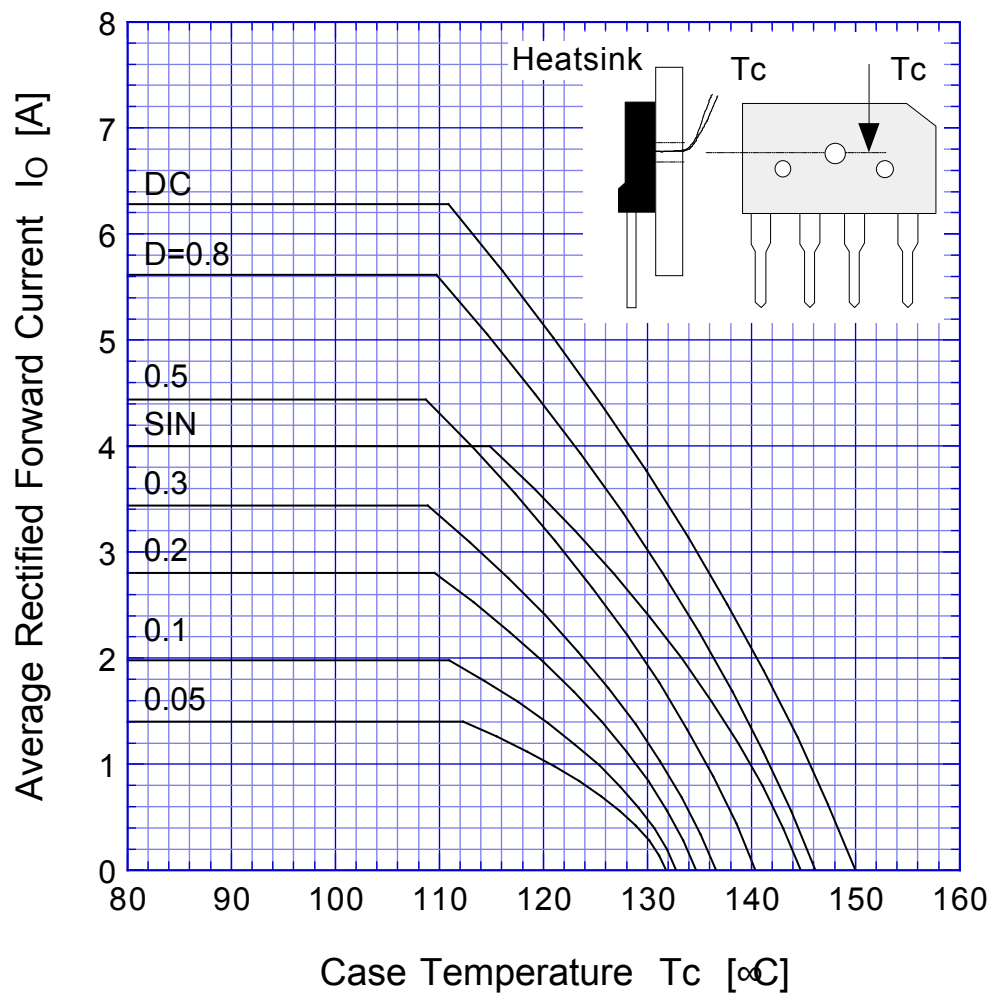


$T_j = 150^\circ\text{C}$



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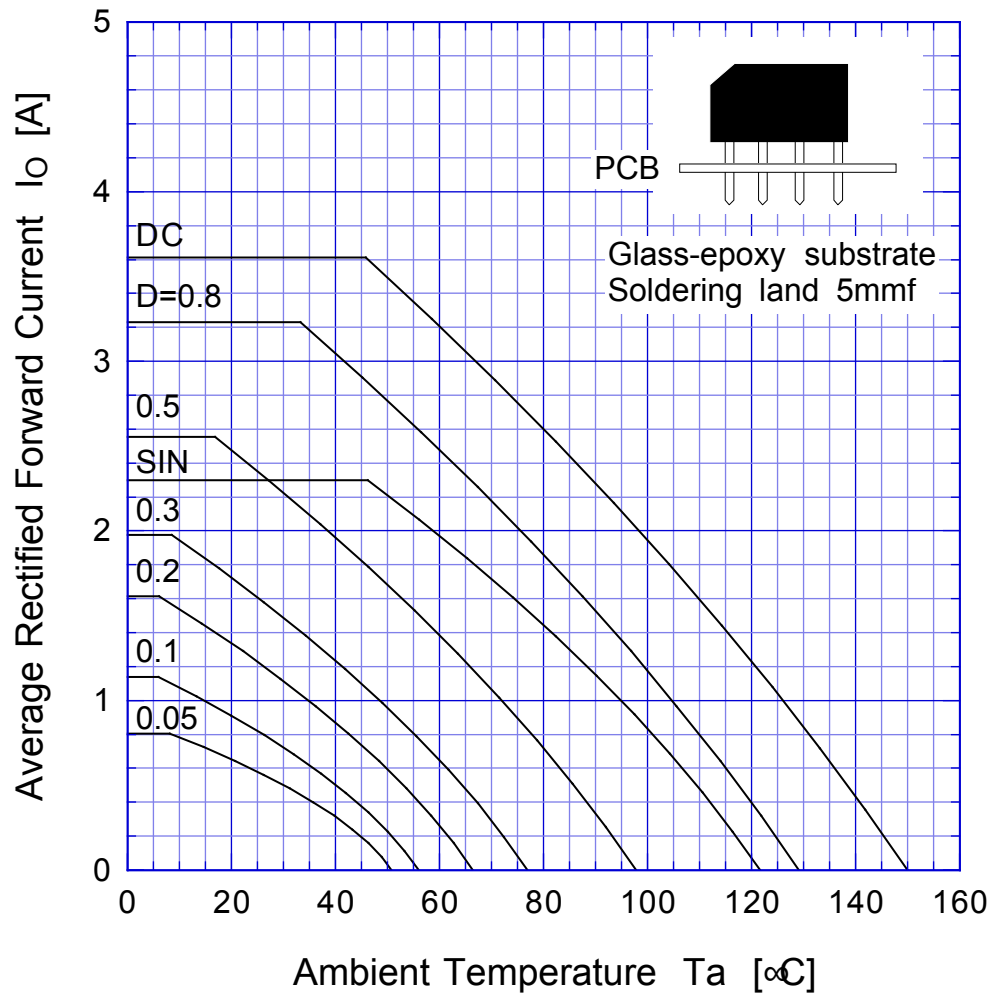
Derating Curve



Sine wave
R-load
with heatsink

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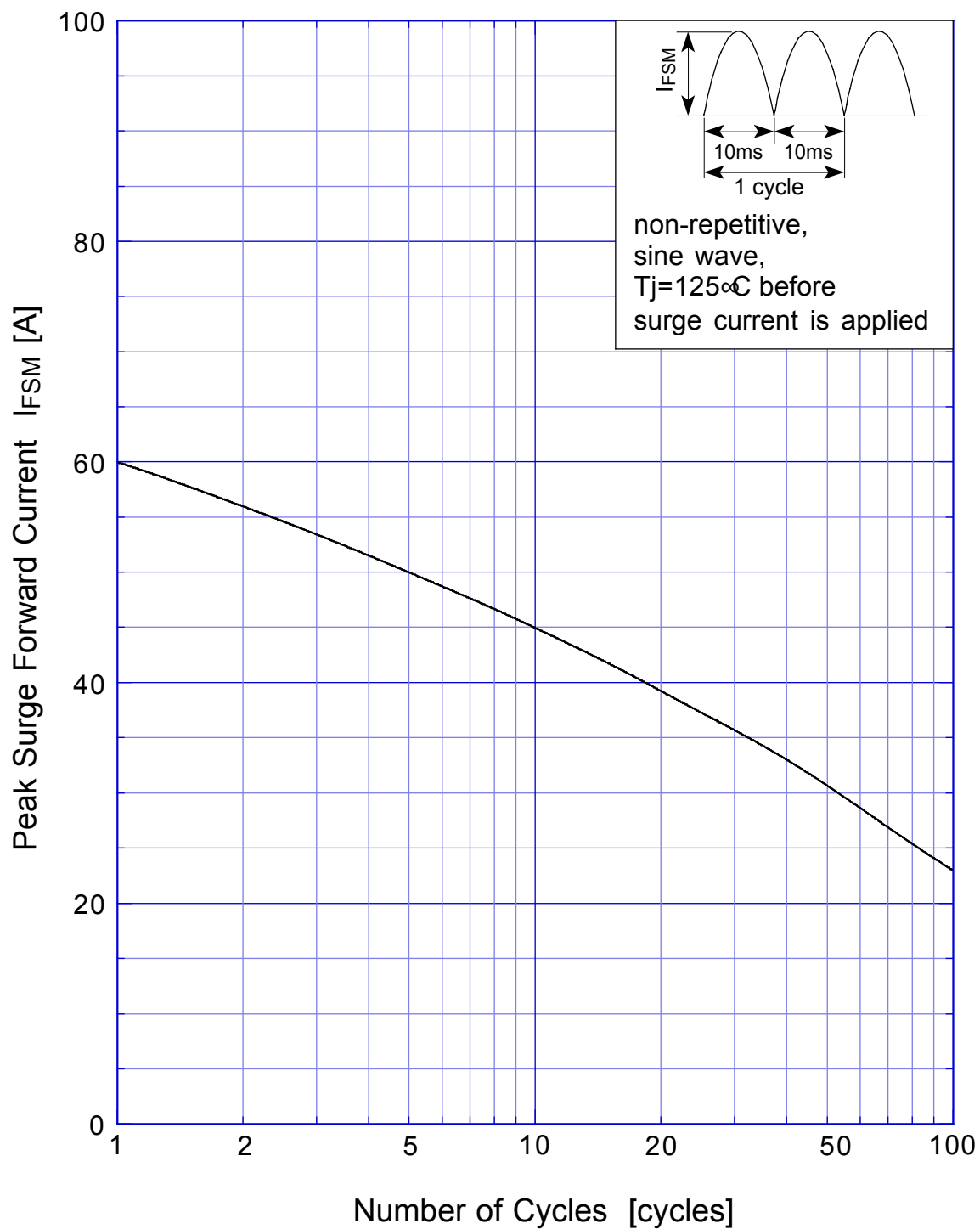
Derating Curve



Sine wave
R-load
Free in air

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Peak Surge Forward Capability



SBD Repetitive Surge Reverse Power Derating Curve

