

# SHINDENGEN

## Schottky Rectifiers (SBD)

## SBD Bridges

# D4SBS4

## 40V 4A

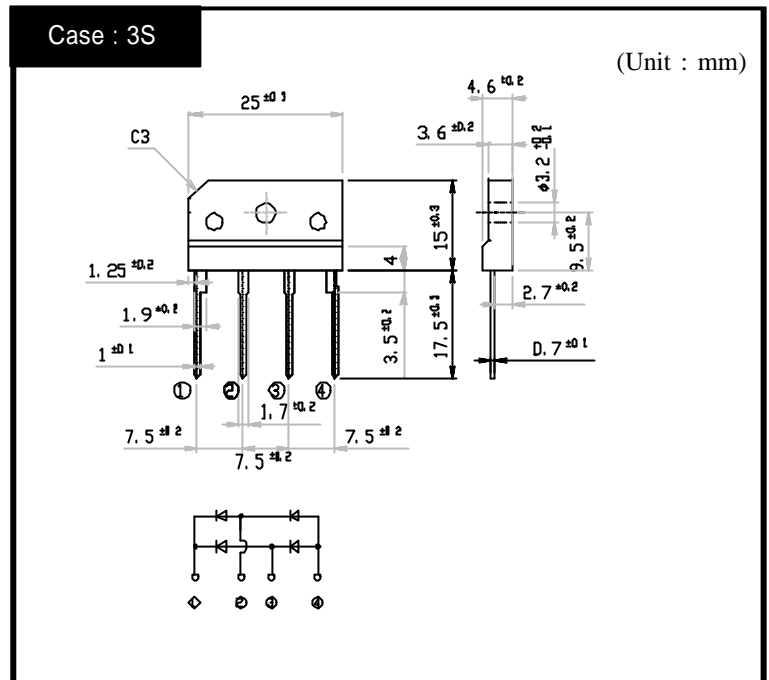
### FEATURES

- 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 Tc=25 )

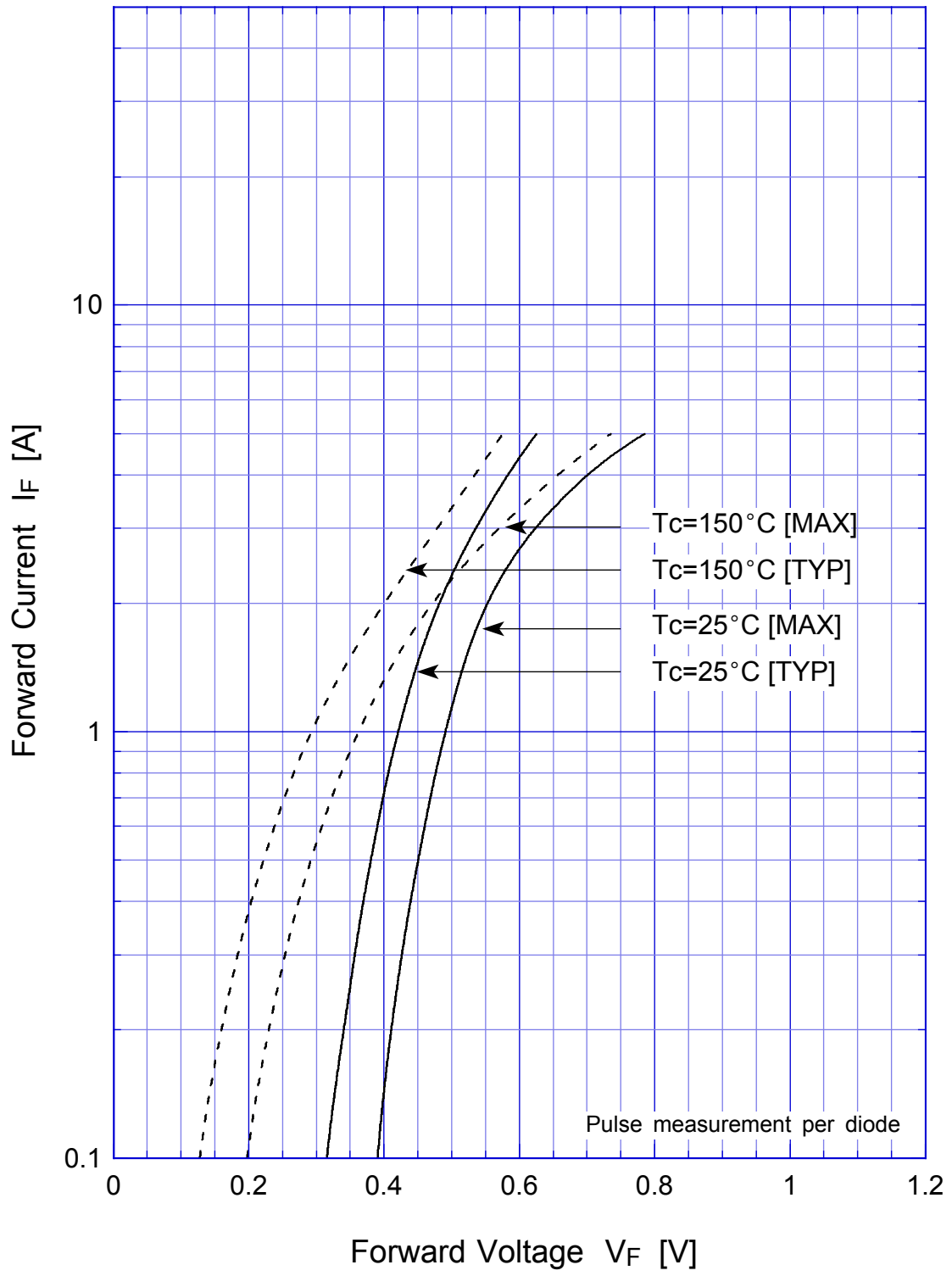
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-55 ~ 150	
Operating Junction Temperature	Tj		150	
Maximum Reverse Voltage	V <sub>RM</sub>		40	V
Repetitive Peak Surge Reverse Voltage	V <sub>RRSM</sub>	Pulse width 0.5ms, duty 1/40	45	V
Average Rectified Forward Current	I <sub>O</sub>	50Hz sine wave, R-load With heatsink Tc=116	4	A
		50Hz sine wave, R-load Without heatsink Ta=33	2.3	
Peak Surge Forward Current	I <sub>FSM</sub>	50Hz sine wave, Non-repetitive 1cycle peak value, Tj=25	60	A
Repetitive Peak Surge Reverse Power	P <sub>RRSM</sub>	Pulse width 10 μs, Rating of per diode, Tj=25	160	W
Dielectric Strength	Vdis	Terminals to case, AC 1 minute	2	kV
Mounting Torque	TOR	(Recommended torque 0.5N·m )	0.8	N·m

Electrical Characteristics (If not specified Tc=25 )

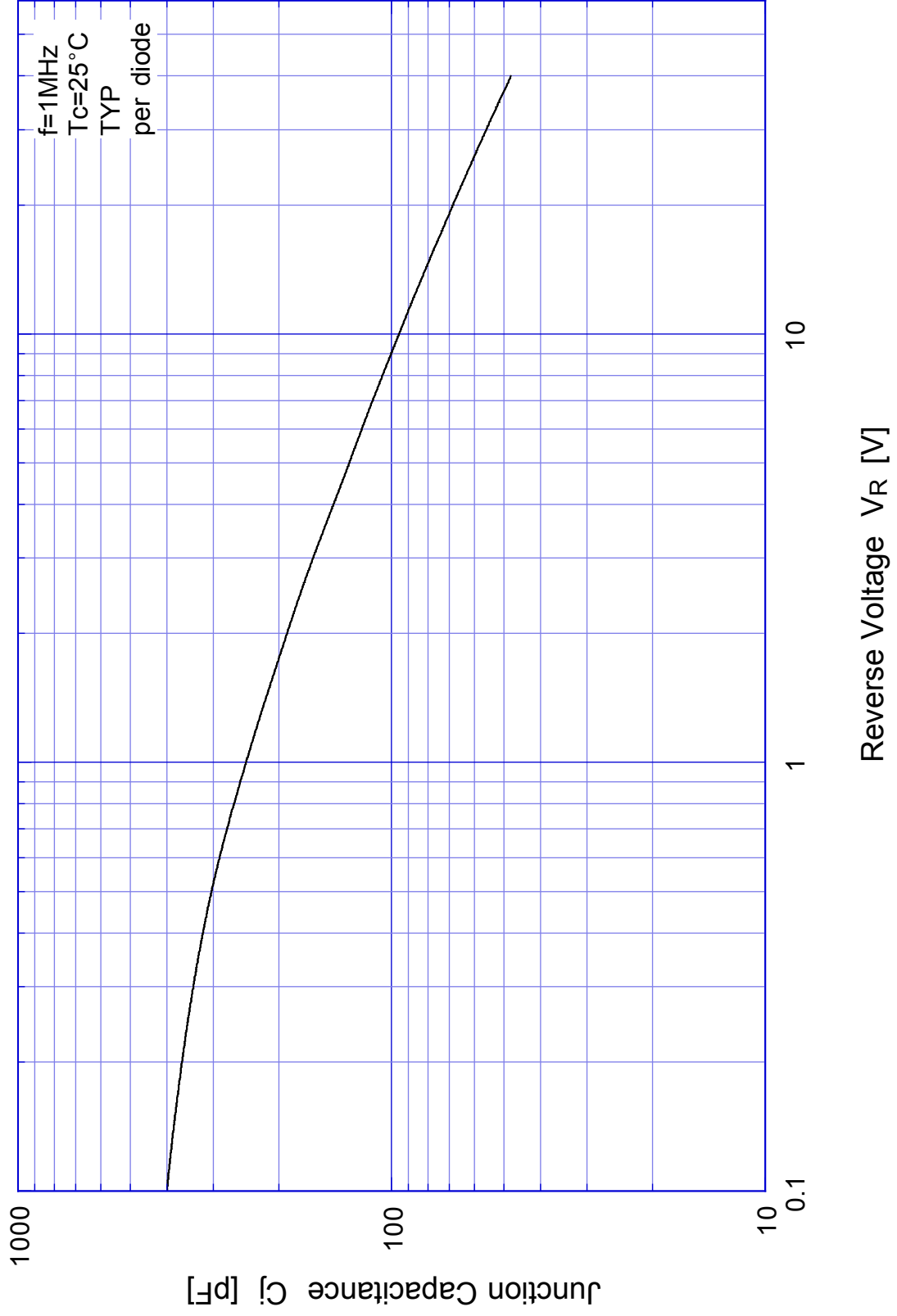
Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =2A, Pulse measurement, Rating of per diode	Max.0.55	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =V <sub>RM</sub> , Pulse measurement, Rating of per diode	Max.2	mA
Junction Capacitance	Cj	f=1MHz, VR=10V, Rating of per diode	TYP 95	pF
Thermal Resistance	jc	junction to case With heatsink	Max.5.5	/W
	jl	junction to lead Without heatsink	Max.6	
	ja	junction to ambient Without heatsink	Max.40	

# D4SBS4

## Forward Voltage

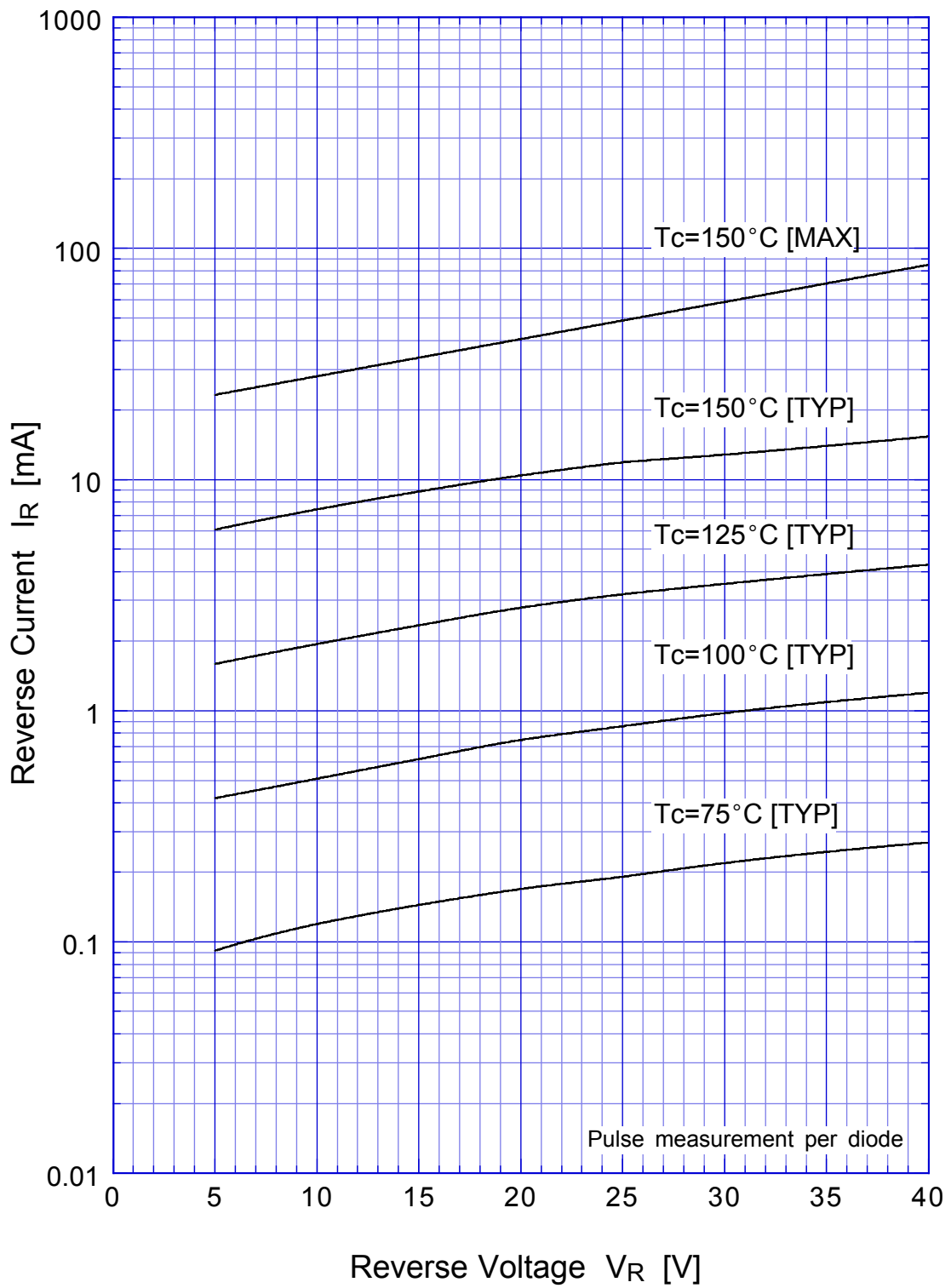


# D4SBS4 Junction Capacitance

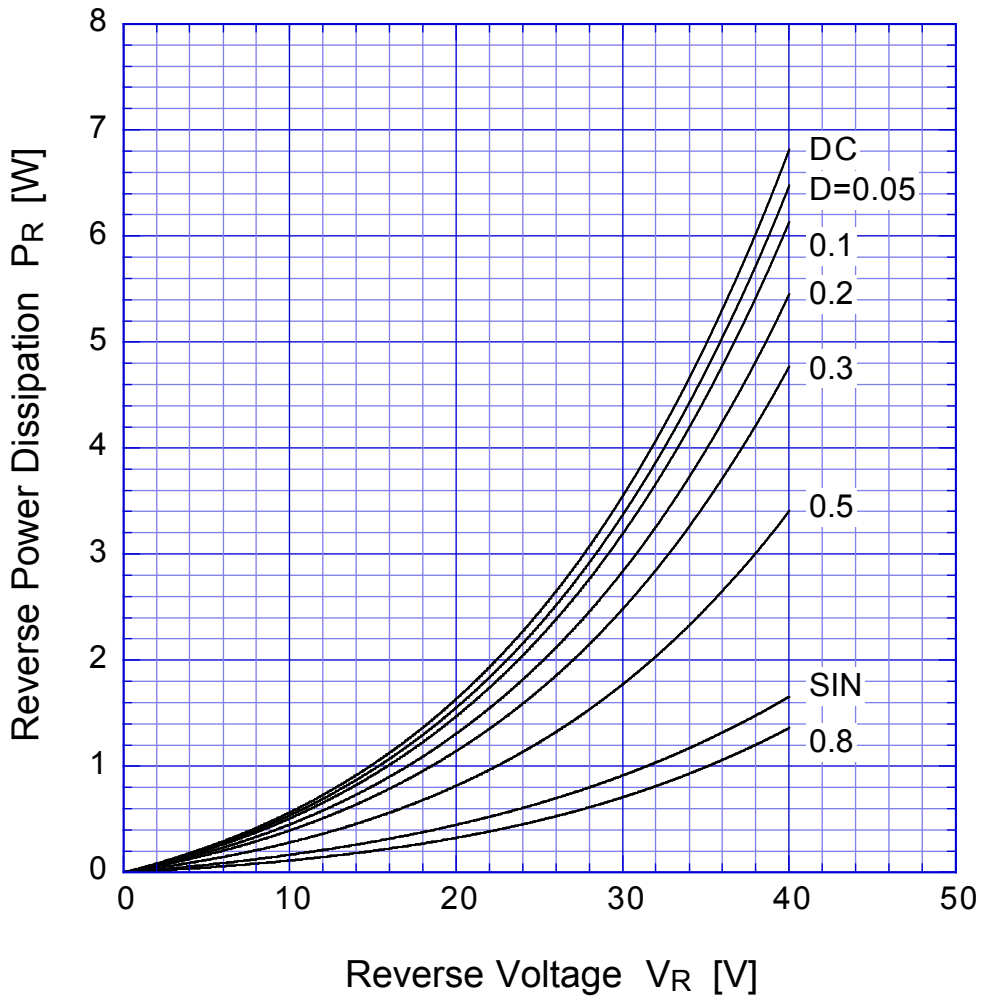


# D4SBS4

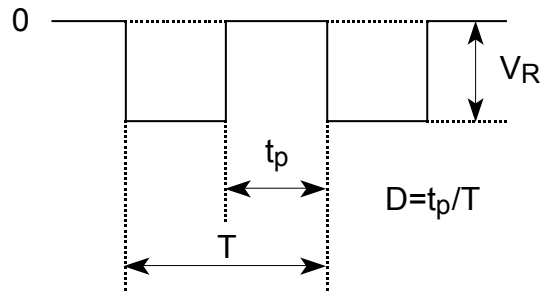
## Reverse Current



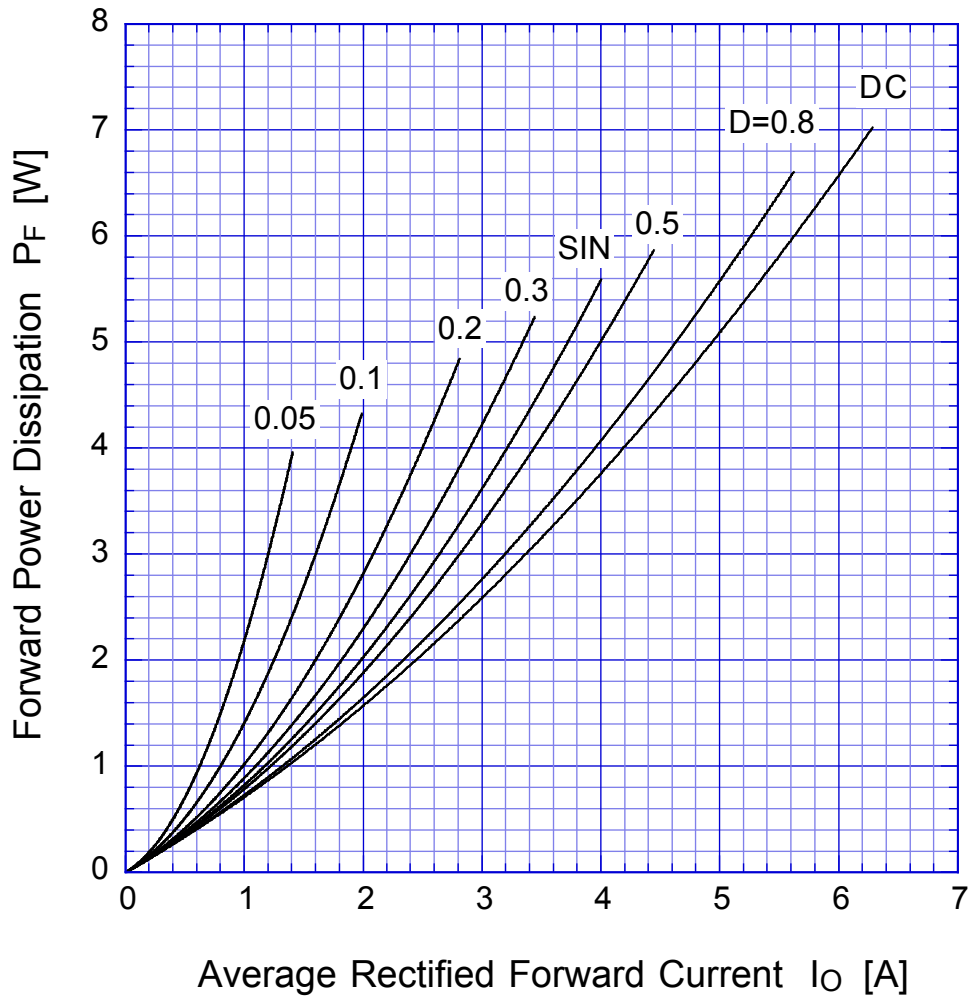
# D4SBS4 Reverse Power Dissipation



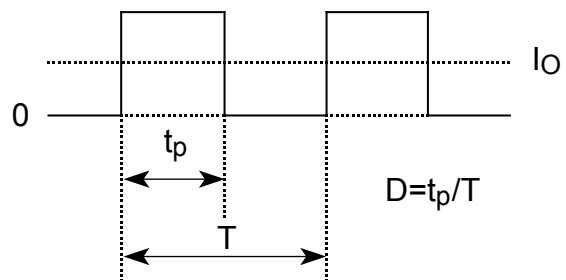
$T_j = 150^\circ\text{C}$



# D4SBS4 Forward Power Dissipation

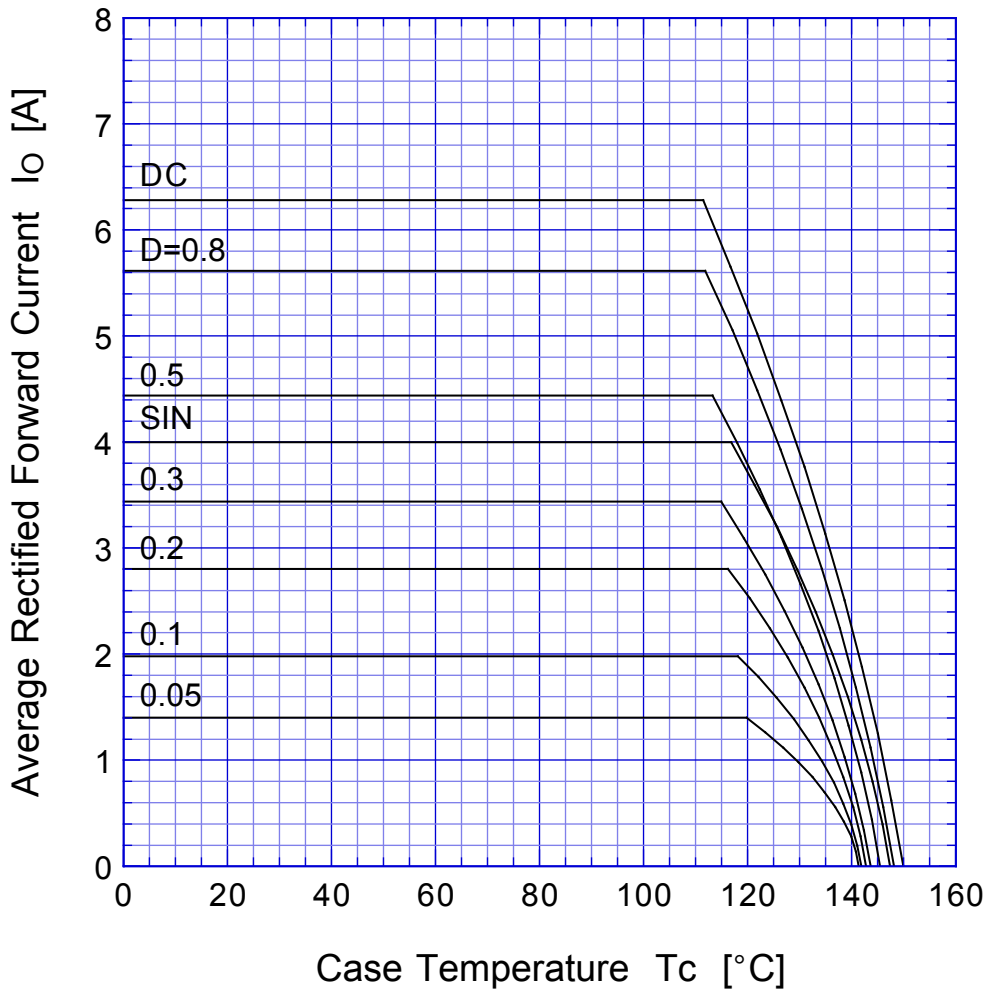


$T_j = 150^\circ\text{C}$



# D4SBS4

# Derating Curve

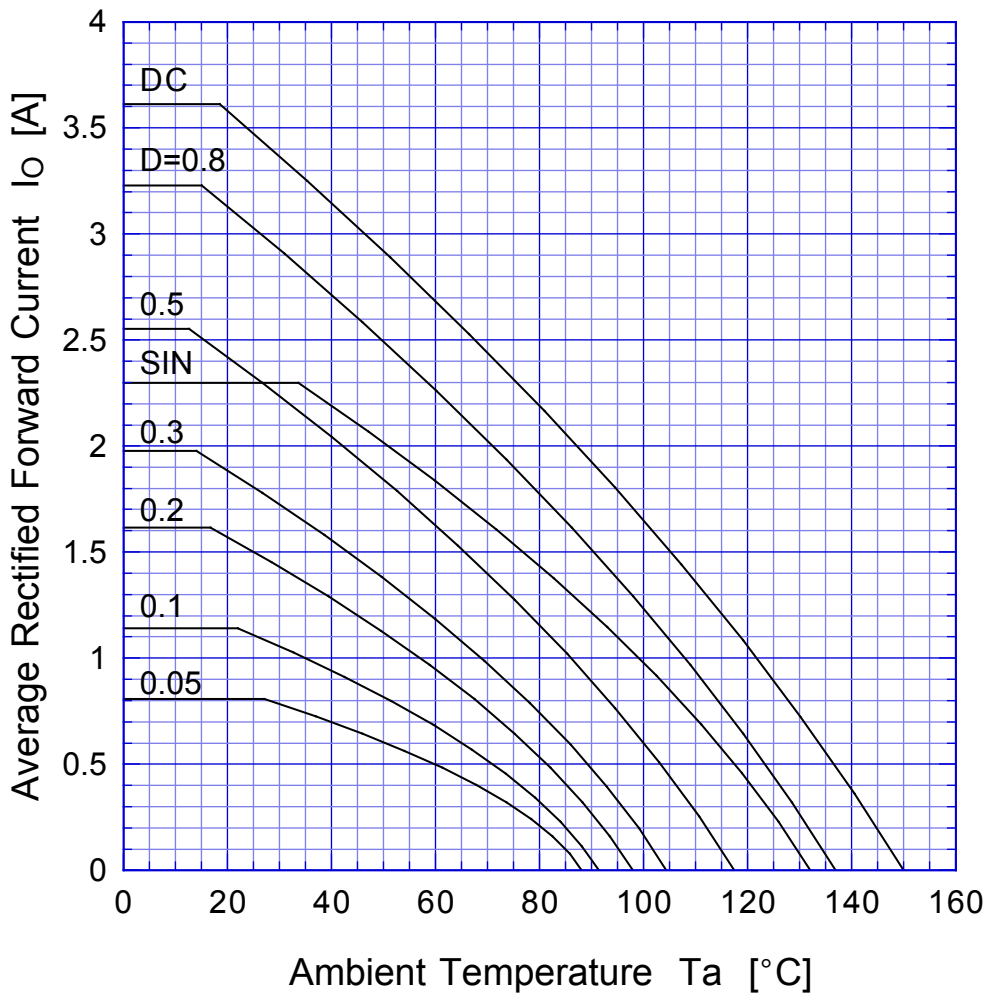


$V_R = 20V$

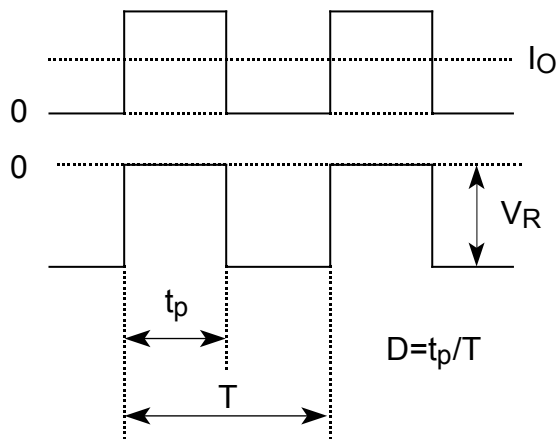


# D4SBS4

# Derating Curve



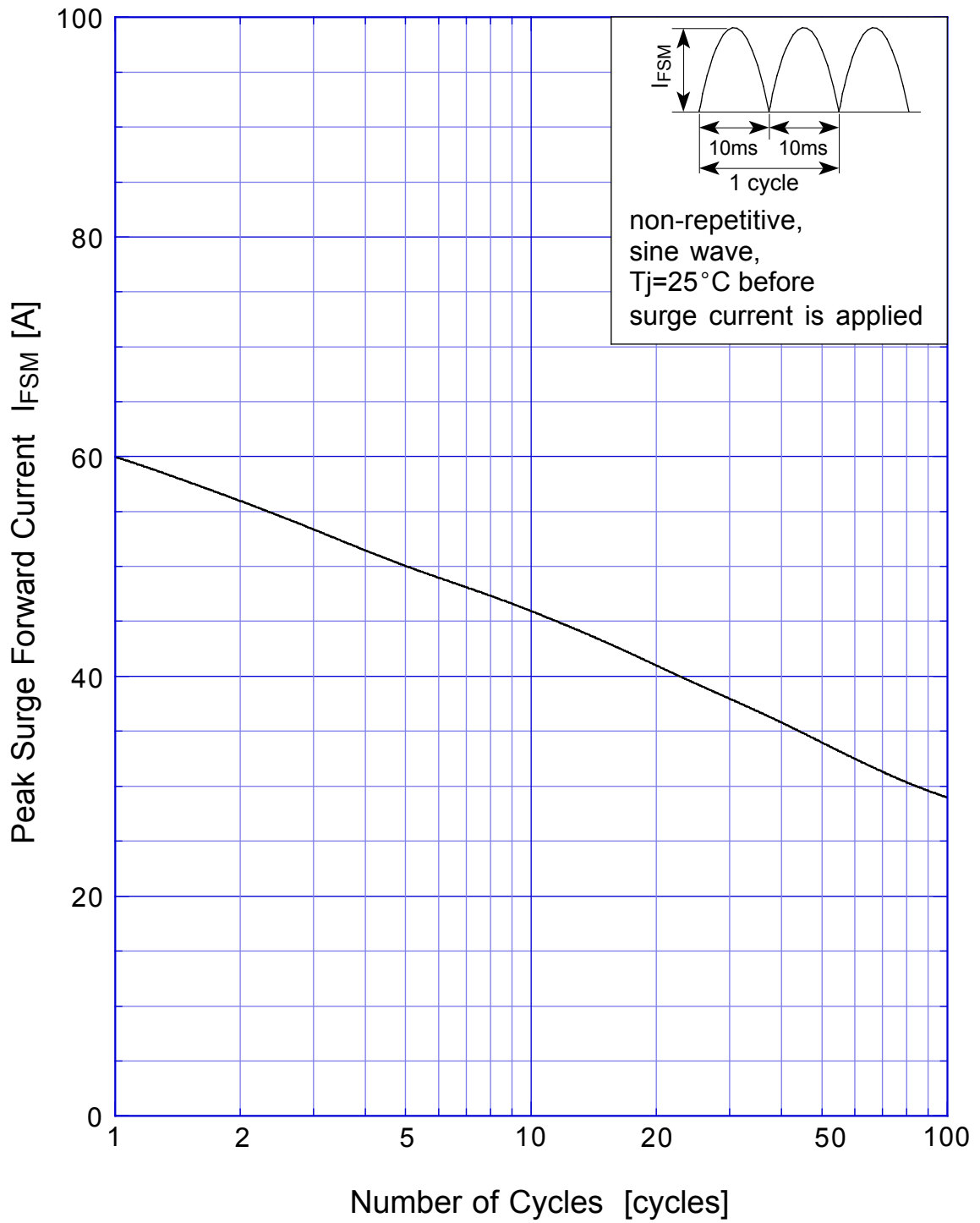
$V_R = 20V$



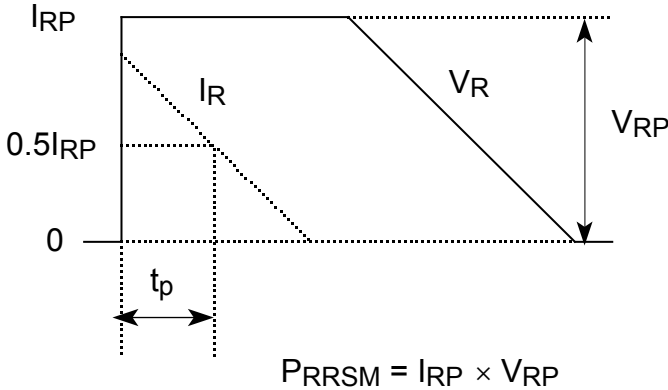


# D4SBS4

## Peak Surge Forward Capability



# SBD Repetitive Surge Reverse Power Derating Curve



# SBD

## Repetitive Surge Reverse Power Capability

