

# SHINDENGEN

## Super Fast Recovery Rectifiers

## Super Fast Bridges

# D4SBL40

## 400V 4A

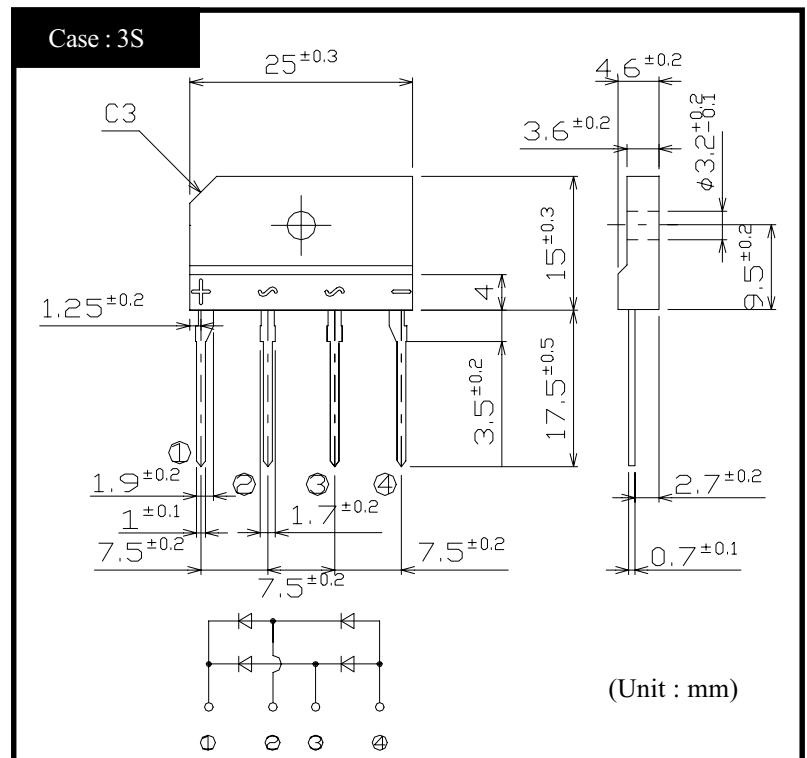
### FEATURES

- Low noise
- SIL Package
- High IFSM

### APPLICATION

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

### OUTLINE DIMENSIONS



### RATINGS

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

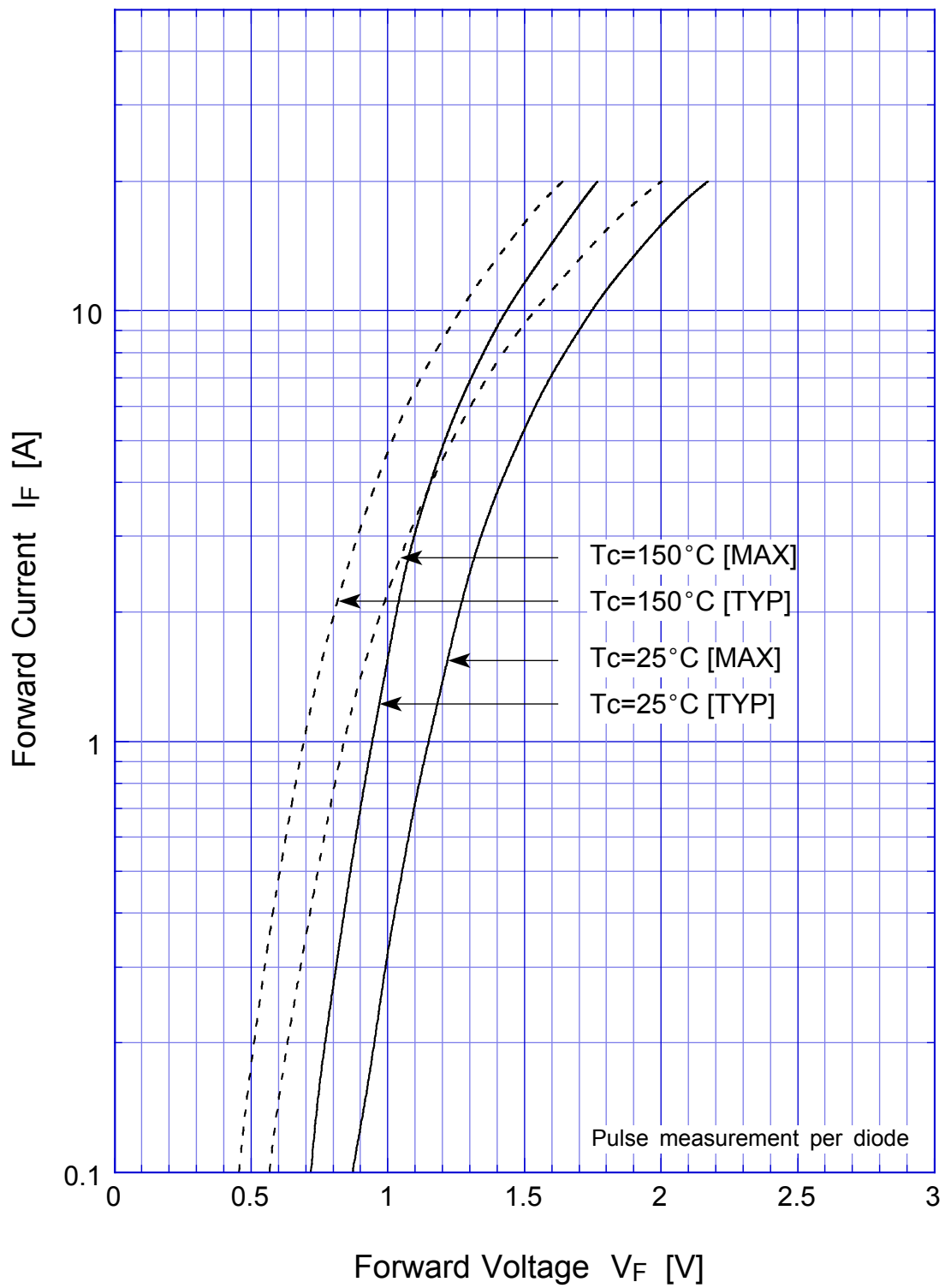
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	$T_{stg}$		-55~150	$^\circ\text{C}$
Operating Junction Temperature	$T_j$		150	$^\circ\text{C}$
Maximum Reverse Voltage	$V_{RM}$		400	V
Average Rectified Forward Current	$I_O$	50Hz sine wave, R-load With heatsink $T_c=91^\circ\text{C}$	4	A
		50Hz sine wave, R-load Without heatsink $T_a=25^\circ\text{C}$	1.95	
Peak Surge Forward Current	$I_{FSM}$	50Hz sine wave, Non-repetitive 1cycle peak value, $T_j=25^\circ\text{C}$	50	A
Dielectric Strength	$V_{dis}$	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 $T_l=25^\circ\text{C}$ )

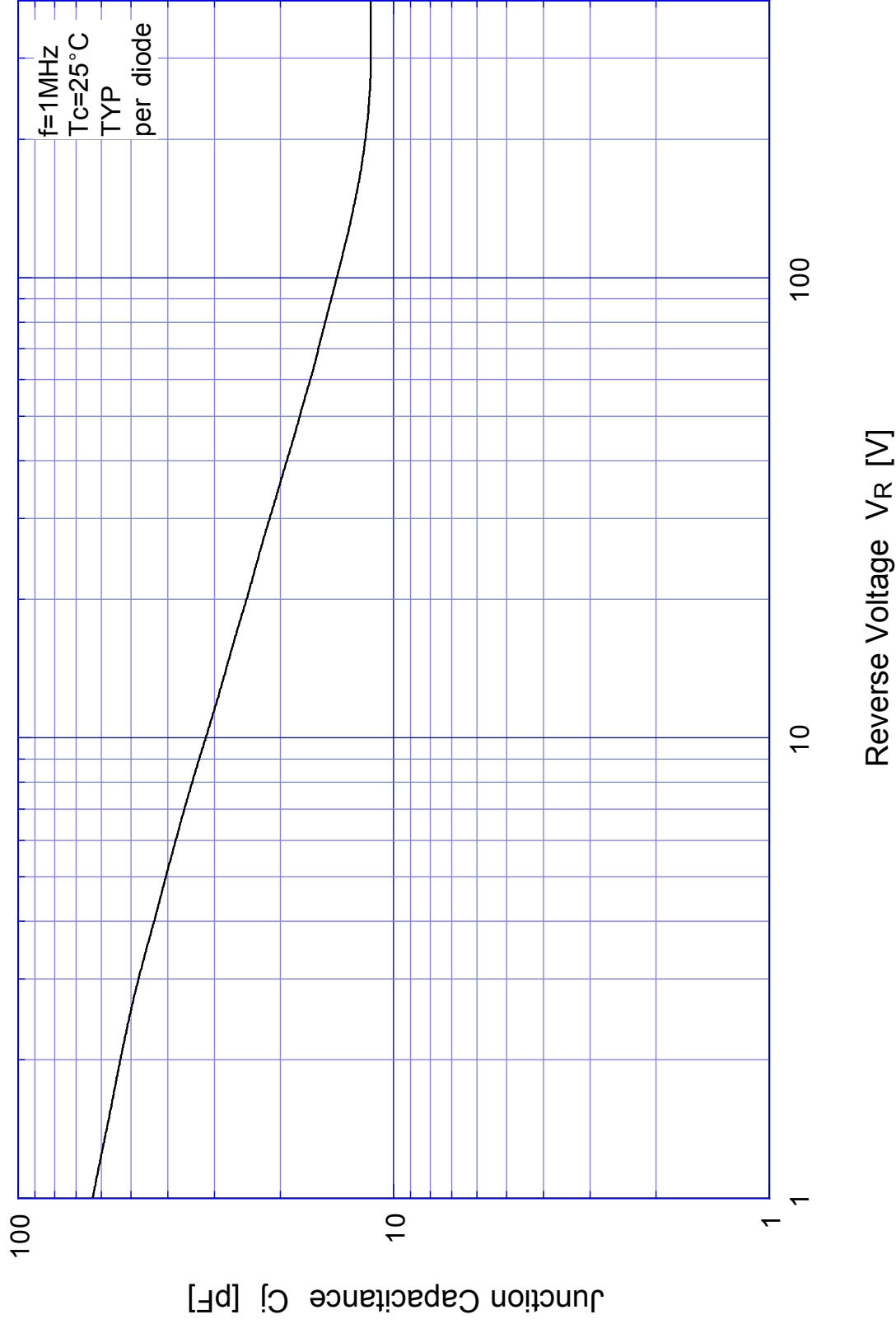
Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	$V_F$	$I_F=2.5\text{A}$ , Pulse measurement, Rating of per diode	Max.1.3	V
Reverse Current	$I_R$	$V_R=V_{RM}$ , Pulse measurement, Rating of per diode	Max.10	$\mu\text{A}$
Reverse Recovery Time	$t_{rr}$	$I_F = 0.5\text{A}$ , $I_R = 1\text{A}$	Max.50	ns
Thermal Resistance	$\theta_{jc}$	junction to case With heatsink	Max.5.5	$^\circ\text{C}/\text{W}$
	$\theta_{jl}$	junction to lead Without heatsink	Max.6	
	$\theta_{ja}$	junction to ambient Without heatsink	Max.30	

# D4SBL40

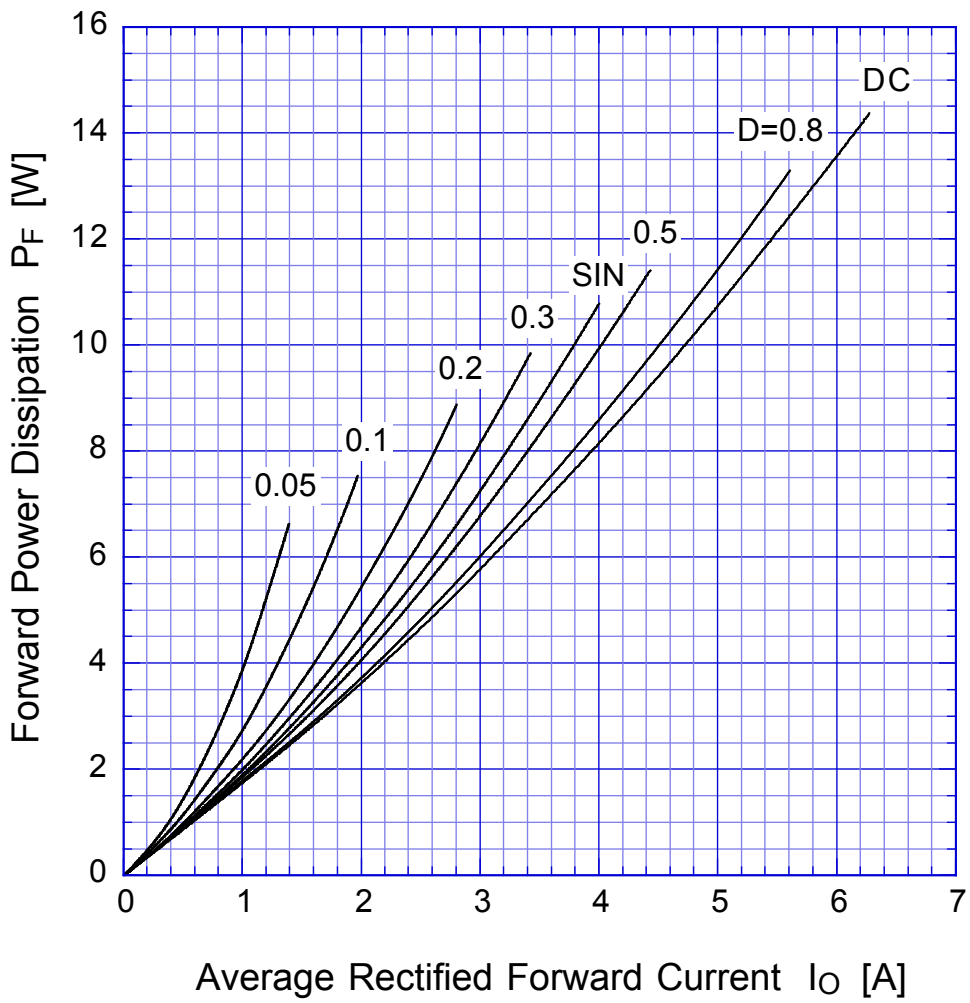
## Forward Voltage



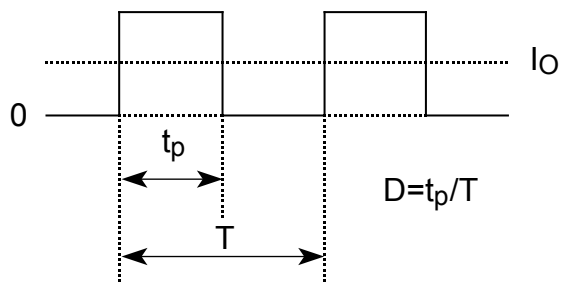
# D4SBL40 Junction Capacitance



# D4SBL40 Forward Power Dissipation

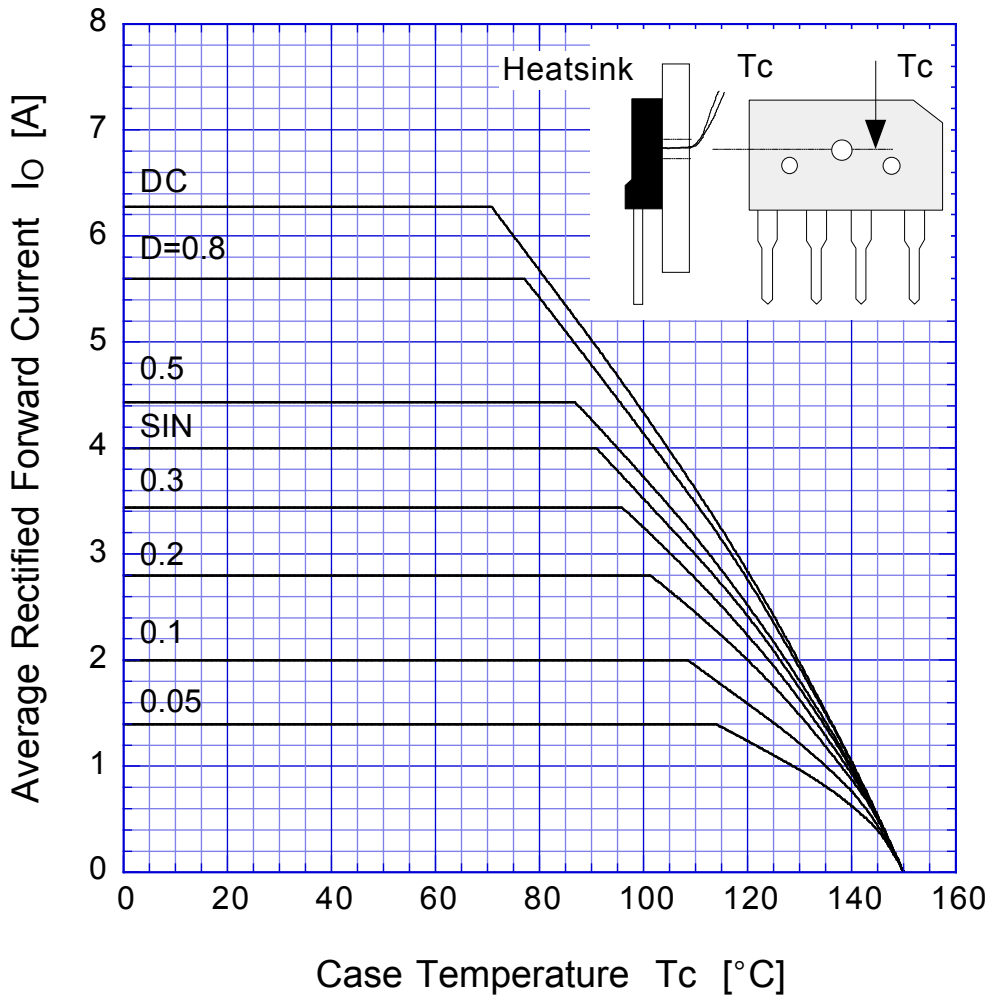


$T_j = 150^\circ\text{C}$

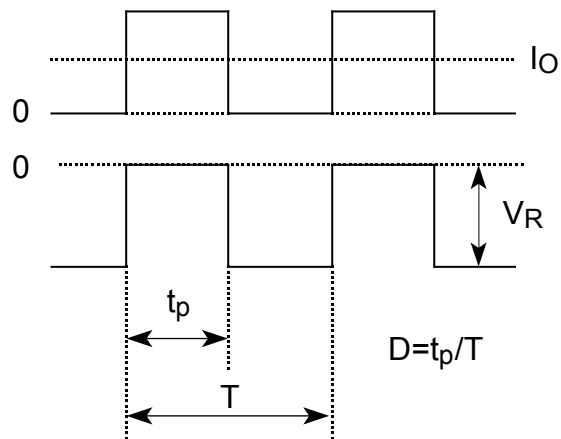


# D4SBL40

# Derating Curve

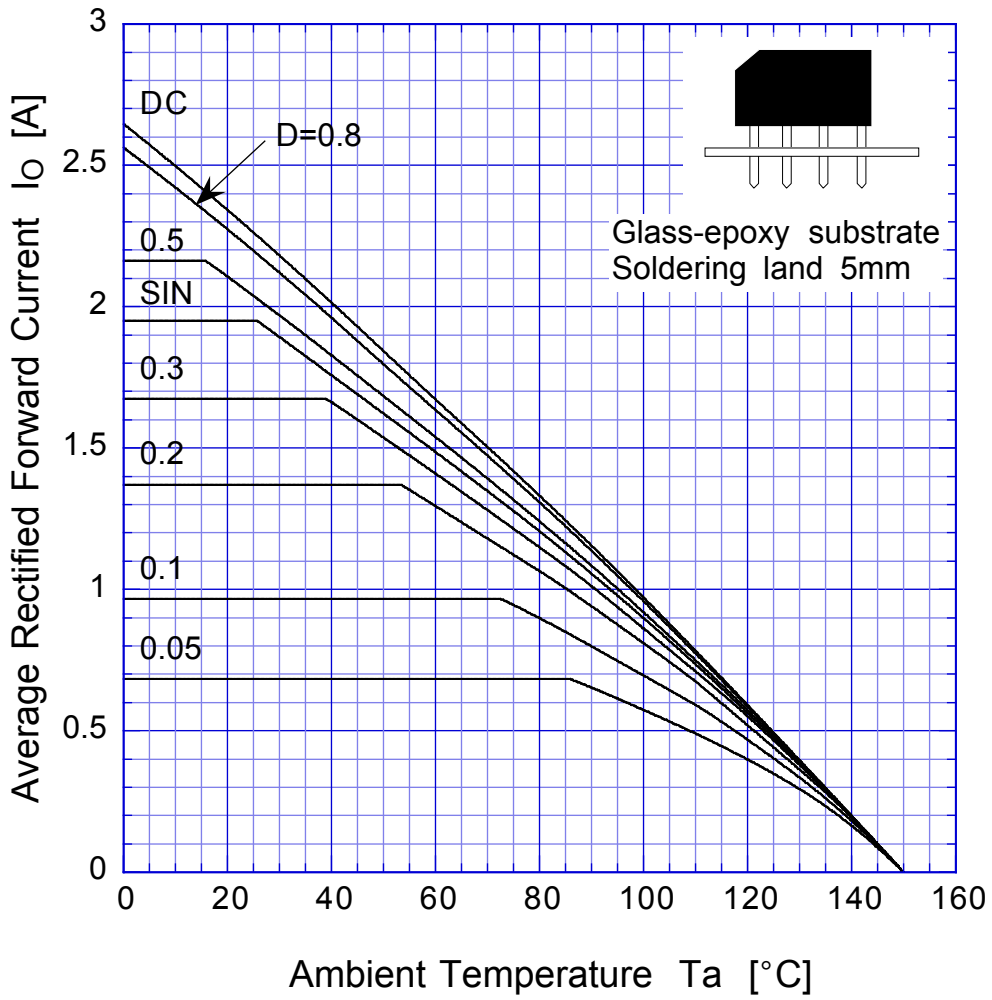


$$V_R = V_{RM}$$

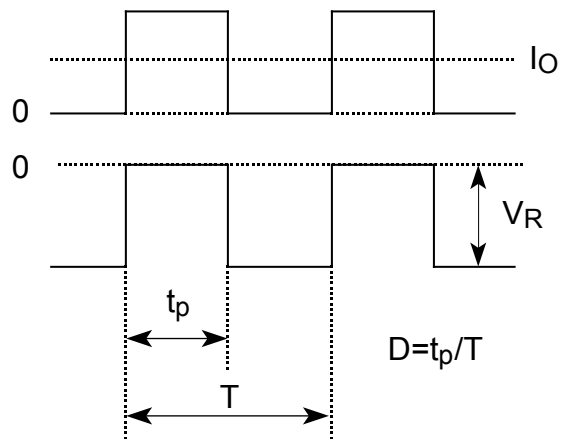


# D4SBL40

# Derating Curve



$V_R = V_{RM}$   
Sine wave  
R-load  
Free in air



# D4SBL40

## Peak Surge Forward Capability

