

# SHINDENGEN

## Super Fast Recovery Rectifiers

## Super Fast Bridges

# D4SBL40

## 400V 4A

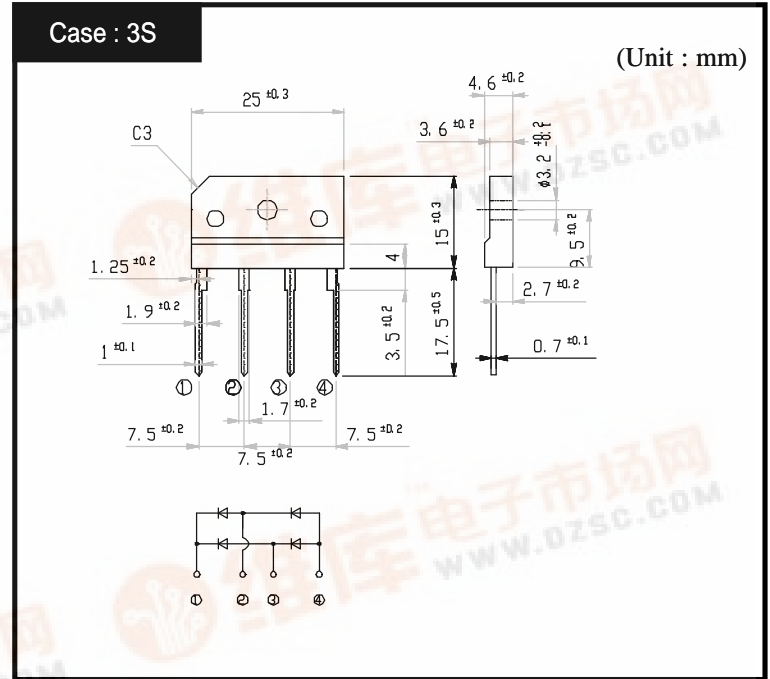
### FEATURES

- 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 Tc=25 )

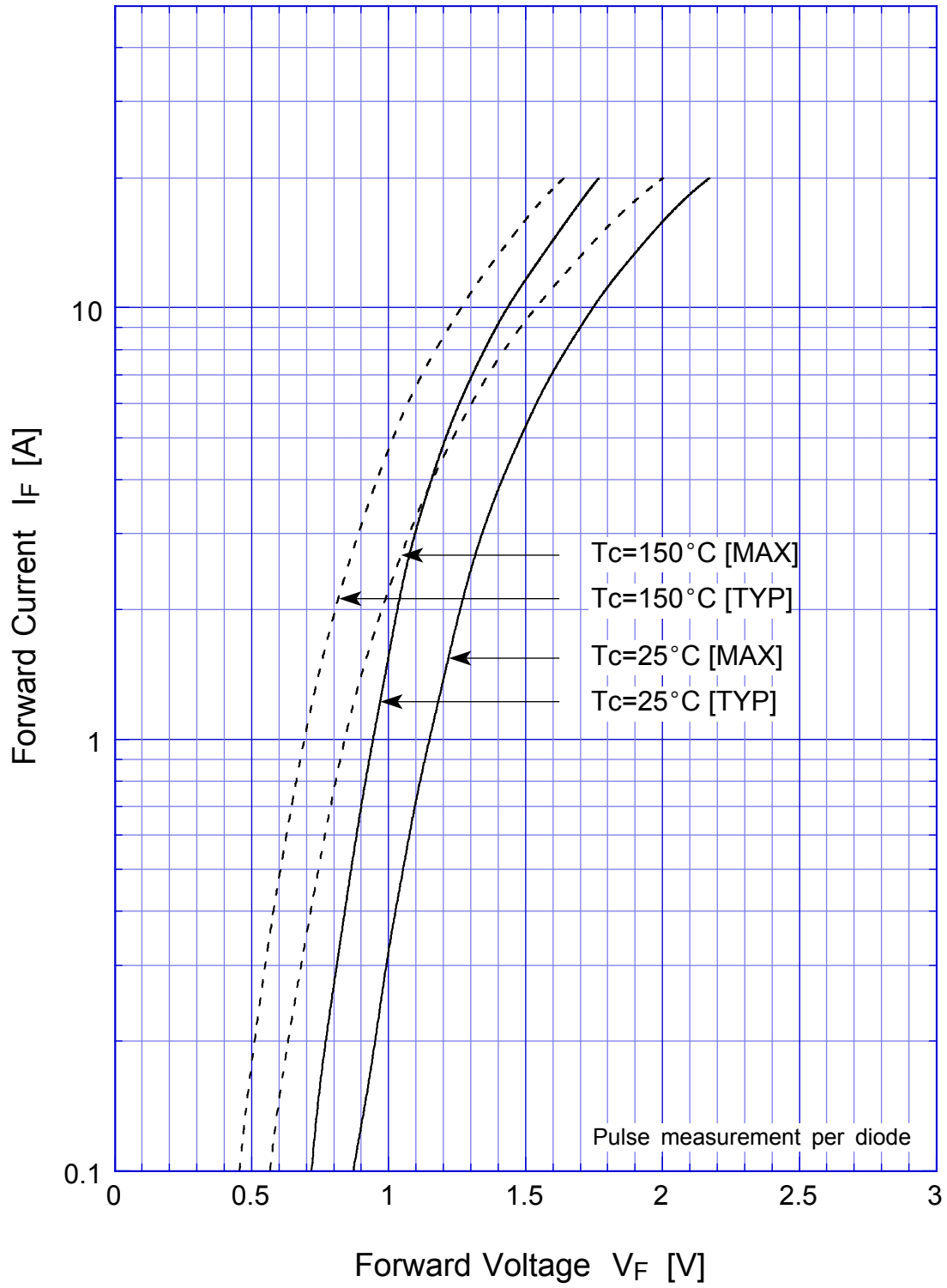
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-55 ~ 150	
Operating Junction Temperature	Tj		150	
Maximum Reverse Voltage	V <sub>RM</sub>		400	V
Average Rectified Forward Current	I <sub>O</sub>	50Hz sine wave, R-load With heatsink Tc=91	4	A
		50Hz sine wave, R-load Without heatsink Ta=25	1.95	
Peak Surge Forward Current	I <sub>FSM</sub>	50Hz sine wave, Non-repetitive 1cycle peak value, Tj=25	50	A
Dielectric Strength	V <sub>dis</sub>	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 TI=25 )

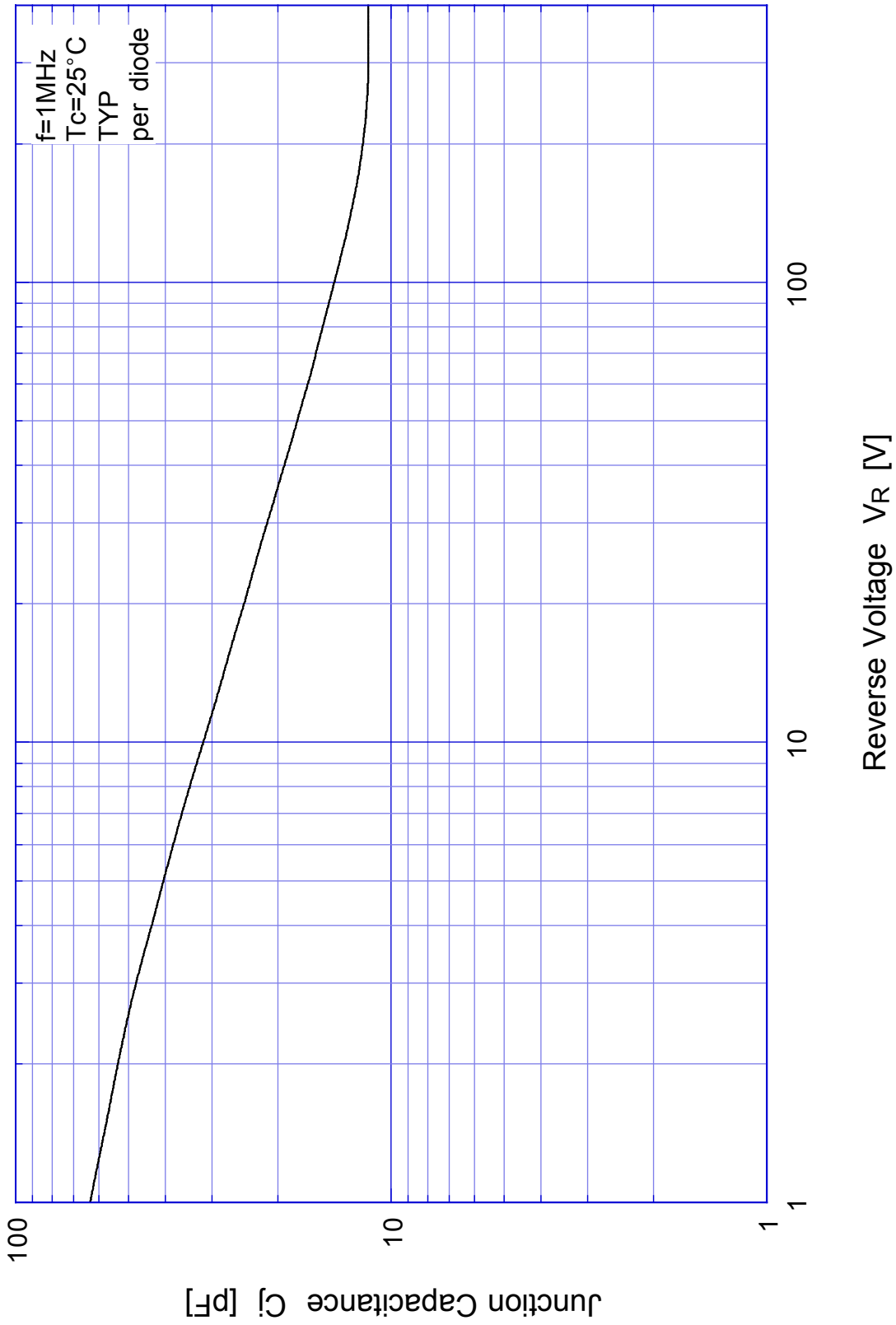
Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =2.5A, Pulse measurement, Rating of per diode	Max.1.3	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =V <sub>RM</sub> , Pulse measurement, Rating of per diode	Max.10	μA
Reverse Recovery Time	trr	I <sub>F</sub> = 0.5A, I <sub>R</sub> = 1A	Max.50	ns
Thermal Resistance	j <sub>c</sub>	junction to case With heatsink	Max.5.5	/W
	j <sub>l</sub>	junction to lead Without heatsink	Max.6	
	j <sub>a</sub>	junction to ambient Without heatsink	Max.30	

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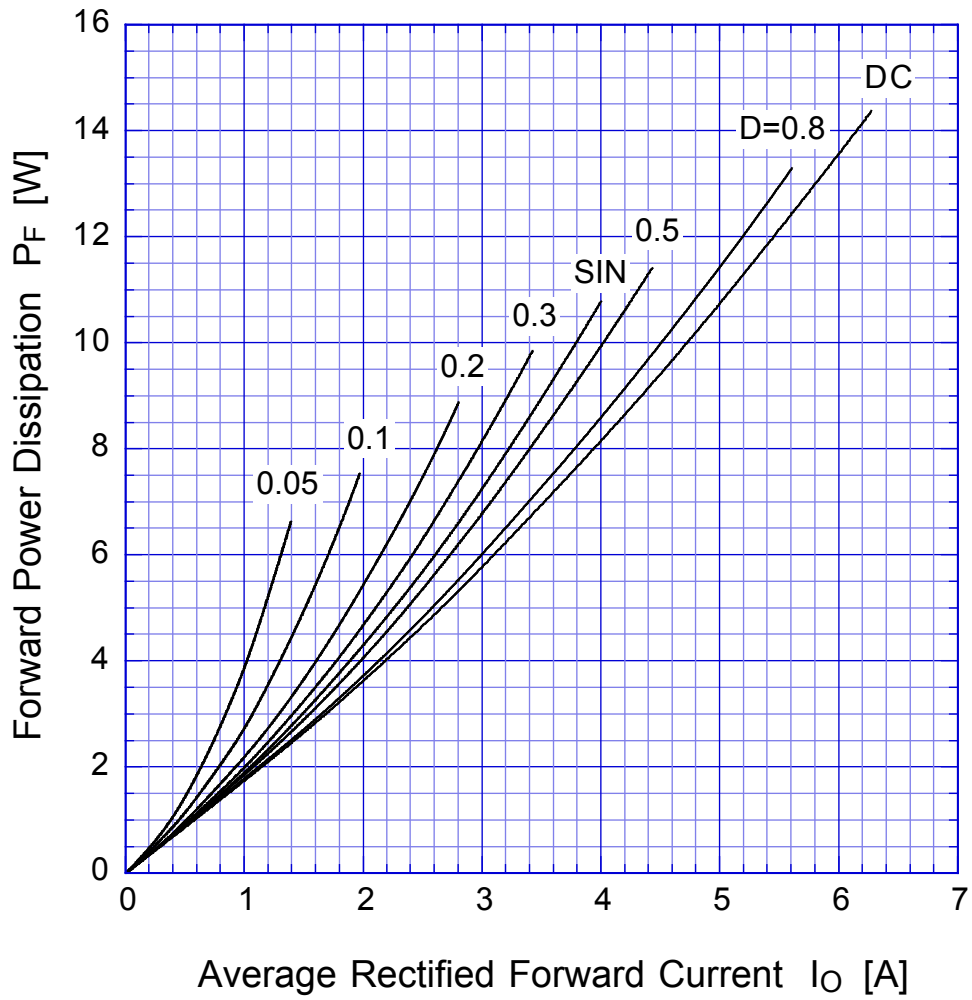
## Forward Voltage



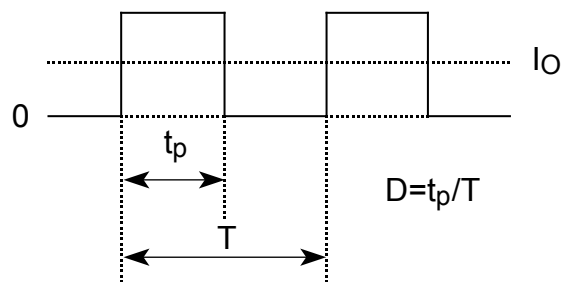
# D4SBL40 Junction Capacitance



## D4SBL40 Forward Power Dissipation

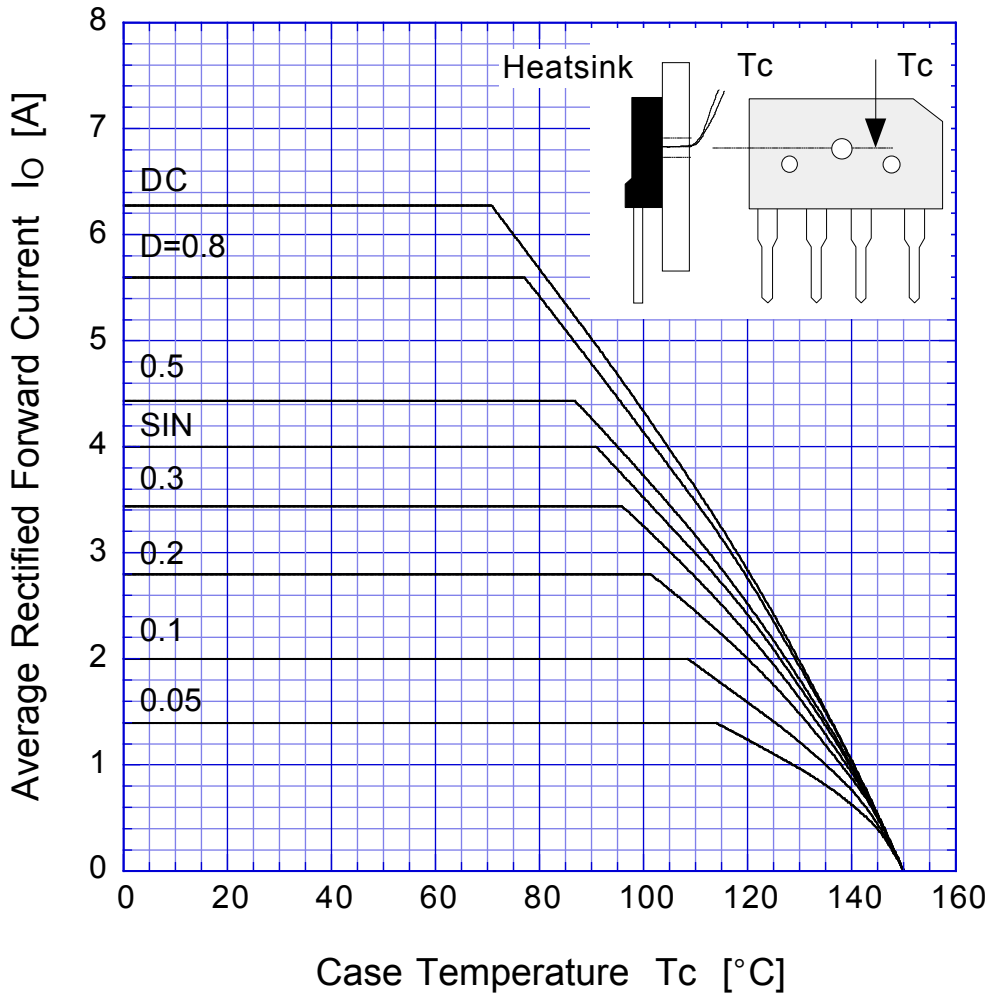


$T_j = 150^\circ\text{C}$

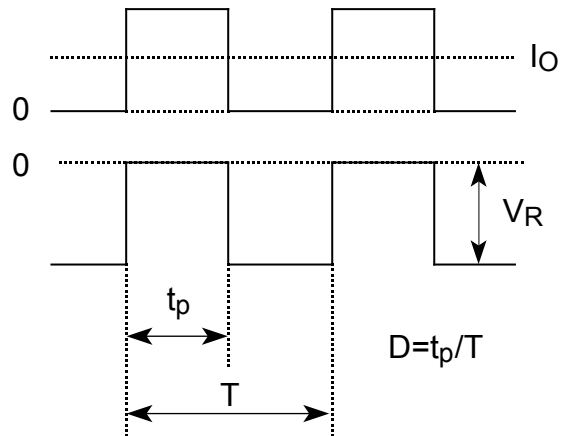


# D4SBL40

## Derating Curve

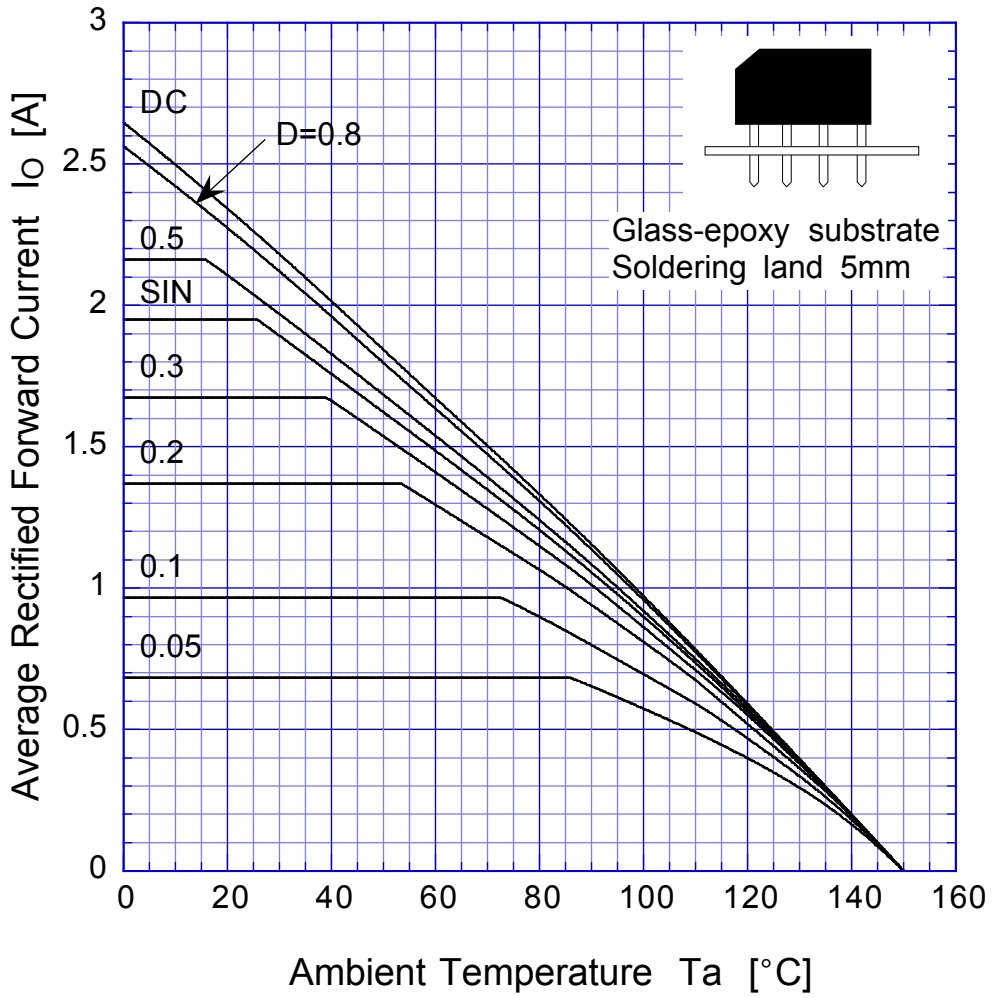


$$V_R = V_{RM}$$

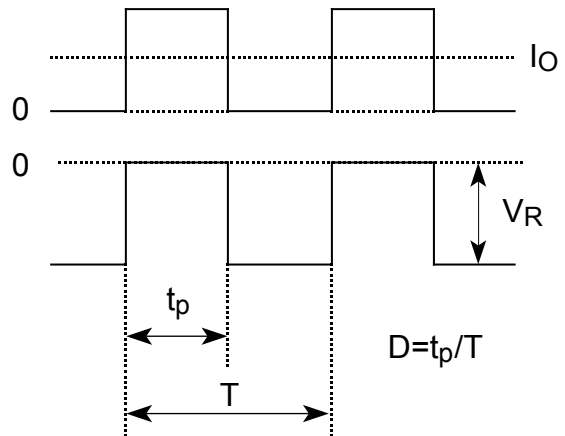


# D4SBL40

## Derating Curve



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



# D4SBL40

## Peak Surge Forward Capability

