

# SHINDENGEN

## General Purpose Rectifiers

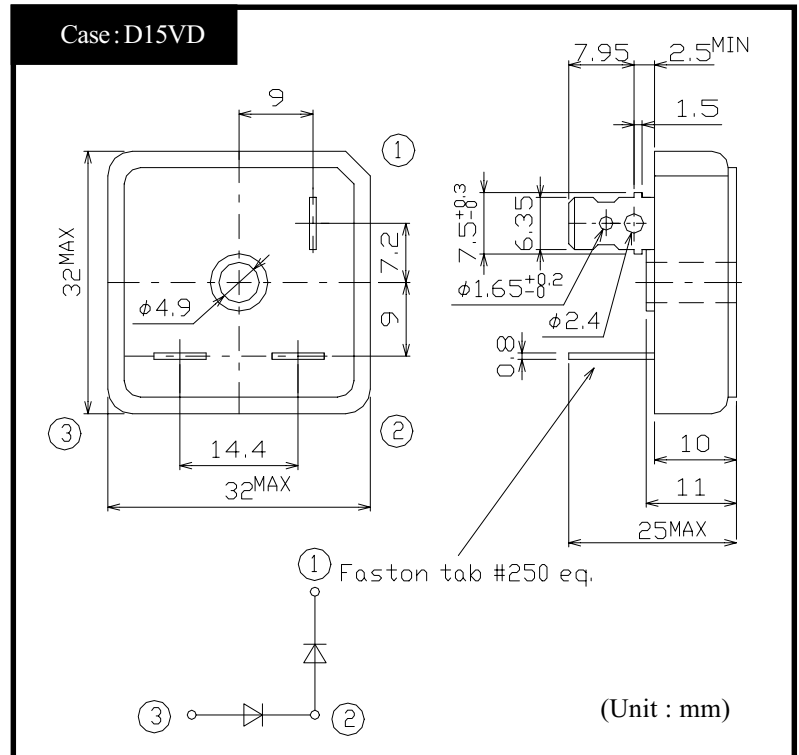
## Doubler type

## Dual Modules

# D15VD40

## 400V 15A

### OUTLINE DIMENSIONS



### RATINGS

#### ● Absolute Maximum Ratings

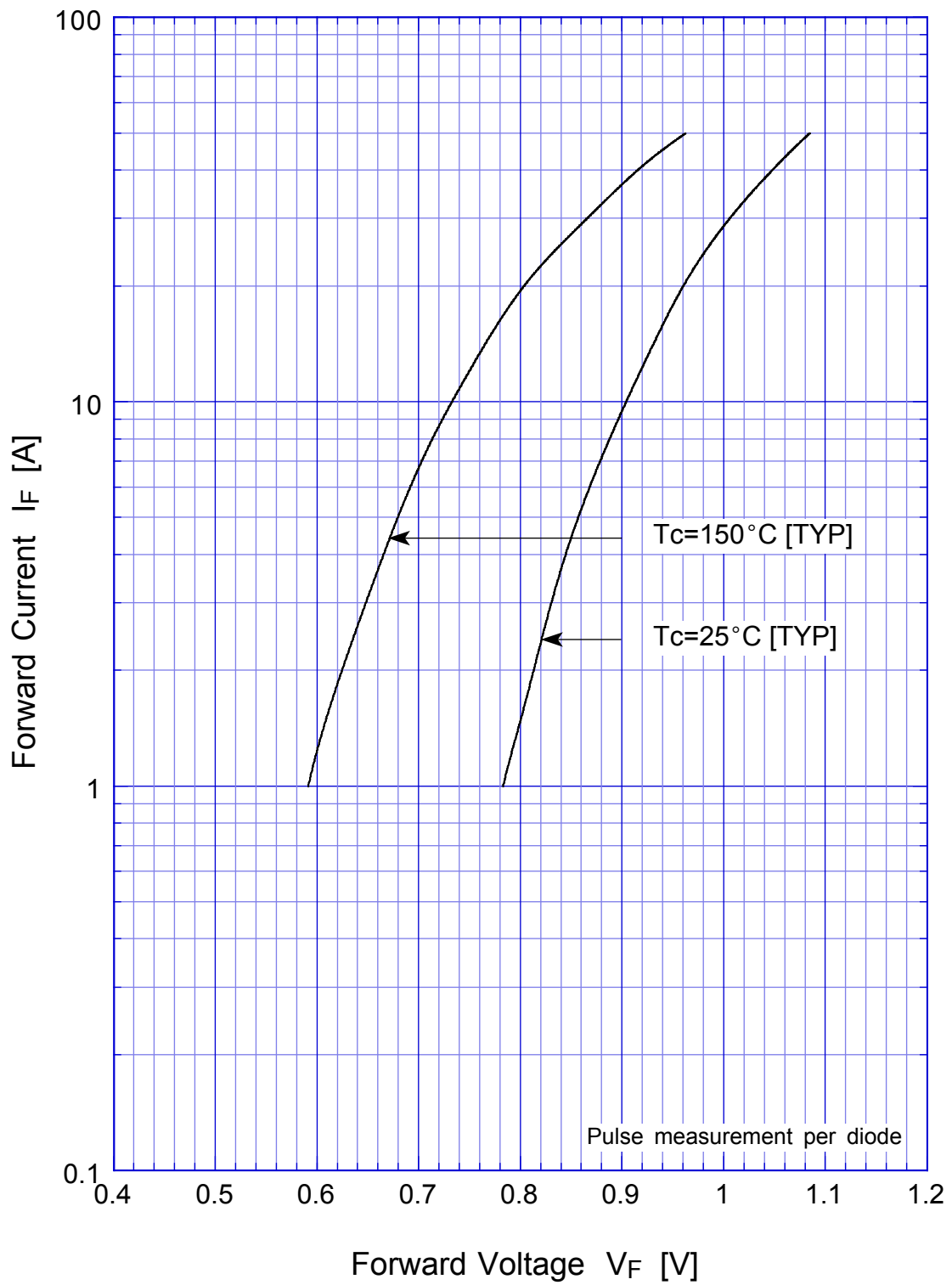
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	$T_{stg}$		-40~150	°C
Operating Junction Temperature	$T_j$		150	°C
Maximum Reverse Voltage	$V_{RM}$		400	V
Average Rectified Forward Current	$I_O$	50Hz sine wave Voltage doubler rectification, $T_c=94^\circ\text{C}$	15	A
		50Hz sine wave at: Bridge resistance load, $T_c=94^\circ\text{C}$	18	
Peak Surge Forward Current	$I_{FSM}$	Non-repetitive 50Hz sine wave $T_j=25^\circ\text{C}$	400	A
Dielectric Strength	$V_{dis}$	Terminals to case, AC 1 minute	2	kV
Mounting Torque	TOR	( ) Shows recommended value	2(1)	N·m

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

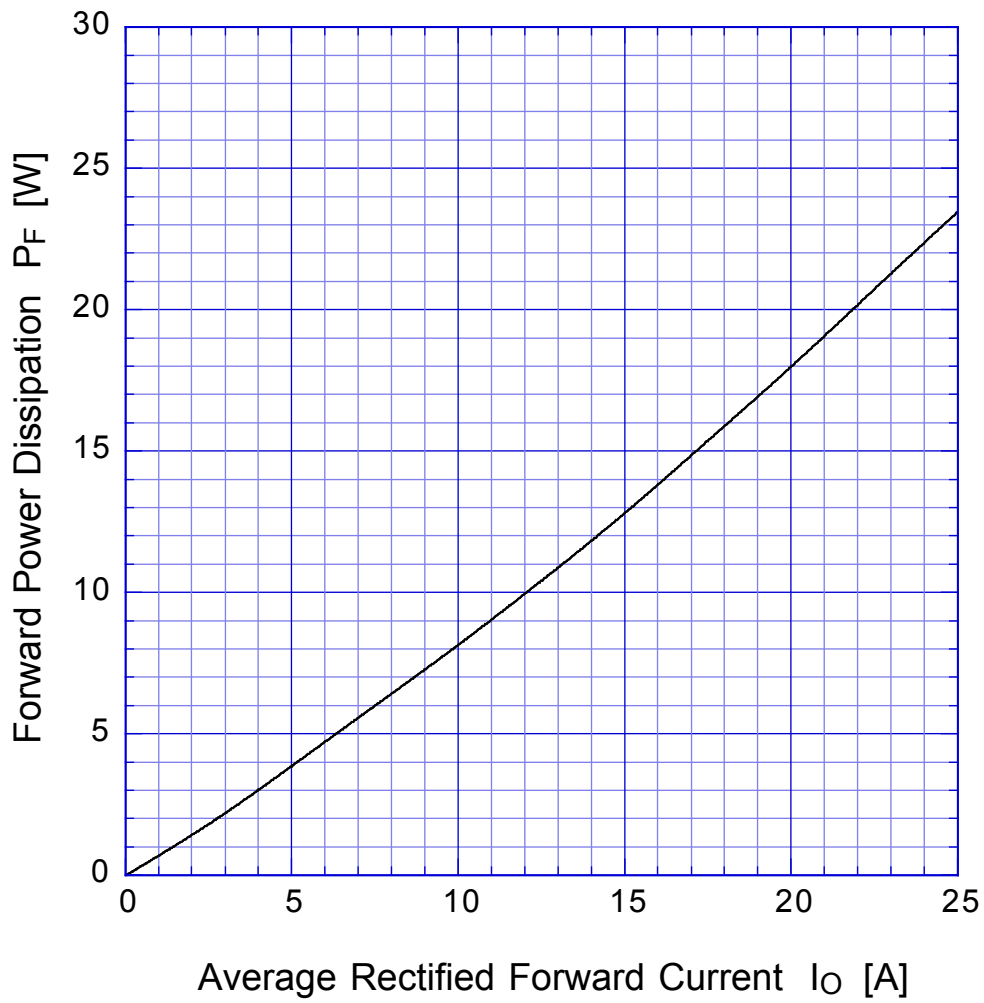
Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	$V_F$	$I_F=15\text{A}$ , Rating of per diode	Max.1.05	V
Reverse Current	$I_R$	$V_R=V_{RM}$ , Rating of per diode	Max.10	$\mu\text{A}$
Thermal Resistance	$\theta_{jc}$	junction to case	Max.3.5	°C/W

# D15VD40

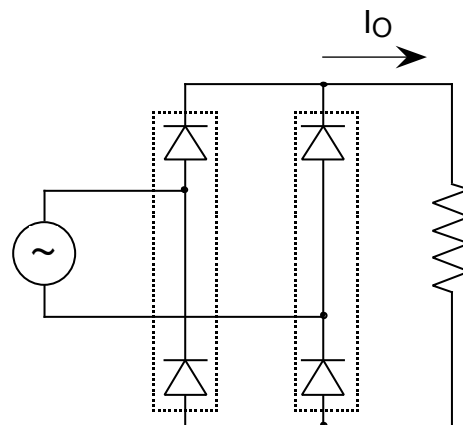
## Forward Voltage



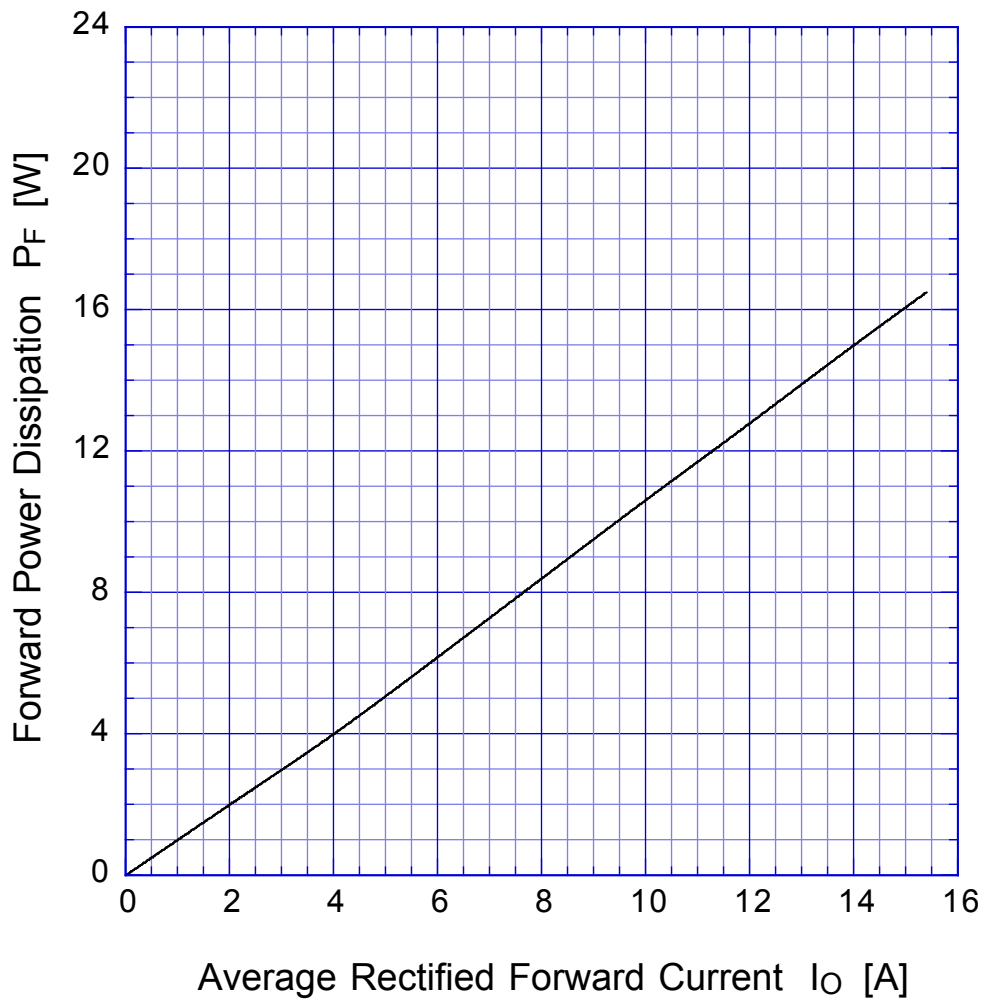
## D15VD40 Forward Power Dissipation



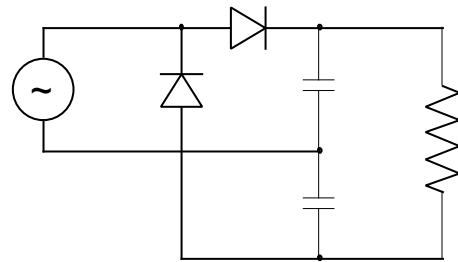
$T_j = 150^\circ\text{C}$   
Sine wave  
R-load  
Single phase rectification



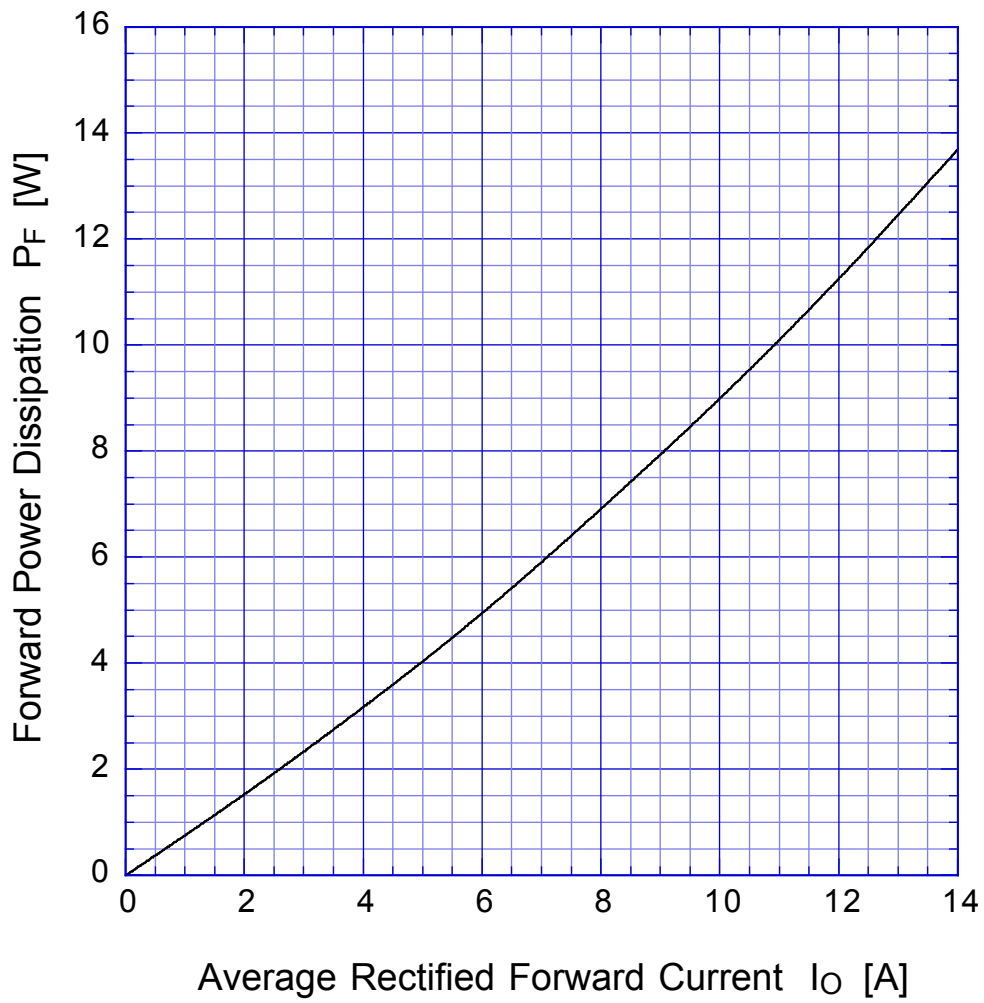
## D15VD40 Forward Power Dissipation



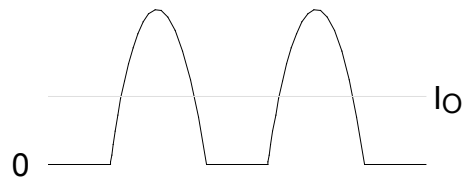
$T_j = 150^\circ\text{C}$   
Sine wave  
Voltage doubler rectification



## D15VD40 Forward Power Dissipation

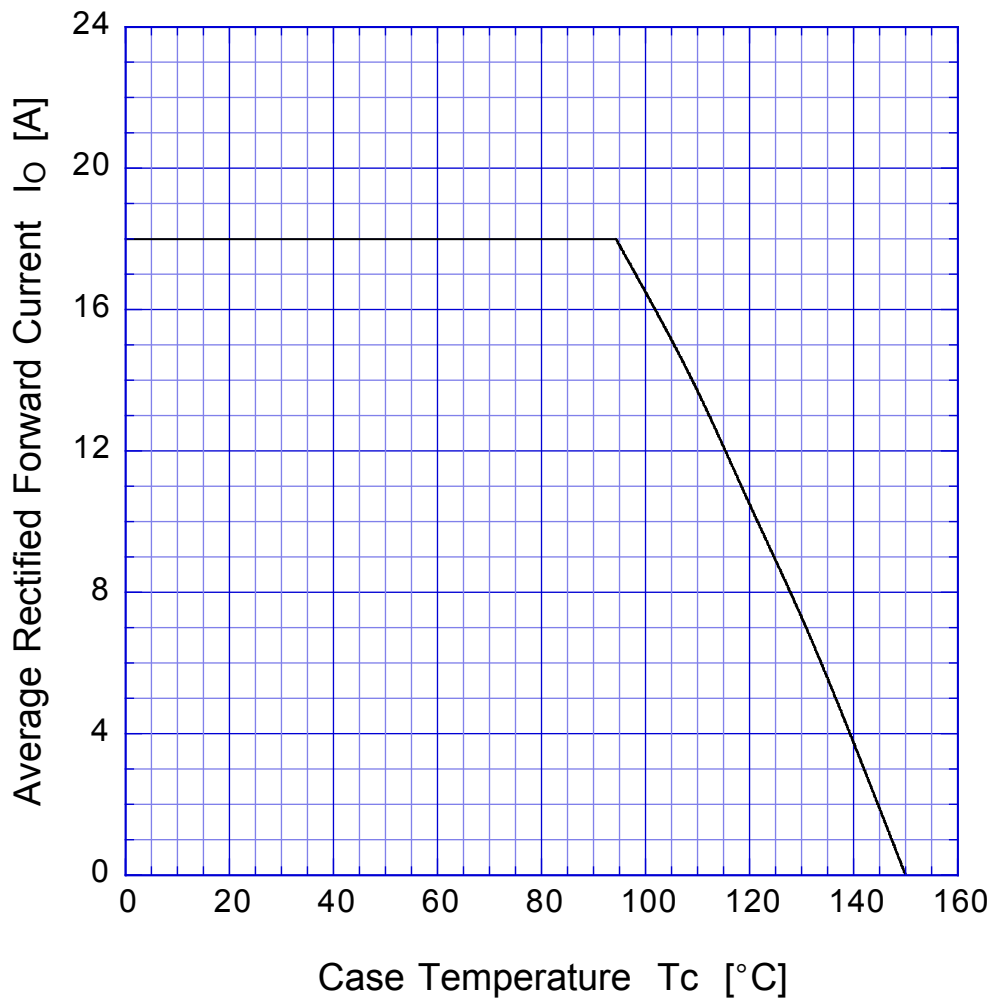


$T_j = 150^\circ\text{C}$   
Sine wave  
R-load  
per diode

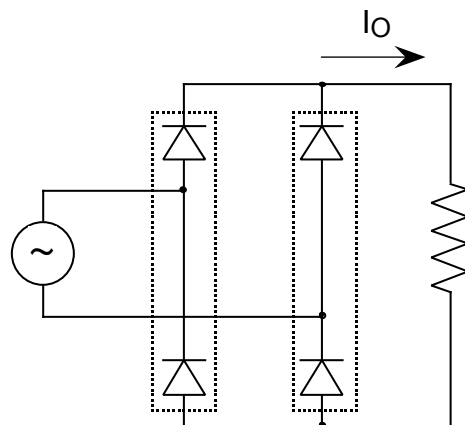


# D15VD40

# Derating Curve

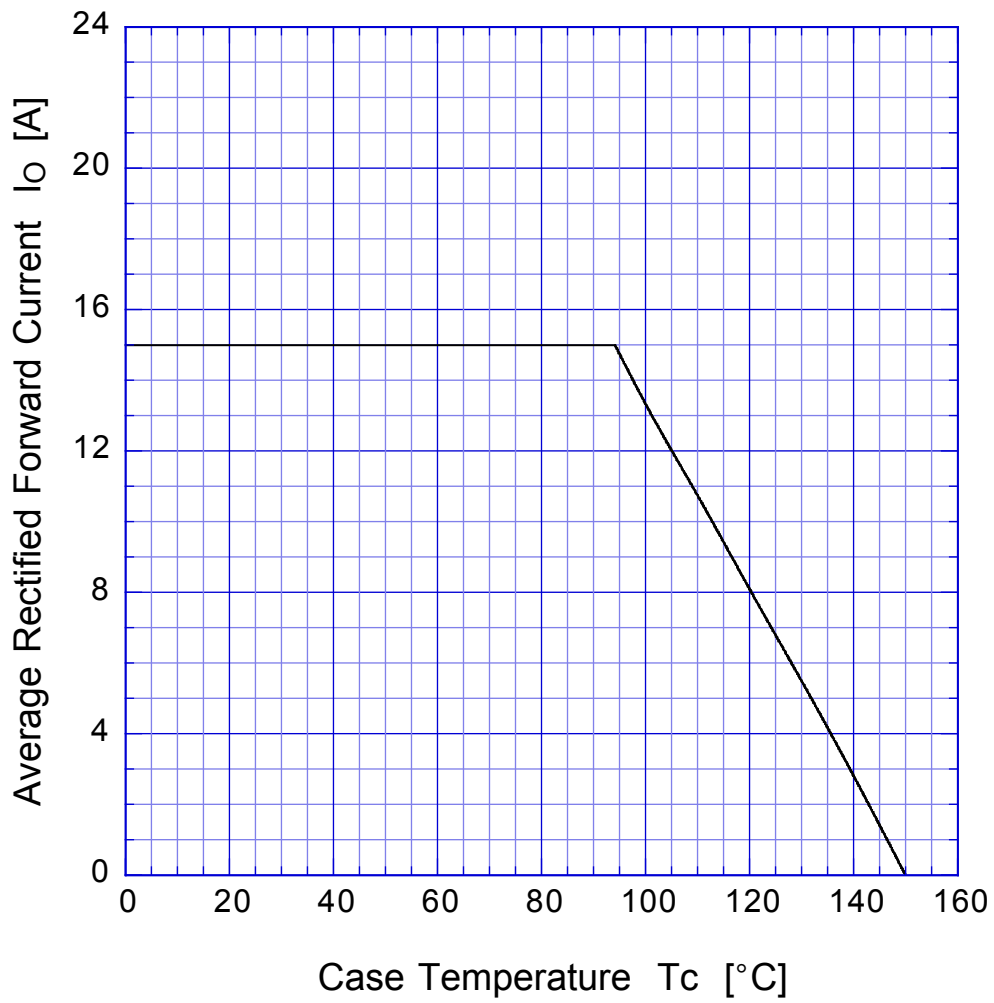


Sine wave  
R-load  
Single phase rectification

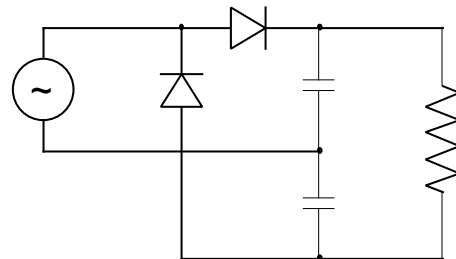


# D15VD40

# Derating Curve



Sine wave  
Voltage doubler rectification



# D15VD40

## Peak Surge Forward Capability

