

# SHINDENGEN

## Super Fast Recovery Rectifiers

Modules

### D120LC40B

400V 120A

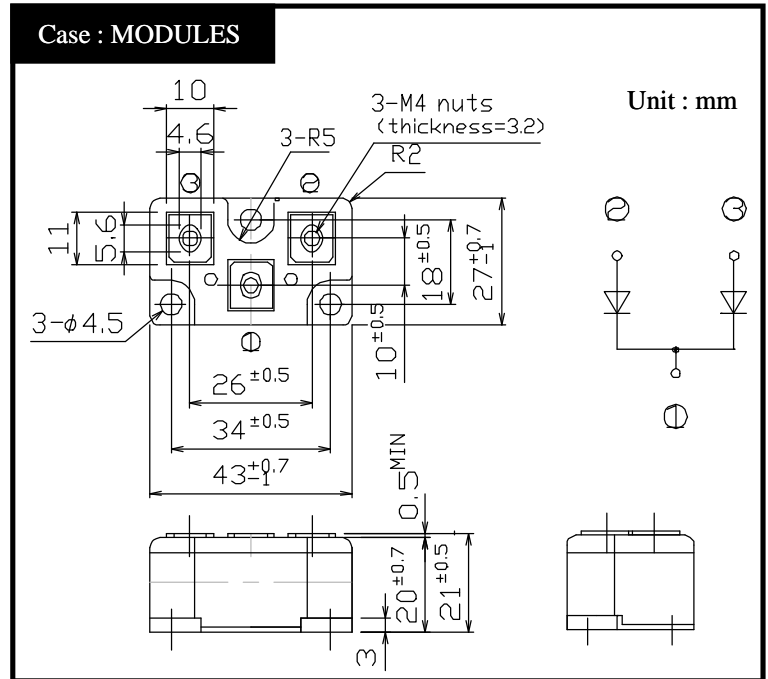
#### FEATURES

High current capacity  
trr100ns  
Insulated Package

#### APPLICATION

Semiconductor Production Equipment  
Big Power Supply  
Factory Automation, Robot

### OUTLINE DIMENSIONS



### RATINGS

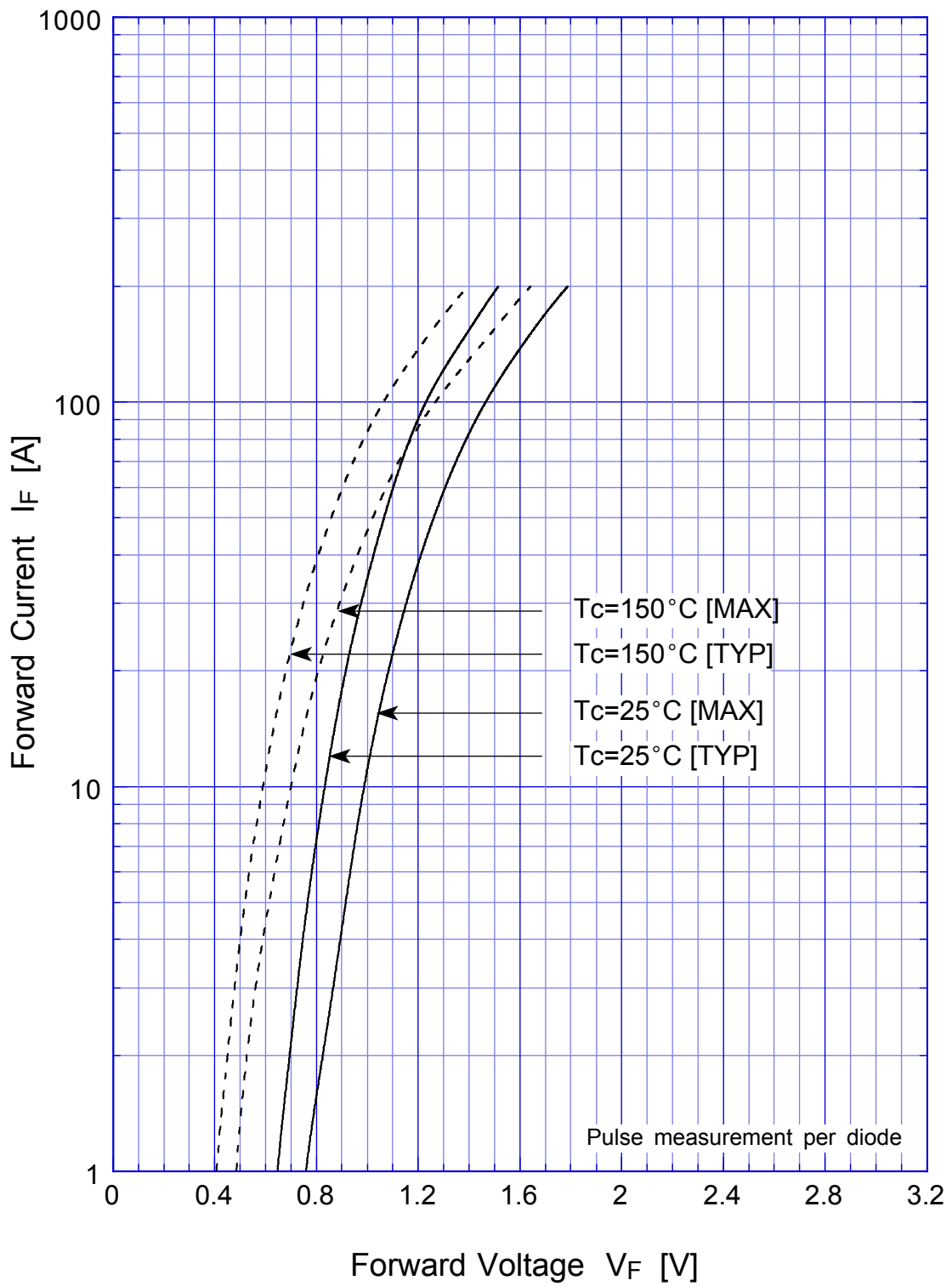
Absolute Maximum Ratings (If not specified  $T_c=25$  )

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	$T_{stg}$		-40 ~ 150	
Operating Junction Temperature	$T_j$		150	
Maximum Reverse Voltage	$V_{RM}$		400	V
Average Rectified Forward Current	$I_O$	50Hz sine wave, R-load, Rating for each arm $I_o/2$ , $T_c=60$	120	A
Peak Surge Forward Current	$I_{FSM}$	50Hz sine wave, Non-repetitive 1cycle peak value, Rating of per arm $T_j=25$	650	A
Dielectric Strength	$V_{dis}$	Terminals to case, AC 1 minute	1.5	kV
Mounting Torque	TOR		1.7	N·m

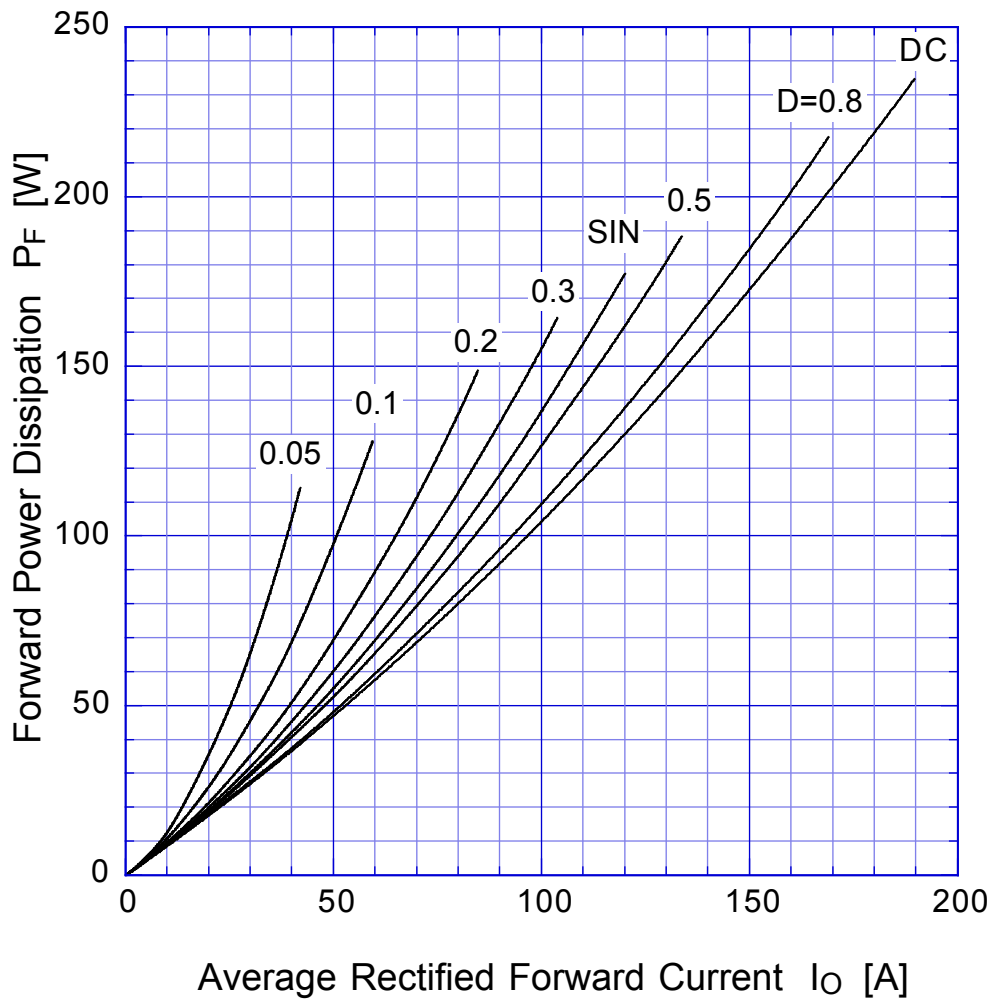
Electrical Characteristics (If not specified  $T_c=25$  )

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	$V_F$	$I_F=60A$ , Pulse measurement, Rating of per arm	Max.1.3	V
Reverse Current	$I_R$	$V_R=V_{RM}$ , Pulse measurement, Rating of per arm	Max.25	$\mu A$
Reverse Recovery Time	trr	$I_F=0.5A$ , $I_R=1A$ , Rating of per arm	Max.100	ns
Thermal Resistance	jc	junction to case	Max.0.5	/W

# D120LC40B Forward Voltage



## D120LC40B Forward Power Dissipation

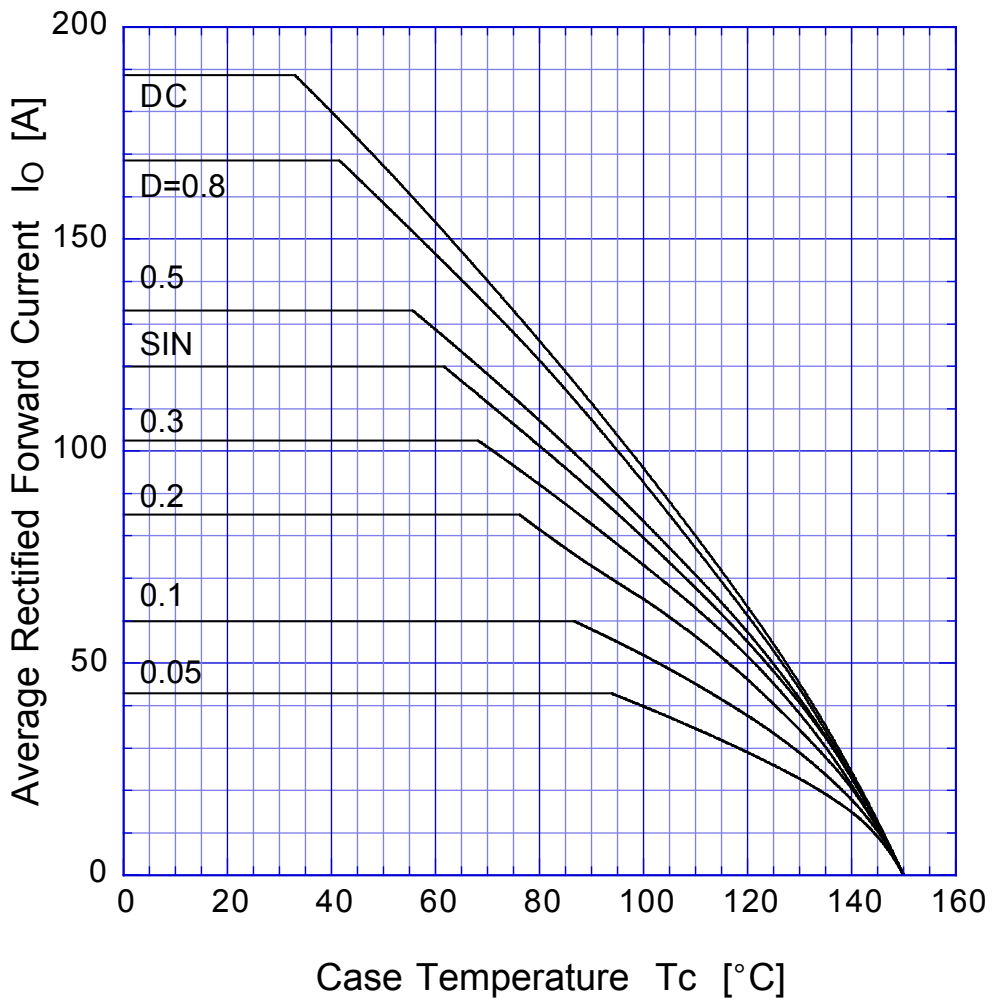


$T_j = T_{jmax}$



# D120LC40B

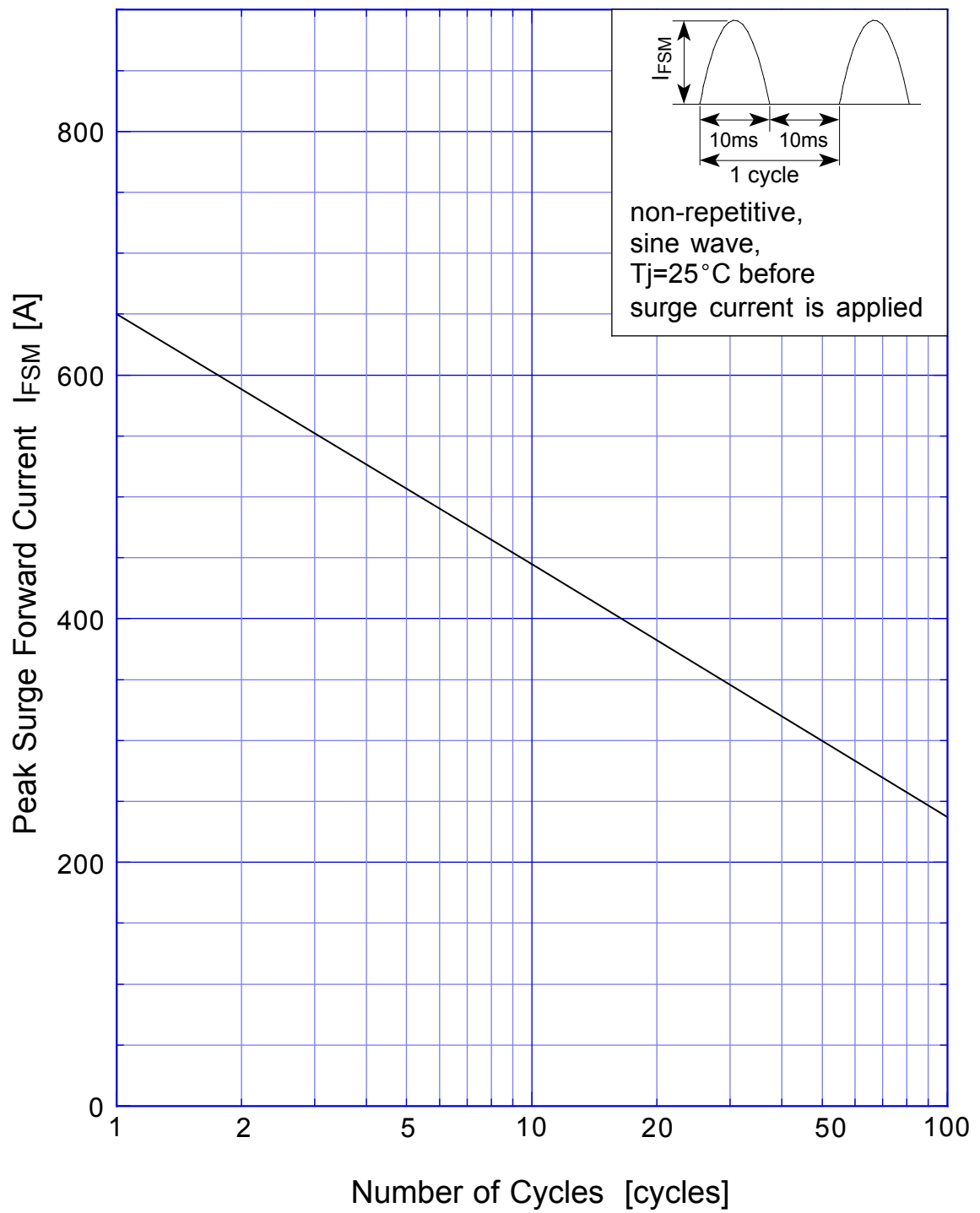
## Derating Curve



$$V_R = V_{RM}$$



## D120LC40B Peak Surge Forward Capability



# D120LC40B Junction Capacitance

