

# SHINDENGEN

## Super Fast Recovery Rectifiers

Modules

### D120LC40B

400V 120A

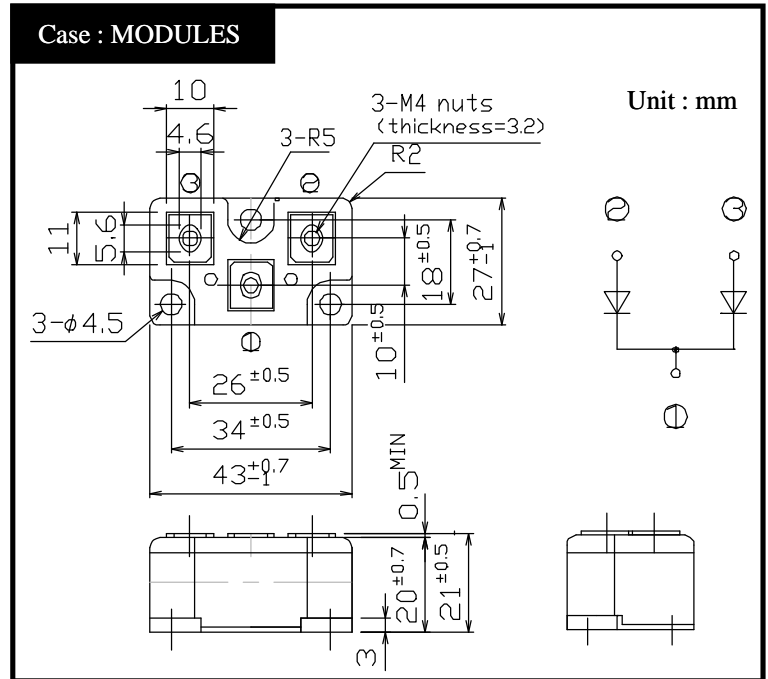
#### FEATURES

High current capacity  
trr100ns  
Insulated Package

#### APPLICATION

Semiconductor Production Equipment  
Big Power Supply  
Factory Automation, Robot

### OUTLINE DIMENSIONS



### RATINGS

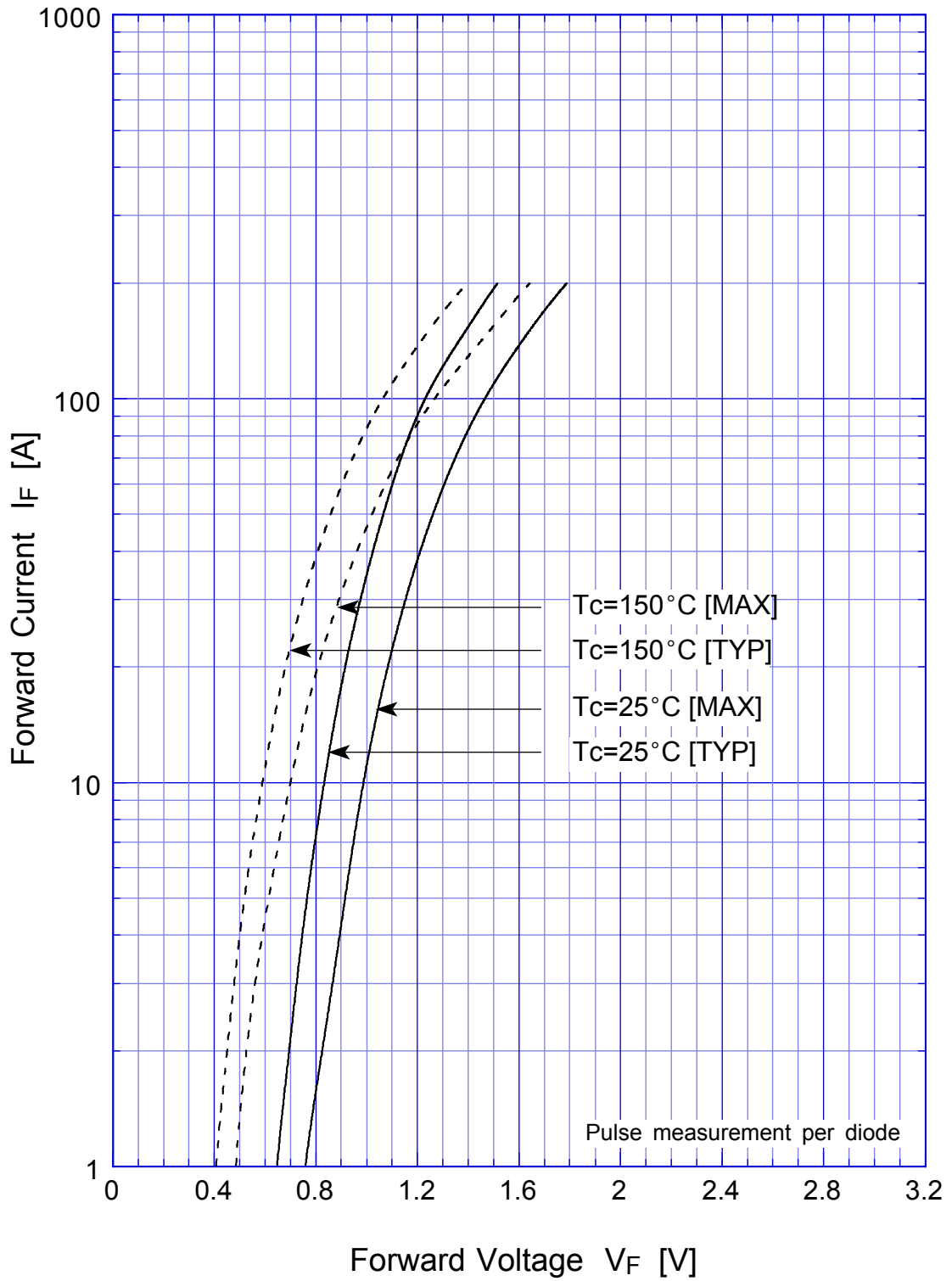
Absolute Maximum Ratings (If not specified Tc=25 )

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-40 ~ 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, Rating for each arm I <sub>o</sub> /2, Tc=60	120	A
Peak Surge Forward Current	I <sub>FSM</sub>	50Hz sine wave, Non-repetitive 1cycle peak value, Rating of per arm Tj=25	650	A
Dielectric Strength	V <sub>dis</sub>	Terminals to case, AC 1 minute	1.5	kV
Mounting Torque	TOR		1.7	N·m

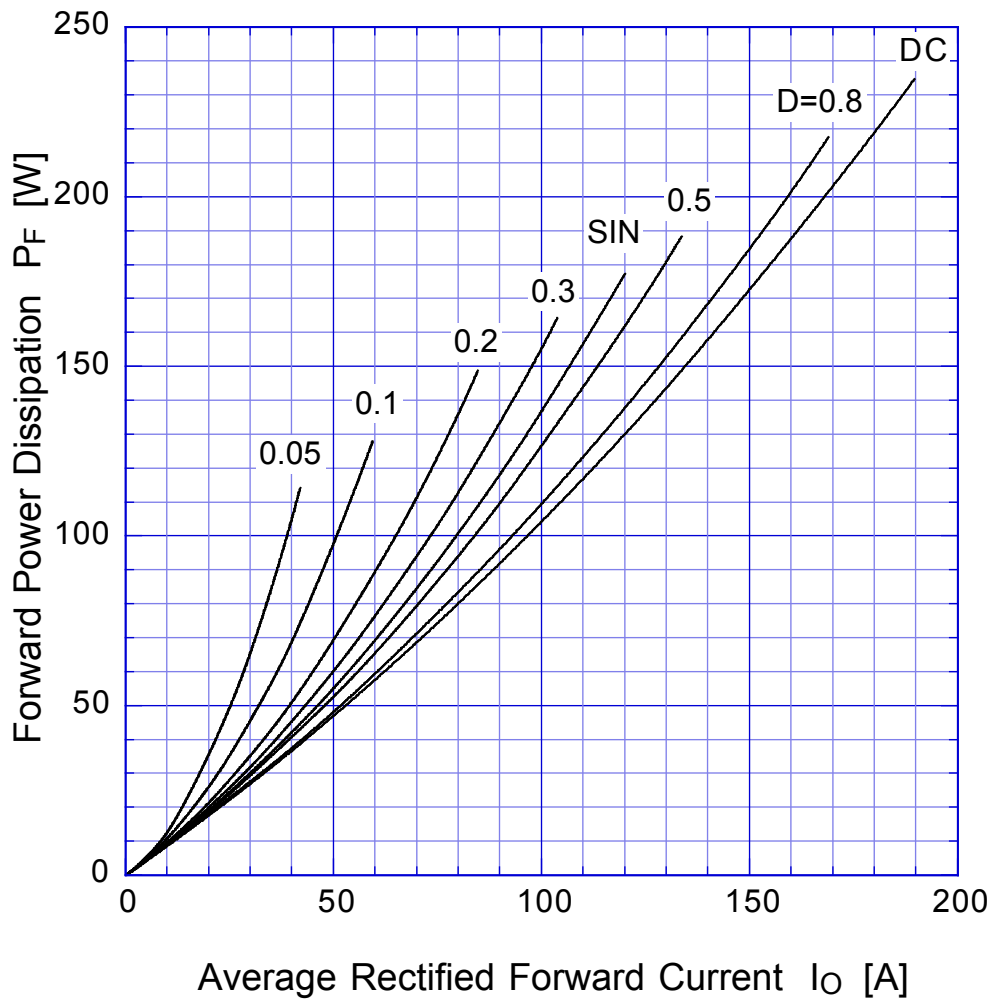
Electrical Characteristics (If not specified Tc=25 )

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =60A, Pulse measurement, Rating of per arm	Max.1.3	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =V <sub>RM</sub> , Pulse measurement, Rating of per arm	Max.25	μA
Reverse Recovery Time	trr	I <sub>F</sub> =0.5A, I <sub>R</sub> =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

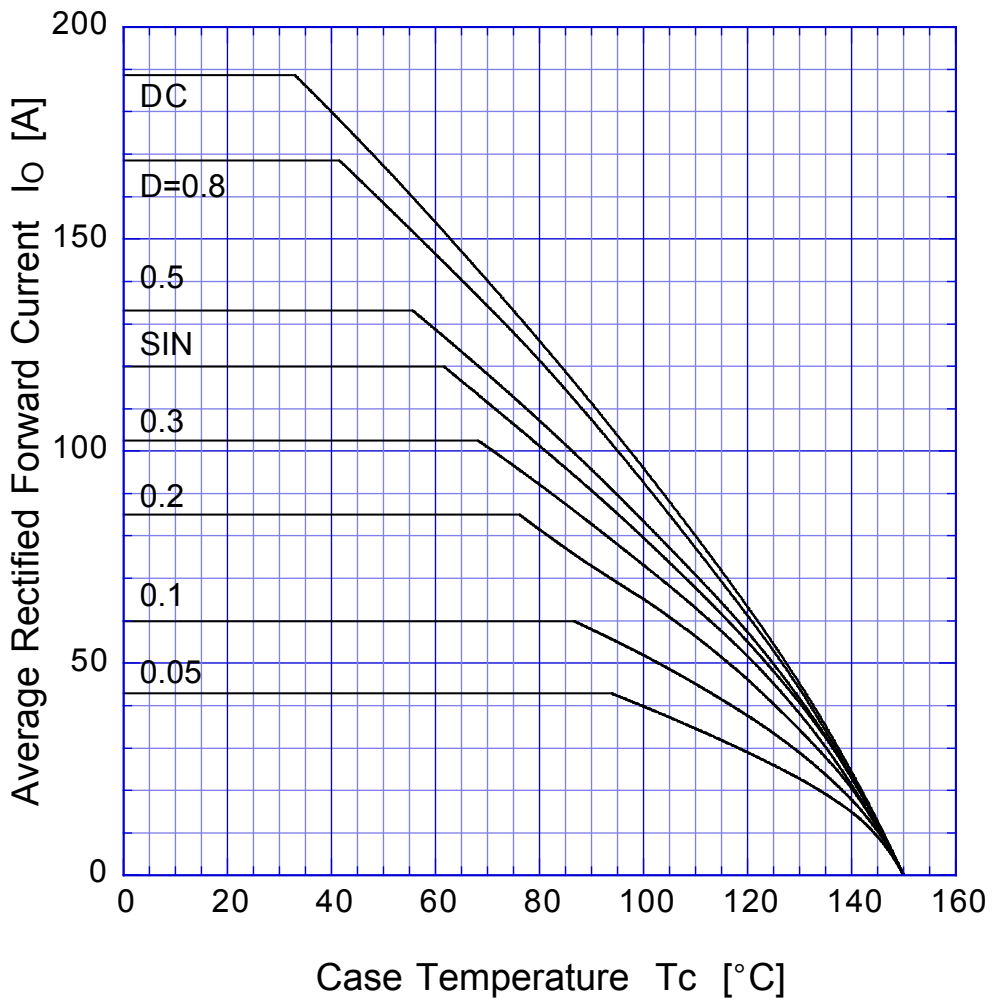


$T_j = T_{jmax}$



# D120LC40B

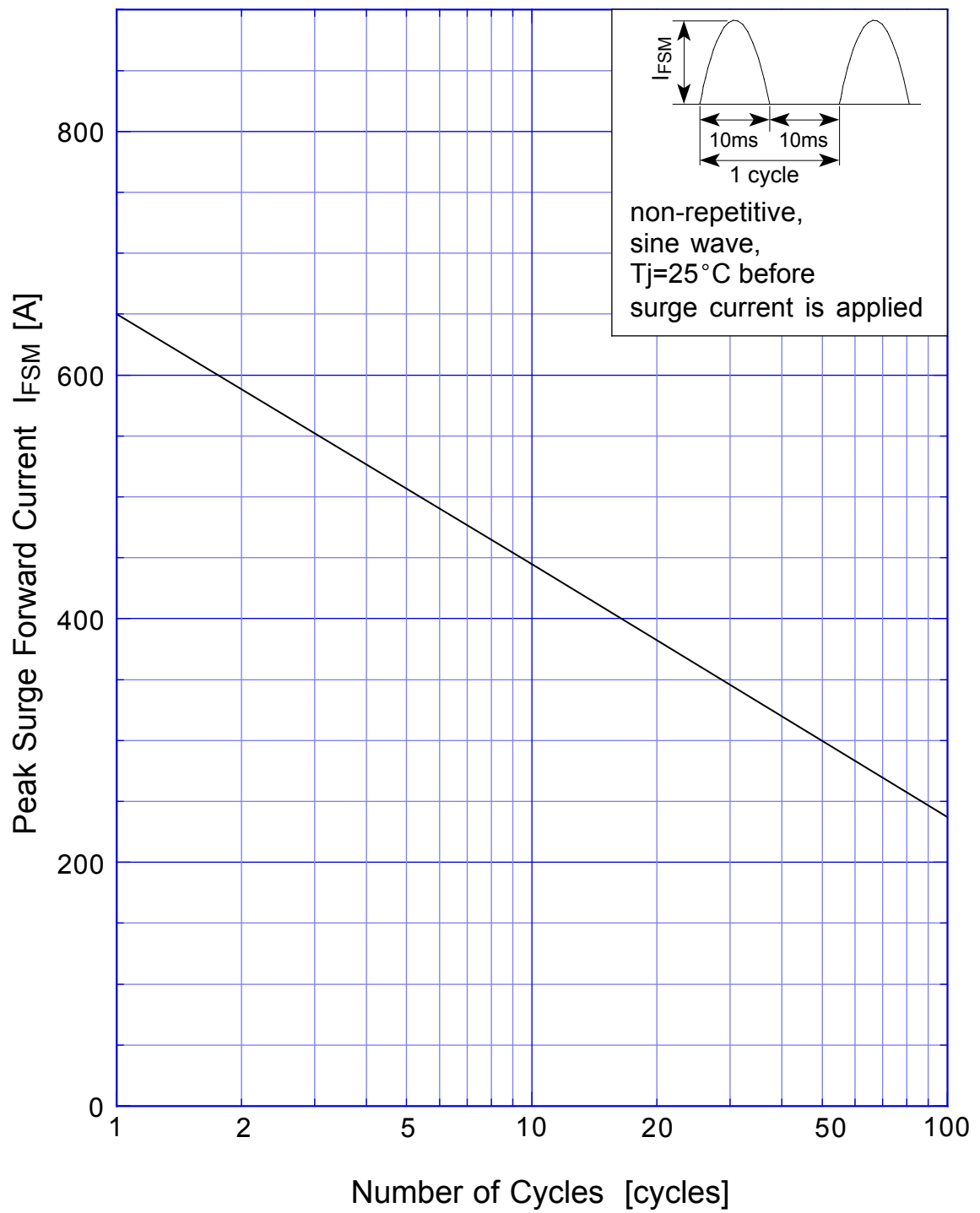
## Derating Curve



$$V_R = V_{RM}$$



## D120LC40B Peak Surge Forward Capability



# D120LC40B Junction Capacitance

