

SHINDENGEN

Super Fast Recovery Rectifiers

Modules

D120LC40

400V 120A

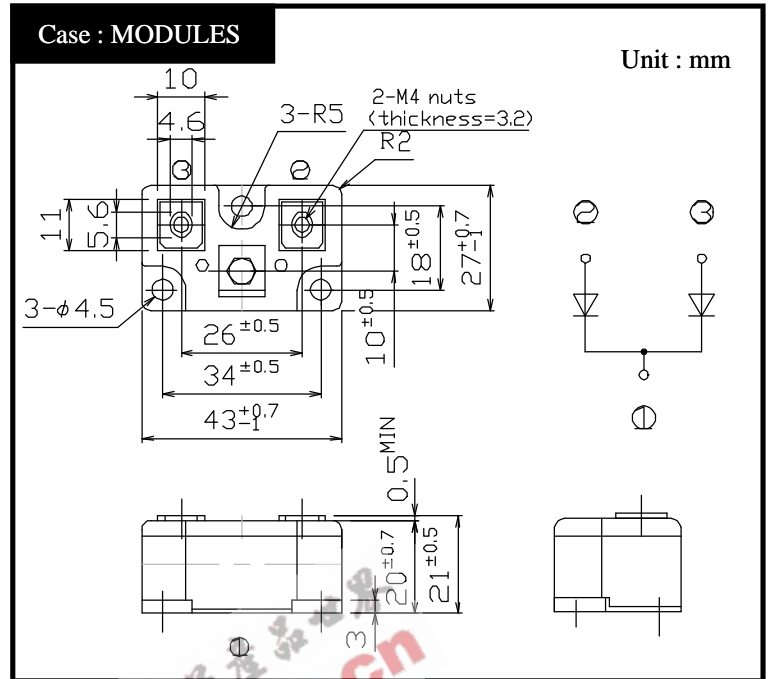
FEATURES

- High current capacity
- trr100ns
- Small jc

APPLICATION

- Semiconductor Production Equipment
- Big Power Supply
- Factory Automation, Robot

OUTLINE DIMENSIONS



RATINGS

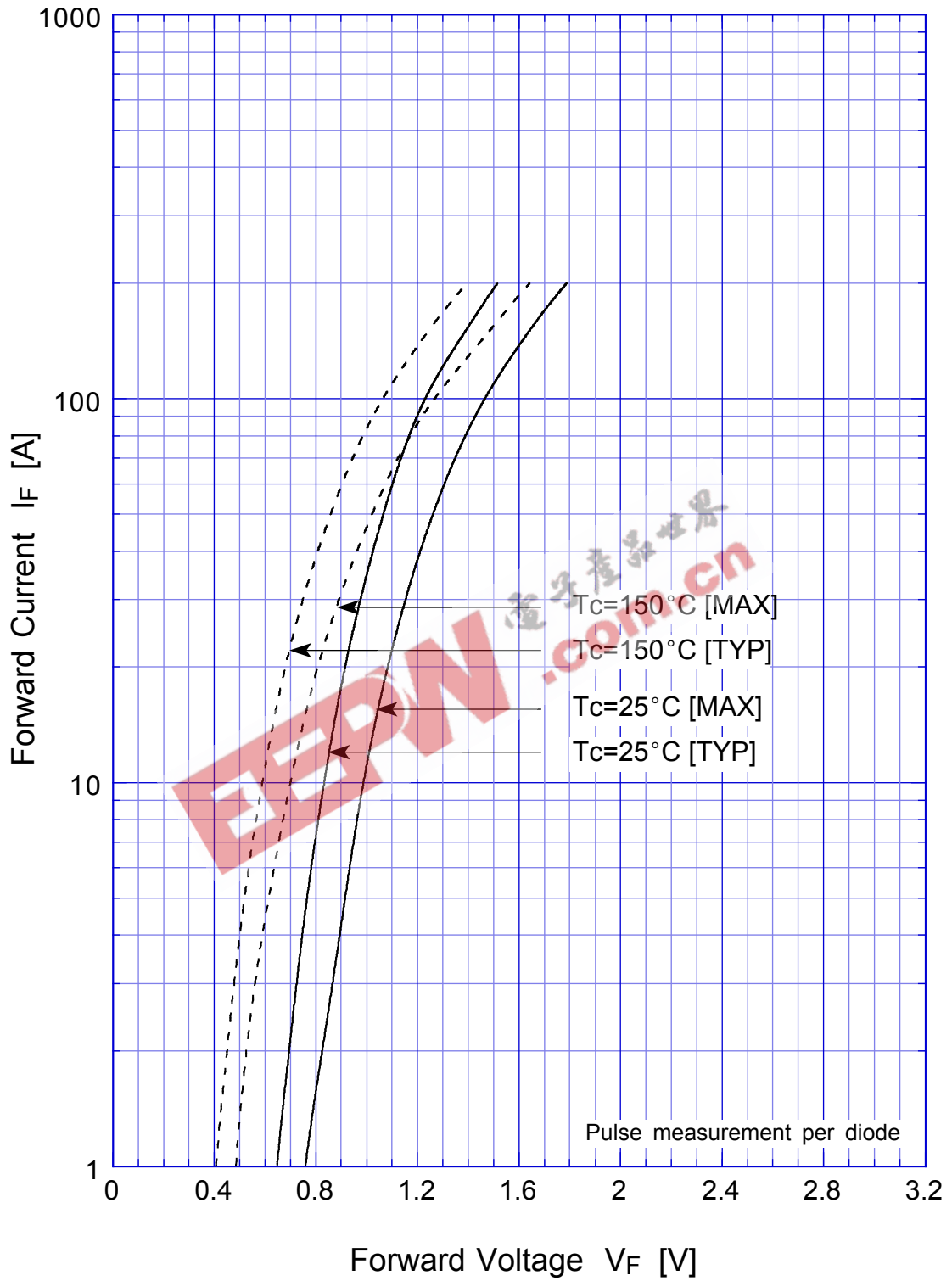
Absolute Maximum Ratings (If not specified Tc=25)

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-40 ~ 150	
Operating Junction Temperature	Tj		150	
Maximum Reverse Voltage	V _{RM}		400	V
Average Rectified Forward Current	I _O	50Hz sine wave, R-load, Rating for each arm I _o /2, Tc=95	120	A
Peak Surge Forward Current	I _{FSM}	50Hz sine wave, Non-repetitive 1cycle peak value, Rating of per arm Tj=25	650	A
Mounting Torque	TOR		1.7	N·m

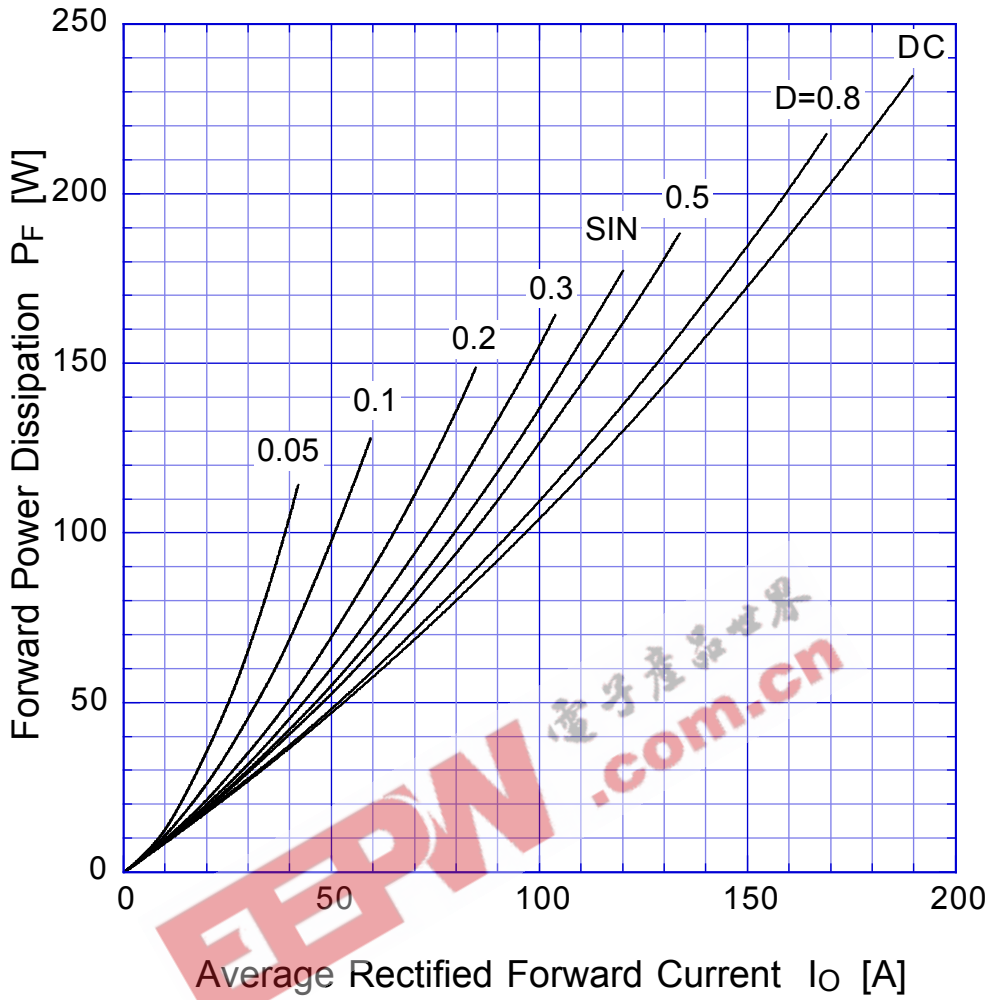
Electrical Characteristics (If not specified Tc=25)

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	μA
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.0.31	/W

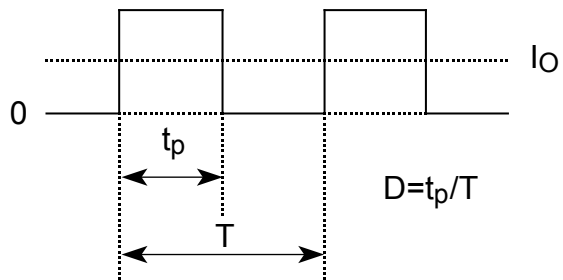
D120LC40 Forward Voltage



D120LC40 Forward Power Dissipation

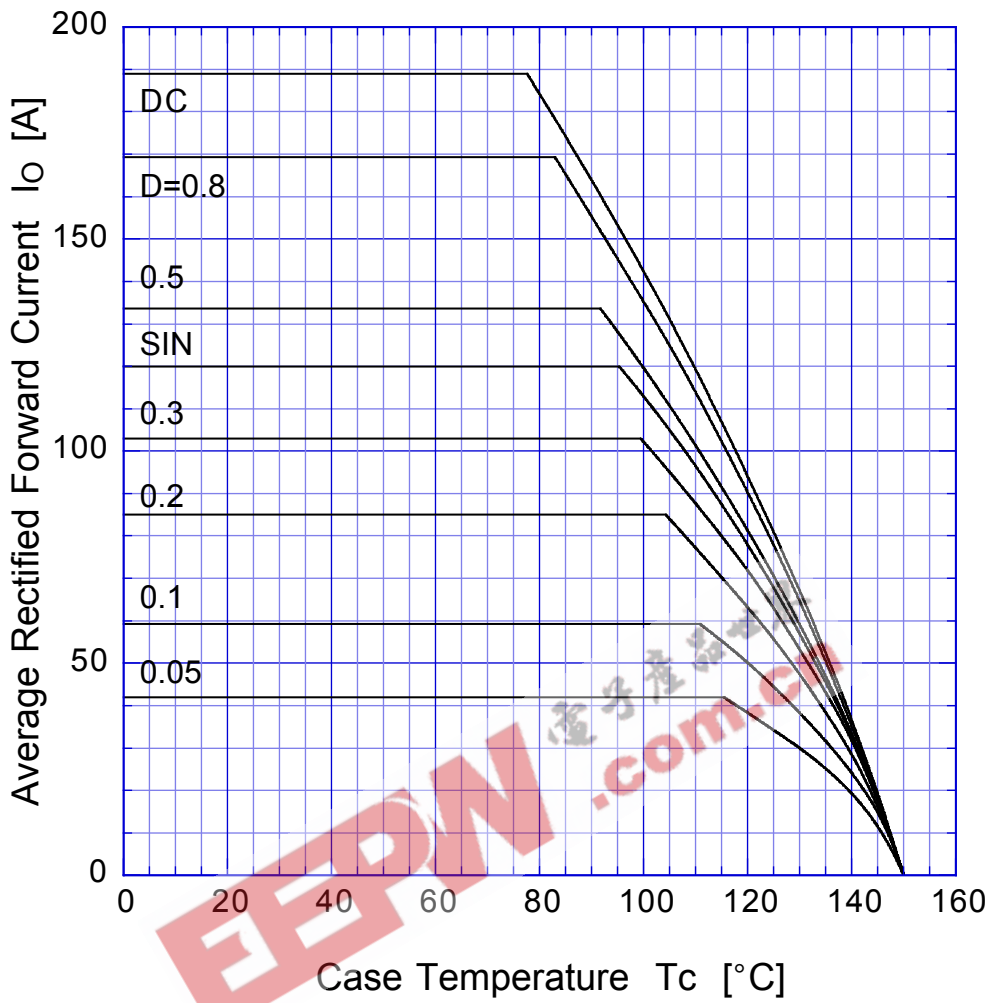


$T_j = T_{jmax}$



D120LC40

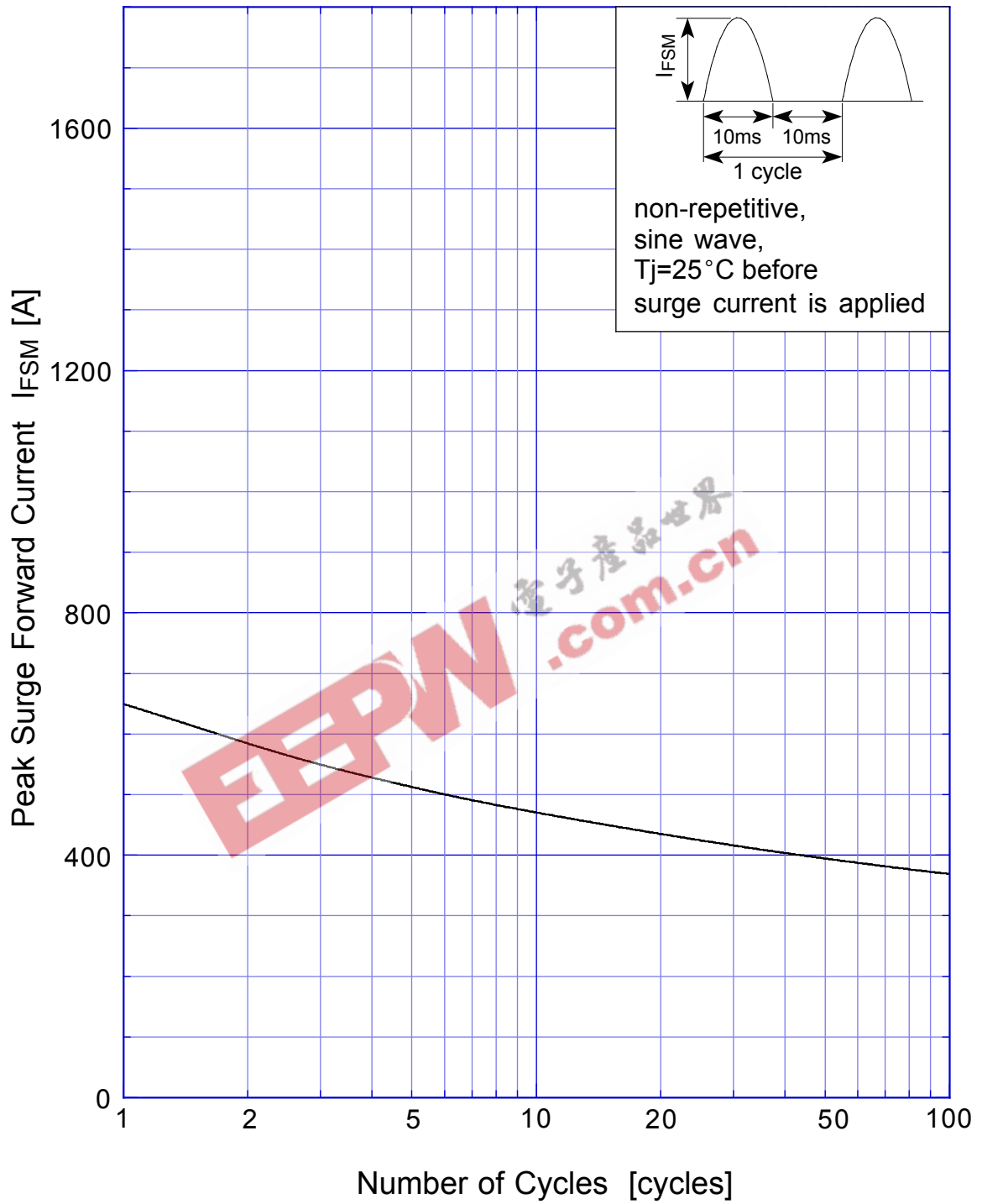
Derating Curve



$$V_R = V_{RM}$$



D120LC40 Peak Surge Forward Capability



D120LC40 Junction Capacitance

