

# SHINDENGEN

## Schottky Rectifiers (SBD)

Modules

**D120SC4M**

**40V 120A**

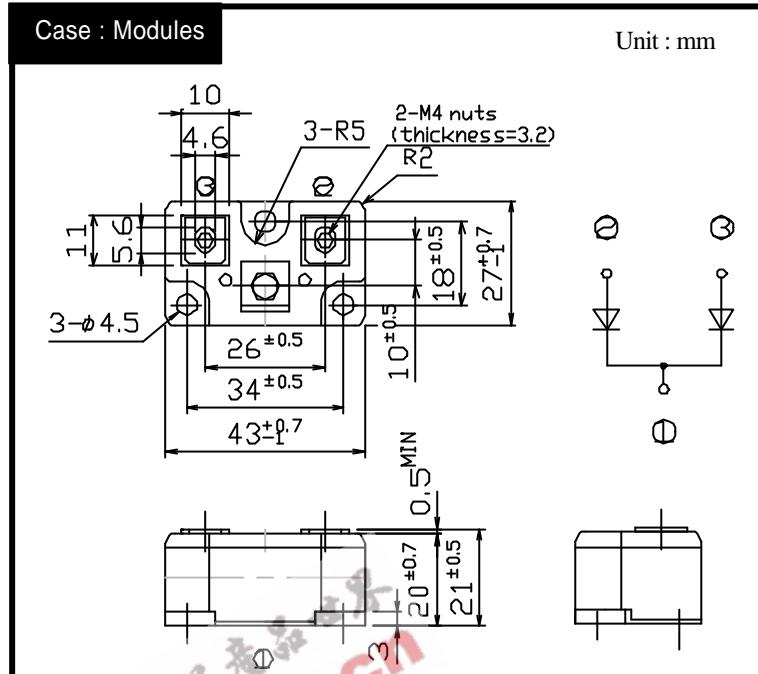
### FEATURES

High capacity modules  
Low VF  
Small  $j_c$

### APPLICATION

Big switching power supply  
DC/DC converter  
Mainframe  
IC tester

### OUTLINE DIMENSIONS



### RATINGS

Absolute Maximum Ratings (If not specified  $T_c=25^\circ\text{C}$ )

Item	Symbol	Conditions	Ratings	Units
Storage Temperature	$T_{stg}$		-40 ~ 125	
Operating Junction Temperature	$T_j$		125	
Maximum Reverse Voltage	$V_{RM}$		40	V
Repetitive Peak Surge Reverse Voltage	$V_{RRSM}$	Pulse width 100ms, duty 1/100	48	V
Average Rectified Forward Current	$I_o$	50Hz sine wave, R-load, Rating for each diode $I_o/2$ , $T_c=90^\circ\text{C}$	120	A
Peak Surge Forward Current	$I_{FSM}$	50Hz sine wave, Non-repetitive 1cycle peak value, Rating of per diode $T_j=125^\circ\text{C}$	800	A
Mounting Torque	$T_{OR}$		1.7	N·m

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

Item	Symbol	Conditions	Ratings	Units
Forward Voltage	$V_F$	$I_F=60\text{A}$ , Pulse measurement, Rating of per diode	Max. 0.58	V
Reverse Current	$I_R$	$V_R=V_{RM}$ , Pulse measurement, Rating of per diode	Max. 40	mA
Junction Capacitance	$C_j$	$f=1\text{MHz}$ , $V_R=10\text{V}$ , Rating of per diode	TYP. 2.1	nF
Thermal Resistance	$j_c$	junction to case	Max. 0.34	/W
	$j_{cf}$	case to heatsink, Mounting torque = 1.7N·m	Max. 0.12	