

# SHINDENGEN

## Schottky Rectifiers (SBD)

Modules

# D120SC6M

**60V 120A**

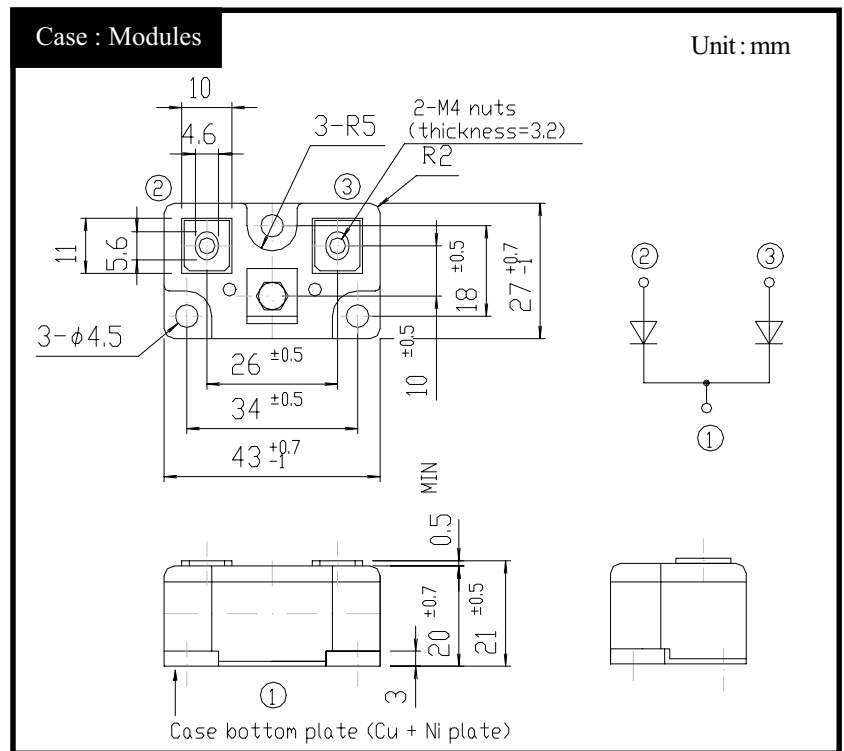
### FEATURES

- High capacity modules
- Low VF
- Small  $\theta_{jc}$

### 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	$^\circ\text{C}$
Operating Junction Temperature	$T_j$		125	$^\circ\text{C}$
Maximum Reverse Voltage	$V_{RM}$		60	V
Repetitive Peak Surge Reverse Voltage	$V_{RRSM}$	Pulse width 100ns, duty 1/100	65	V
Average Rectified Forward Current	$I_O$	50Hz sine wave, R-load, Rating for each arm $I_o/2$ , $T_c=85^\circ\text{C}$	120	A
Peak Surge Forward Current	$I_{FSM}$	50Hz sine wave, Non-repetitive 1cycle peak value, Rating of per arm $T_j=125^\circ\text{C}$	800	A
Mounting Torque	TOR		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 arm	Max.0.67	V
Reverse Current	$I_R$	$V_R=V_{RM}$ , Pulse measurement, Rating of per arm	Max.40	mA
Junction Capacitance	$C_j$	$f=1\text{MHz}$ , $V_R=10\text{V}$ , Rating of per arm	TYP 2.2	nF
Thermal Resistance	$\theta_{jc}$	junction to case	Max.0.34	$^\circ\text{C}/\text{W}$
	$\theta_{cf}$	case to heatsink, Mounting torque = 1.7N·m	Max.0.12	