

# SHINDENGEN

## Schottky Rectifiers (SBD)

Modules

**D360SC4M**

**40V 360A**

### FEATURES

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

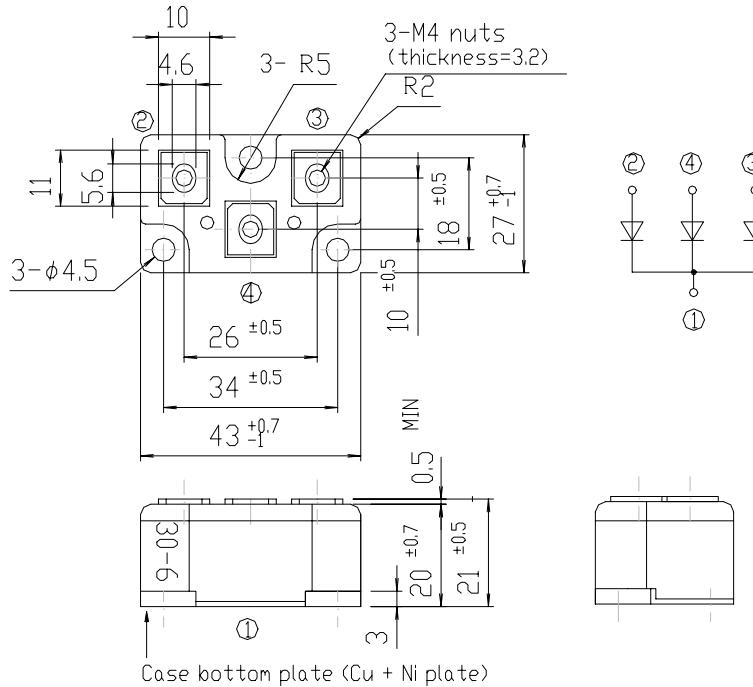
### APPLICATION

- Big switching power supply
- DC/DC converter
- Mainframe
- IC tester

### OUTLINE DIMENSIONS

Case : Modules

Unit : mm



### 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	$V_{RM}$		40	V
Repetitive Peak Surge Reverse Voltage	$V_{RRSM}$	Pulse width 100ns, duty 1/100	48	V
Average Rectified Forward Current	$I_O$	50Hz sine wave, R-load, Rating for each arm $I_O/3$ , $T_c=64^\circ\text{C}$	360	A
Peak Surge Forward Current	$I_{FSM}$	50Hz sine wave, Non-repetitive 1cycle peak value, Rating of per arm $T_j=125^\circ\text{C}$	1600	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	$V_F$	$I_F=120\text{A}$ , Pulse measurement, Rating of per arm	Max.0.60	V
Reverse Current	$I_R$	$V_R=V_{RM}$ , Pulse measurement, Rating of per arm	Max.80	mA
Junction Capacitance	$C_j$	$f=1\text{MHz}$ , $V_R=10\text{V}$ , Rating of per arm	TYP 4.2	nF
Thermal Resistance	$\theta_{jc}$	junction to case	Max.0.18	$^\circ\text{C}/\text{W}$
	$\theta_{cf}$	case to heatsink, Mounting torque = 1.7N·m	Max.0.12	