

SHINDENGEN

Schottky Rectifiers (SBD)

Modules

D180SC4M

40V 180A

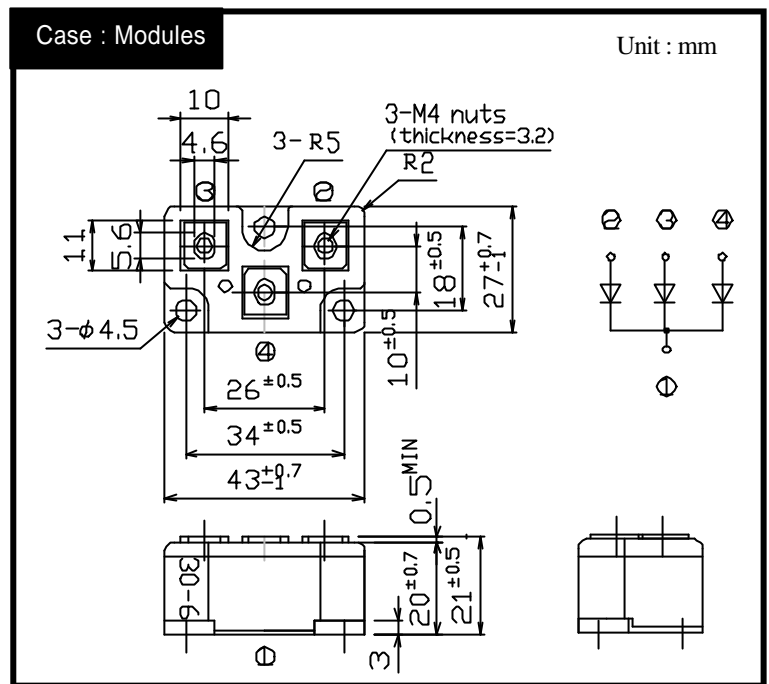
FEATURES

- 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 $T_c=25$)

| 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 $I_o/3$, $T_c=83$ | 180 | A |
| Peak Surge Forward Current | I_{FSM} | 50Hz sine wave, Non-repetitive 1cycle peak value, Rating of per diode $T_j=125$ | 800 | A |
| Mounting Torque | TOR | | 1.7 | N·m |

Electrical Characteristics (If not specified $T_c=25$)

| Item | Symbol | Conditions | Ratings | Units |
|----------------------|--------|---|----------|-------|
| Forward Voltage | V_F | $I_F=60A$, 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 | $f=1MHz$, $V_R=10V$, Rating of per diode | TYP 2.1 | nF |
| Thermal Resistance | j_c | junction to case | Max.0.25 | /W |
| | cf | case to heatsink, Mounting torque = 1.7N·m | Max.0.12 | |