

SHINDENGEN

Schottky Rectifiers (SBD)

Modules

D240SC6MH

60V 240A

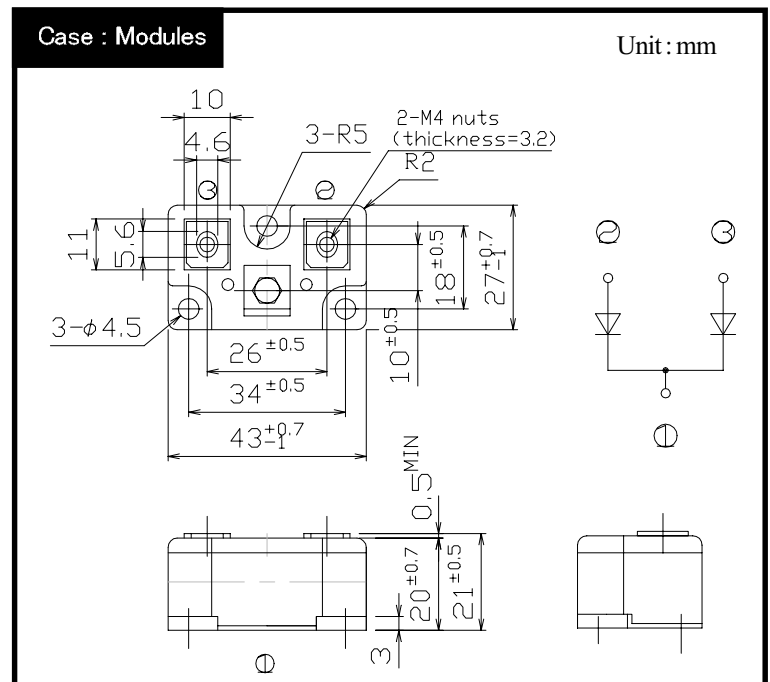
FEATURES

- High capacity modules
- Low VF
- Small θ_{jc}
- Built-in fuse

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 $I_o/2$, $T_c=71^\circ\text{C}$ | 240 | 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 | 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 | $I_F=120\text{A}$, 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.80 | mA |
| Junction Capacitance | C_j | $f=1\text{MHz}$, $V_R=10\text{V}$, Rating of per arm | TYP 4.4 | nF |
| Thermal Resistance | θ_{jc} | junction to case | Max.0.23 | $^\circ\text{C}/\text{W}$ |
| | θ_{cf} | case to heatsink, Mounting torque = 1.7N·m | Max.0.12 | |