

SHINDENGEN

Schottky Rectifiers (SBD)

Modules

D120SC4M

40V 120A

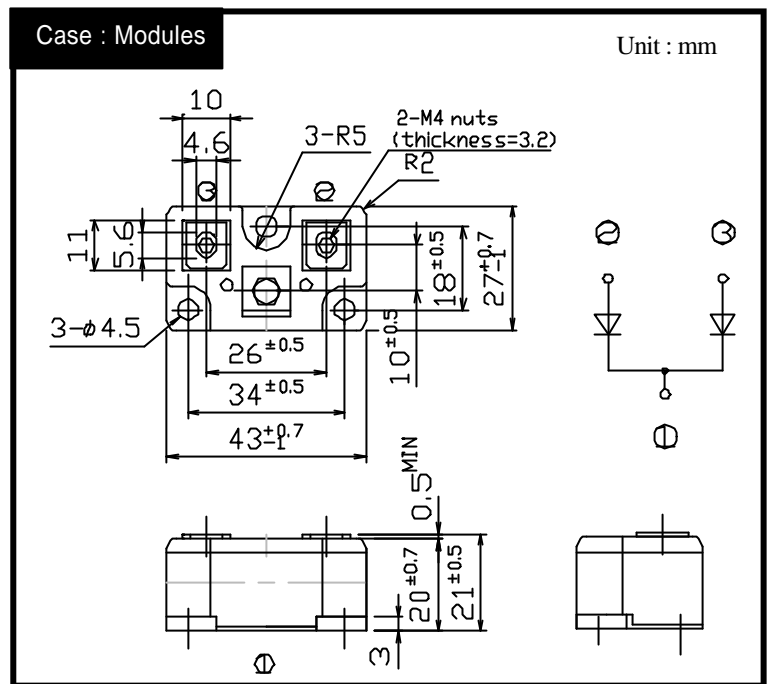
FEATURES

- High capacity modules
- Low VF
- Small jc

APPLICATION

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

OUTLINE DIMENSIONS



RATINGS

Absolute Maximum Ratings (If not specified Tc=25)

| Item | Symbol | Conditions | Ratings | Units |
|---------------------------------------|-------------------|--|-----------|-------|
| Storage Temperature | Tstg | | -40 ~ 125 | |
| Operating Junction Temperature | Tj | | 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, Tc=90 | 120 | A |
| Peak Surge Forward Current | I _{FSM} | 50Hz sine wave, Non-repetitive 1cycle peak value, Rating of per diode Tj=125 | 800 | A |
| Mounting Torque | TOR | | 1.7 | N·m |

Electrical Characteristics (If not specified Tc=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 | jc | junction to case | Max.0.34 | /W |
| | cf | case to heatsink. Mounting torque = 1.7N·m | Max.0.12 | |