

SHINDENGEN

Schottky Rectifiers (SBD)

Modules

D240SC6M

60V 240A

FEATURES

- High capacity modules
- Low VF
- Small θ_{jc}

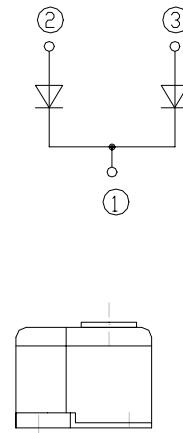
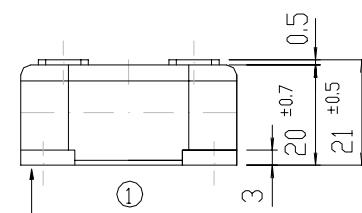
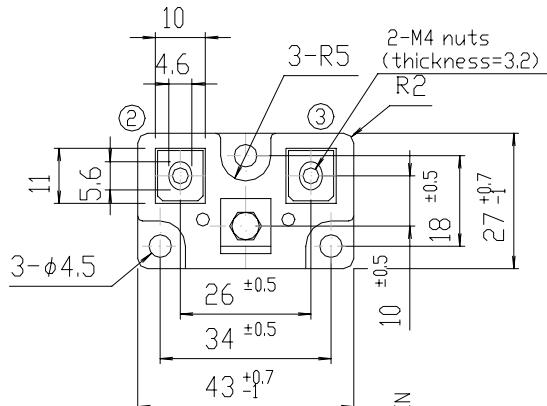
APPLICATION

- 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}		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	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. 0.67	V
Reverse Current	I_R	$V_R=V_{RM}$, Pulse measurement, Rating of per arm	Max. 80	mA
Junction Capacitance	C_J	f=1MHz, $V_R=10\text{V}$, 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	