

SHINDENGEN

Schottky Rectifiers (SBD)

Modules

D180SC6M

60V 180A

FEATURES

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

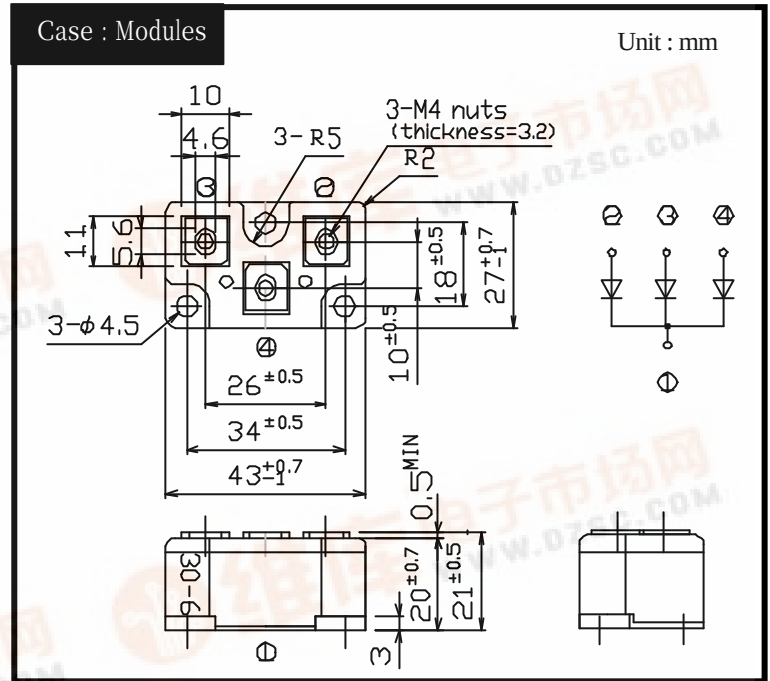
APPLICATION

- 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 100ms, duty 1/100	65	V
Average Rectified Forward Current	I_o	50Hz sine wave, R-load, Rating for each diode $I_o/3$, $T_c=78^\circ\text{C}$	180	A
Peak Surge Forward Current	I_{FSM}	50Hz sine wave, Non-repetitive 1cycle peak value, Rating of per diode $T_j=125^\circ\text{C}$	800	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	$I_F=60\text{A}$, Pulse measurement, Rating of per diode	Max.0.67	V
Reverse Current	I_R	$V_R=V_{RM}$, Pulse measurement, Rating of per diode	Max.40	mA
Junction Capacitance	C_j	$f=1\text{MHz}$, $V_R=10\text{V}$, Rating of per diode	TYP 2.2	nF
Thermal Resistance	θ_{jc}	junction to case	Max.0.25	$^\circ\text{C/W}$
	θ_{cf}	case to heatsink. Mounting torque = 1.7N·m	Max.0.12	