

D180SC6M

60V 180A

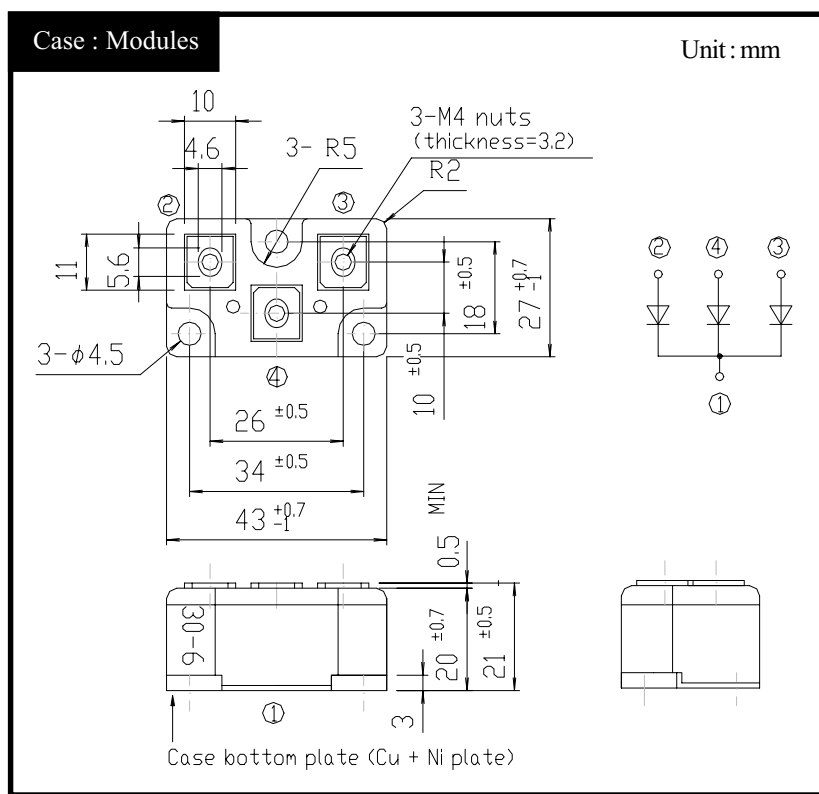
FEATURES

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

APPLICATION

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

OUTLINE DIMENSIONS



RATINGS

● Absolute Maximum Ratings (If not specified T_c=25°C)

Item	Symbol	Conditions	Ratings	Units
Storage Temperature	T _{stg}		-40~125	°C
Operating Junction Temperature	T _j		125	°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 /3, T _c =78°C	180	A
Peak Surge Forward Current	I _{FSM}	50Hz sine wave, Non-repetitive 1cycle peak value, Rating of per arm T _j =125 °C	800	A
Mounting Torque	TOR		1.7	N·m

● Electrical Characteristics (If not specified T_c=25°C)

Item	Symbol	Conditions	Ratings	Units
Forward Voltage	V _F	I _F =60A, 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.40	mA
Junction Capacitance	C _j	f=1MHz, V _R =10V, Rating of per arm	TYP 2.2	nF
Thermal Resistance	θ_{jc}	junction to case	Max.0.25	°C/W
	θ_{cf}	case to heatsink, Mounting torque = 1.7N·m	Max.0.12	