

D120SC4M

40V 120A

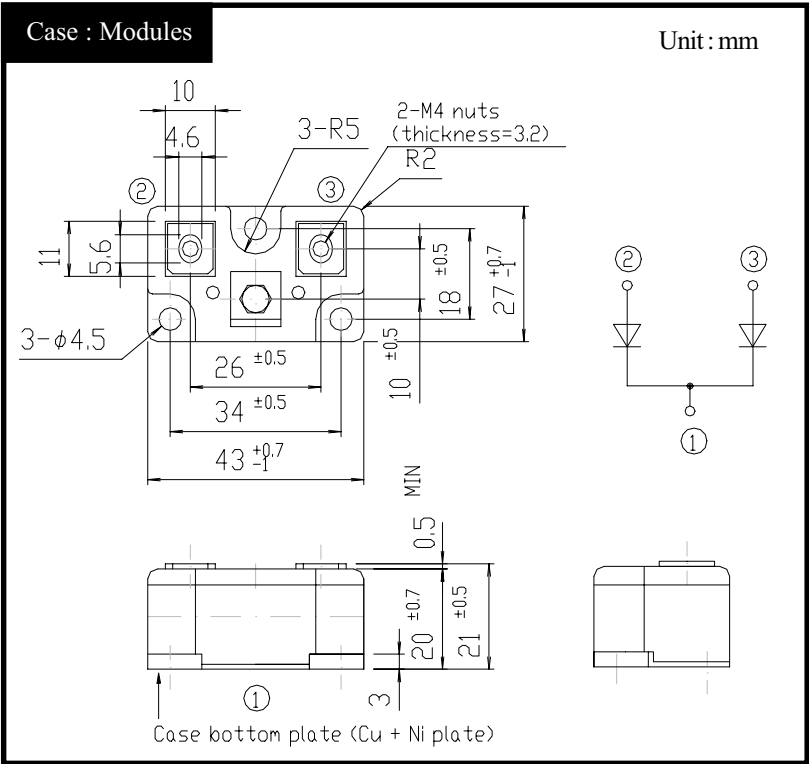
FEATURES

- High capacity modules
- Low VF
- Small  $\theta_{jc}$

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	Tstg		-40~125	$^{\circ}\text{C}$
Operating Junction Temperature	Tj		125	$^{\circ}\text{C}$
Maximum Reverse Voltage	$V_{RM}$		40	V
Repetitive Peak Surge Reverse Voltage	$V_{RRSM}$	Pulse width 100ns, duty 1/100	48	V
Average Rectified Forward Current	$I_O$	50Hz sine wave, R-load, Rating for each arm $I_o/2$ , $T_c=90^{\circ}\text{C}$	120	A
Peak Surge Forward Current	$I_{FSM}$	50Hz sine wave, Non-repetitive 1cycle peak value, Rating of per arm $T_j=125^{\circ}\text{C}$	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 arm	Max.0.58	V
Reverse Current	$I_R$	$V_R=V_{RM}$ , Pulse measurement, Rating of per arm	Max.40	mA
Junction Capacitance	Cj	f=1MHz, $V_R=10\text{V}$ , Rating of per arm	TYP 2.1	nF
Thermal Resistance	$\theta_{jc}$	junction to case	Max.0.34	$^{\circ}\text{C}/\text{W}$
	$\theta_{cf}$	case to heatsink, Mounting torque = 1.7N·m	Max.0.12	