

MDC080A ~ MDC220A

DIODE MODULES

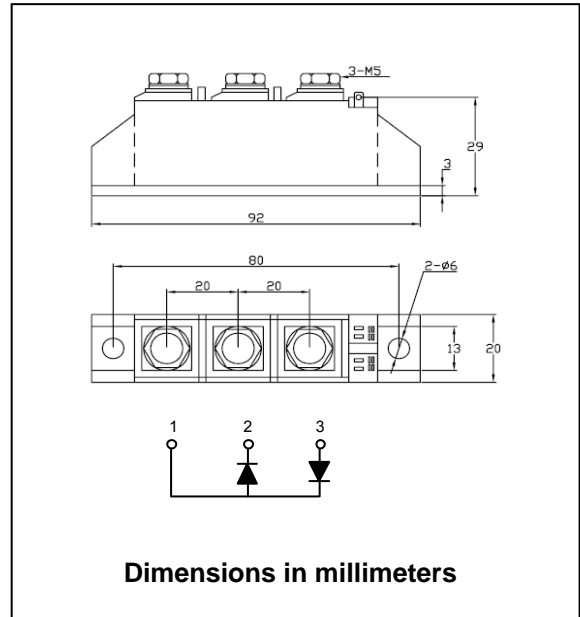
Applications :

- * Supplies for DC power equipment
- * DC supply for PWM inverter
- * Field supply for DC motors
- * Battery DC power supplies

Advantages :

- * Space and weight savings
- * Simple mounting
- * Improved temperature and power cycling
- * Reduced protection circuits

TYPE	V_{RRM} (V)	V_{RSM} (V)
MDC080A	800	900
MDC120A	1200	1300
MDC140A	1400	1500
MDC160A	1600	1700
MDC180A	1800	1900
MDC200A	2000	2100
MDC220A	2200	2300



MAXIMUM RATINGS

SYMBOL	TEST CONDITION	MAXIMUM	UNIT
I_{FRMS}	$T_{VJ} = T_{VJM}$	180	A
$I_{F(AV)}$	$T_C = 105\text{ }^\circ\text{C}$; 180° sine	120	A
I_{FSM}	$T_{VJ} = 45\text{ }^\circ\text{C}$ t = 10 ms(50 Hz), sine	2800	A
	$V_R = 0$ t = 8.3 ms(60 Hz), sine	3300	A
	$T_{VJ} = T_{VJM}$ t = 10 ms(50 Hz), sine	2500	A
	$V_R = 0$ t = 8.3 ms(60 Hz), sine	2750	A
$\int i^2 dt$	$T_{VJ} = 45\text{ }^\circ\text{C}$ t = 10 ms(50 Hz), sine	39200	A ² s
	$V_R = 0$ t = 8.3 ms(60 Hz), sine	45000	A ² s
	$T_{VJ} = T_{VJM}$ t = 10 ms(50 Hz), sine	31200	A ² s
	$V_R = 0$ t = 8.3 ms(60 Hz), sine	31300	A ² s
I_R	$T_{VJ} = T_{VJM}$; $V_R = V_{RRM}$	15	mA
V_F	$I_F = 300\text{ A}$; $T_{VJ} = 25\text{ }^\circ\text{C}$	1.43	V
R_{thJC}	Per diode ; DC current	0.26	K/W
	Per module	0.13	K/W
R_{thJK}	Per diode ; DC current	0.46	K/W
	Per module	0.23	K/W
T_{VJ}		-40 to +150	°C
T_{VJM}		150	°C
T_{STG}		-40 to +125	°C