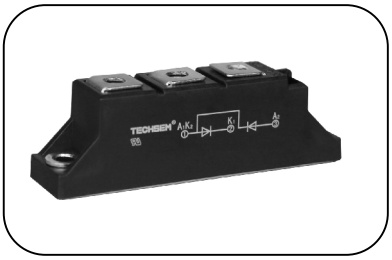
TECHSEM

MDC110 MDA110 MDK110 MD110
Diode Modules



Features：

- Isolated mounting base 2500V~
- Pressure contact technology with Increased power cycling capability
- Space and weight saving

Typical Applications

- Various rectifiers
- DC supply for PWM inverter

V_{RSM}	V_{RRM}	Type & Outline
900V	800V	MDx110-08-223F3
1100V	1000V	MDx110-10-223F3
1300V	1200V	MDx110-12-223F3
1500V	1400V	MDx110-14-223F3
1700V	1600V	MDx110-16-223F3
1900V	1800V	MDx110-18-223F3

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T_j(°C)	VALUE			UNIT
				Min	Type	Max	
$I_{F(AV)}$	Mean forward current	180° half sine wave 50Hz Single side cooled,T_C=100°C	150			110	A
$I_{F(RMS)}$	RMS forward current		150			173	A
I_{RRM}	Repetitive peak current	at V_{RRM}	150			10	mA
I_{FSM}	Surge forward current	10ms half sine wave V_R=0.6V_{RRM}	150			2.60	KA
I^2t	I^2T for fusing coordination					34	A^2s*10^3
V_{FO}	Threshold voltage		150			0.80	V
r_F	Forward slop resistance					1.74	mΩ
V_{FM}	Peak forward voltage	I_{FM}=330A	25			1.45	V
$R_{th(j-c)}$	Thermal resistance Junction to case	At 180^0 sine· Single side cooled per chip				0.350	°C /W
$R_{th(c-h)}$	Thermal resistance case to heatsink	At 180^0 sine· Single side cooled per chip				0.2	°C /W
V_{iso}	Isolation voltage	50Hz,R.M.S,t=1min, I_{iso}:1mA(max)		2500			V
F_m	Terminal connection torque(M5)				4		N·m
	Mounting torque(M6)				6		N·m
T_{stg}	Stored temperature			-40		125	°C
W_t	Weight				160/165		g
Outline	223F3/224H3						

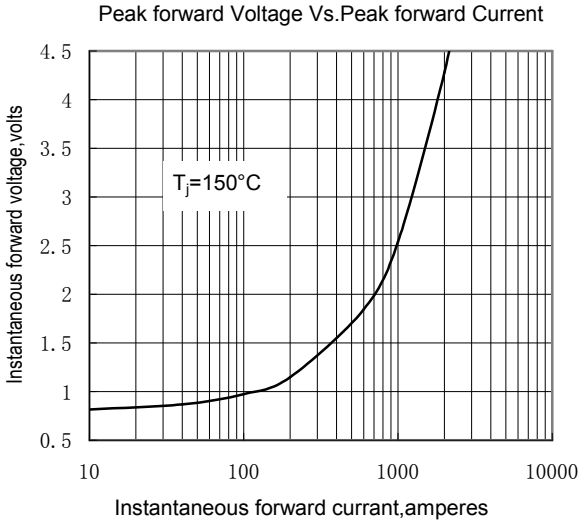


Fig.1

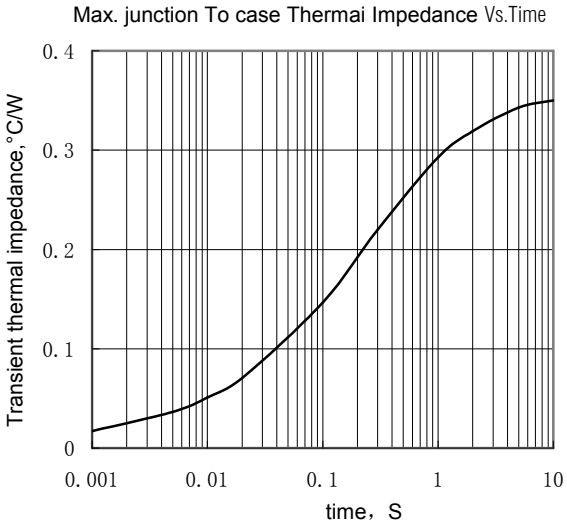


Fig.2

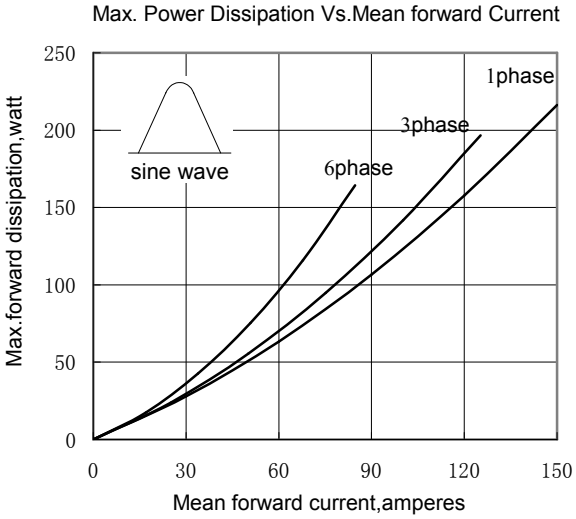


Fig.3

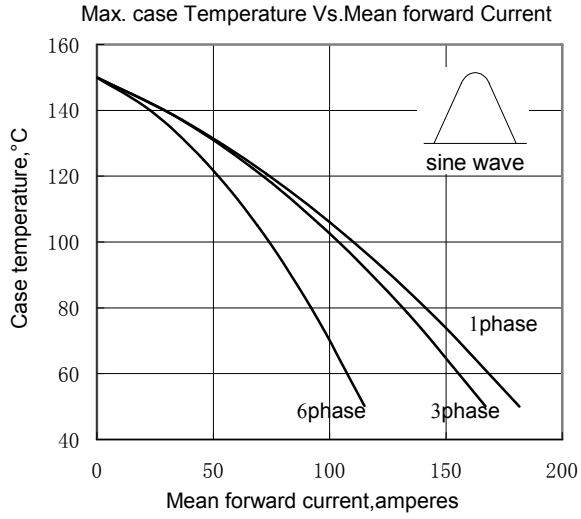


Fig.4

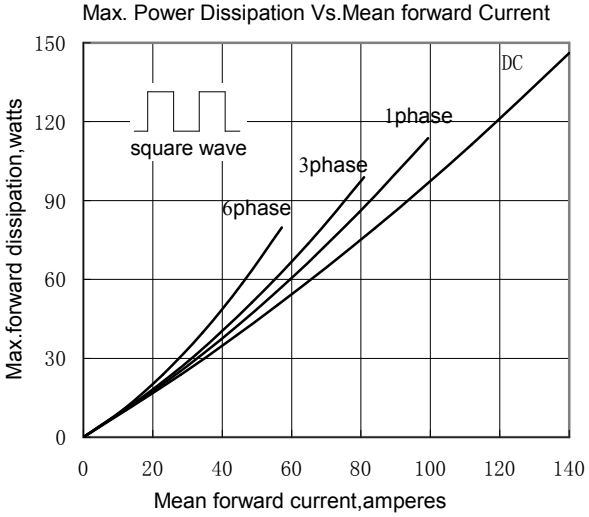


Fig.5

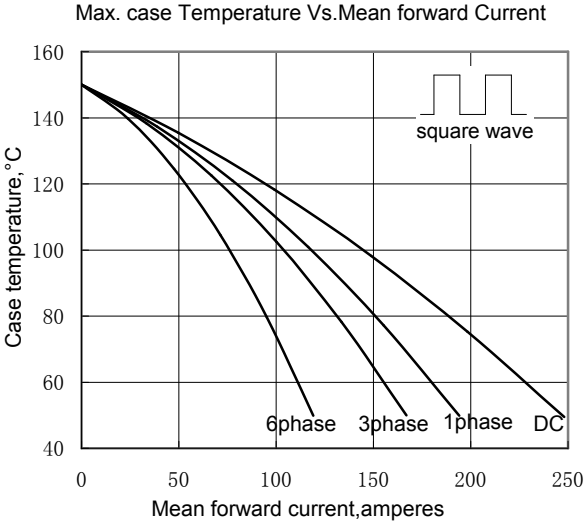


Fig.6

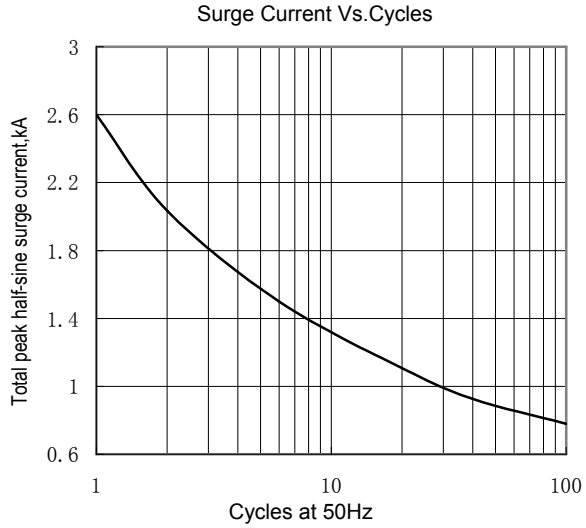


Fig.7

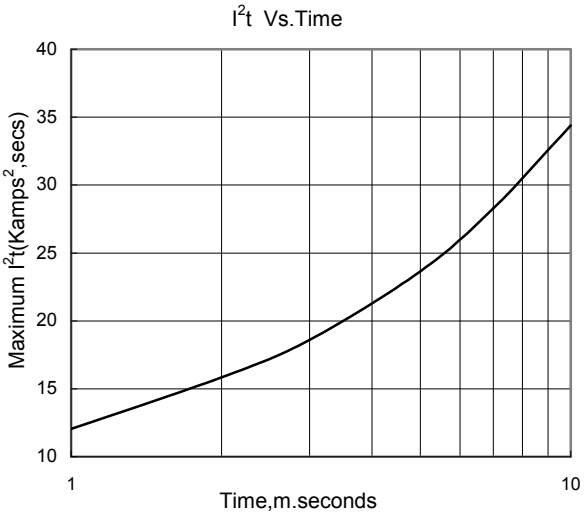
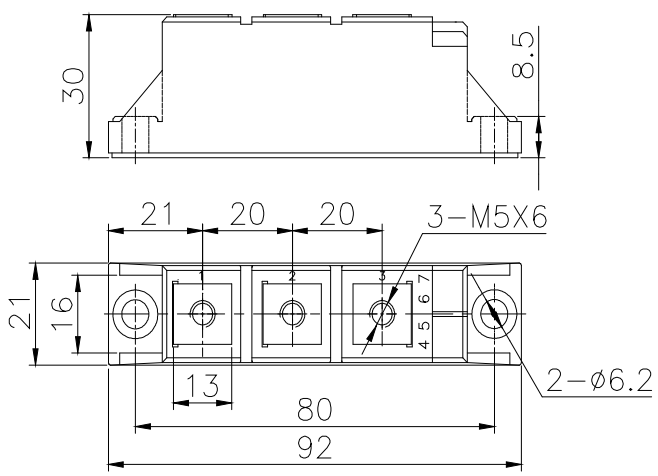
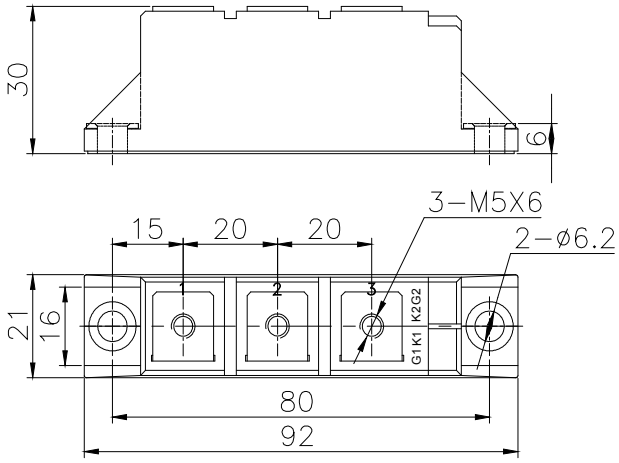


Fig.8

Outline:



223F3



224H3