MDC150 MDK150 MD150 Diode Modules

Features：

- High performance thermal insulation materials
- Good thermal fatigue performance
- International standard package

Typical Applications

- Various rectifiers
- DC supply for PWM inverter

V_{RSM}	V_{RRM}	Type & Outline
900V	800V	MDx150-08
1100V	1000V	MDx150-10
1300V	1200V	MDx150-12
1500V	1400V	MDx150-14
1700V	1600V	MDx150-16
1900V	1800V	MDx150-18

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			150	A
$I_{F\ (RMS)}$	RMS forward current		150			235	A
I_{RRM}	Repetitive peak current	at V_{RRM}	150			12	mA
I_{FSM}	Surge forward current	10ms half sine wave V_R=0.6V_{RRM}	150			4.60	KA
I^2t	I^2T for fusing coordination					106	A^2s*10^3
V_{FO}	Threshold voltage		150			0.80	V
r_F	Forward slop resistance					1.35	mΩ
V_{FM}	Peak forward voltage	I_{FM}=450A	25			1.45	V
$R_{th(j-c)}$	Thermal resistance Junction to case	At 180^0 sine Single side cooled per chip				0.230	°C /W
$R_{th(c-h)}$	Thermal resistance case to heatsink	At 180^0 sine Single side cooled per chip				0.08	°C /W
V_{iso}	Isolation voltage	50Hz,R.M.S,t=1min,I_{iso}:1mA(max)		2500			V
F_m	Terminal connection torque(M6)				6		N·m
	Mounting torque(M6)				6		N·m
T_{stg}	Stored temperature			-40		125	°C
W_t	Weight				165		g
Outline	M02H						

Peak forward Voltage Vs.Peak forward Current

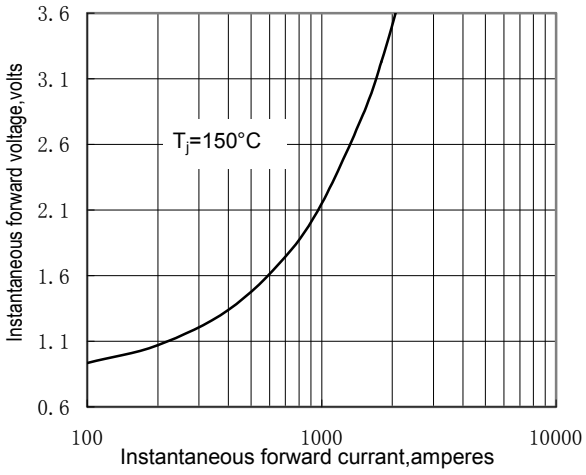


Fig.1

Max. junction To case Thermai Impedance Vs.Time

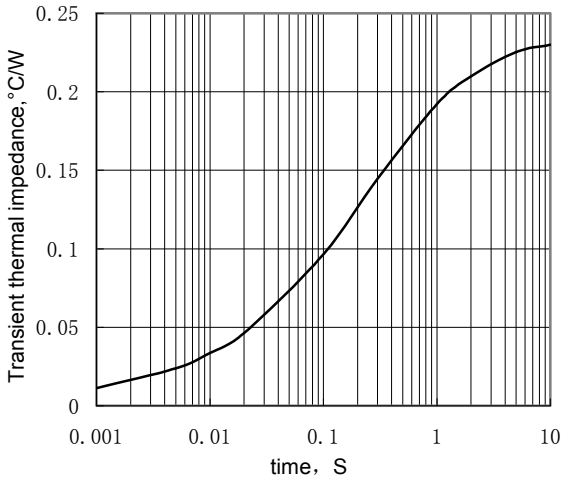


Fig.2

Max. Power Dissipation Vs.Mean forward Current

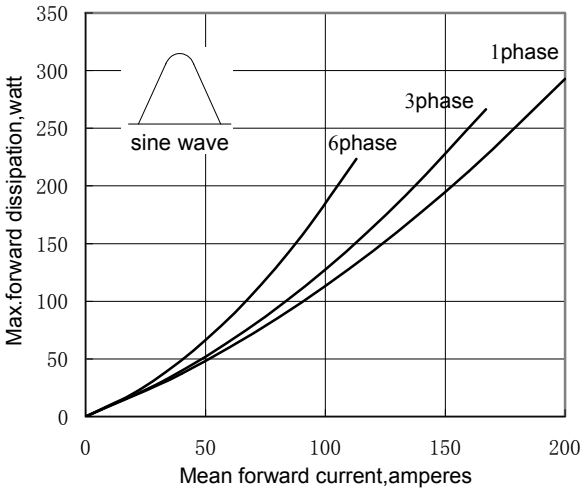


Fig.3

Max. case Temperature Vs.Mean forward Current

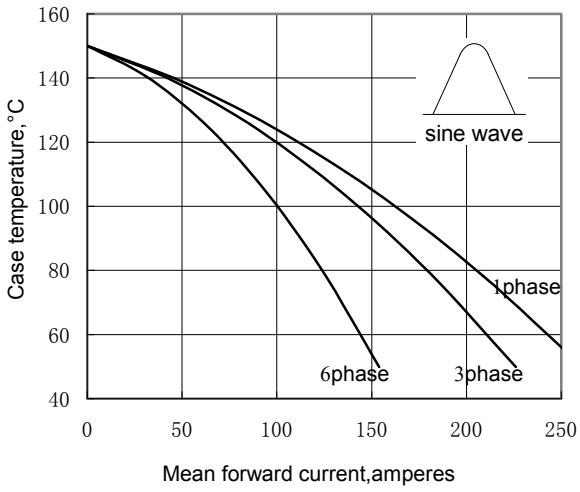


Fig.4

Max. Power Dissipation Vs.Mean forward Current

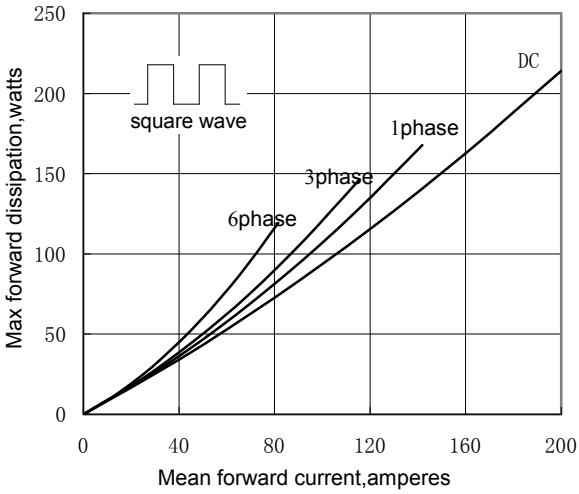


Fig.5

Max. case Temperature Vs.Mean forward Current

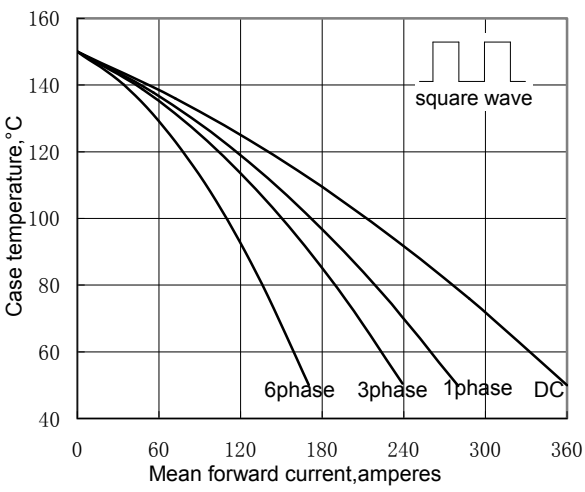


Fig.6

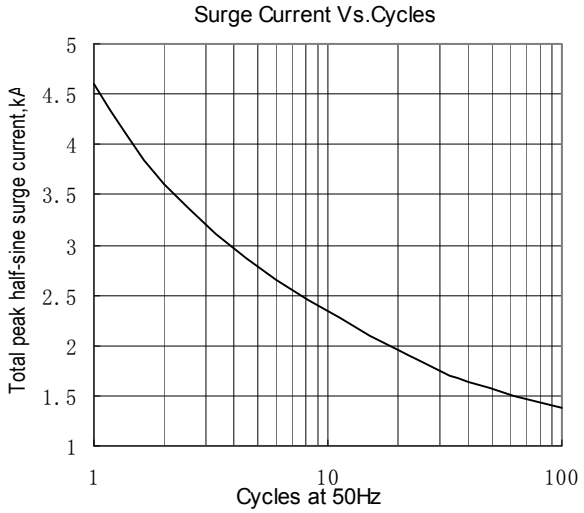


Fig.7

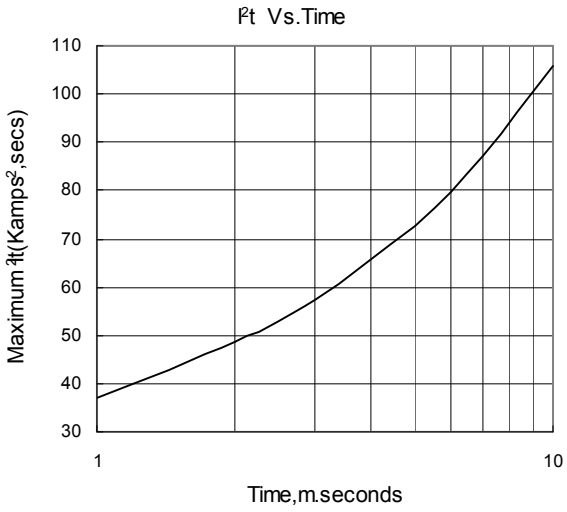
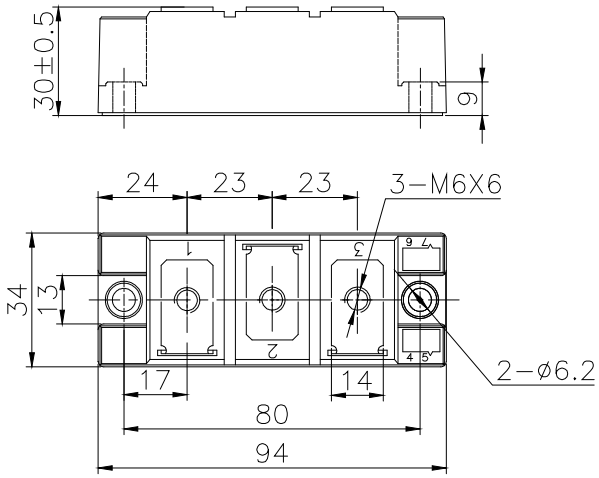


Fig.8

Outline:



M02H