

Features :

- Isolated mounting base 3000V~
- Pressure contact technology with Increased power cycling capability
- Space and weight saving

Typical Applications

- AC/DC Motor drives
- DC supply for PWM inverter

V_{RSM}	V_{RRM}	Type & Outline
900V	800V	Mx90D80
1100V	1000V	Mx90D100
1300V	1200V	Mx90D120
1500V	1400V	Mx90D140
1700V	1600V	Mx90D160
1900V	1800V	Mx90D180

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	$T_j(^{\circ}C)$	VALUE			UNIT
				Min	Type	Max	
$I_{F(AV)}$	Mean forward current	180° half sine wave 50Hz Single side cooled, $T_c=100^{\circ}C$	150			90	A
$I_{F(RMS)}$	RMS forward current		150			141	A
I_{RRM}	Repetitive peak current	at V_{RRM}	150			8	mA
I_{FSM}	Surge forward current	10ms half sine wave $V_R=0.6V_{RRM}$	150			2.3	kA
I^2t	I^2t for fusing coordination					26	$A^2s \cdot 10^3$
V_{FO}	Threshold voltage		150			0.80	V
r_F	Forward slope resistance					1.70	m Ω
V_{FM}	Peak forward voltage	$I_{FM}=270A$	25			1.38	V
$R_{th(j-c)}$	Thermal resistance Junction to case	At 180° sine: Single side cooled per chip				0.47	$^{\circ}C/W$
$R_{th(c-h)}$	Thermal resistance case to heatsink	At 180° sine: Single side cooled per chip				0.20	$^{\circ}C/W$
V_{iso}	Isolation voltage	50Hz, R.M.S, $t=1min, I_{iso}: 1mA(max)$		3000			V
F_m	Terminal connection torque(M5)				4		N-m
	Mounting torque(M6)				6		N-m
T_{vj}	Junction temperature			-40		150	$^{\circ}C$
T_{stg}	Stored temperature			-40		125	$^{\circ}C$
W_t	Weight				170		g
Outline	M01						

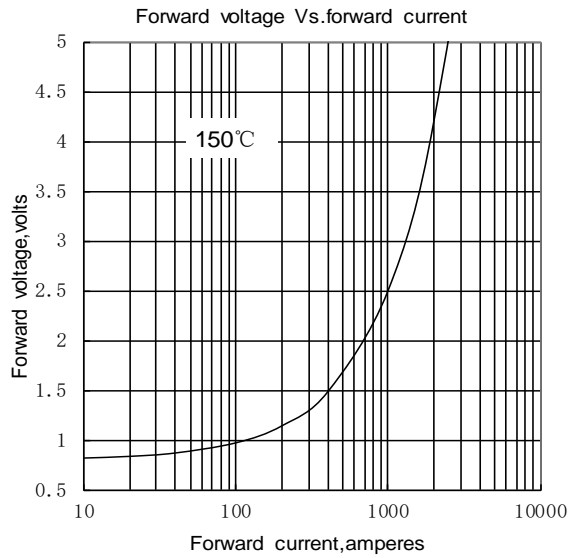


Fig.1

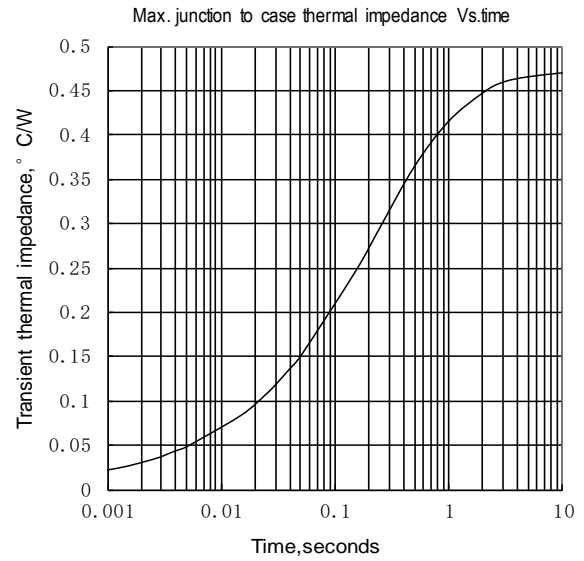


Fig.2

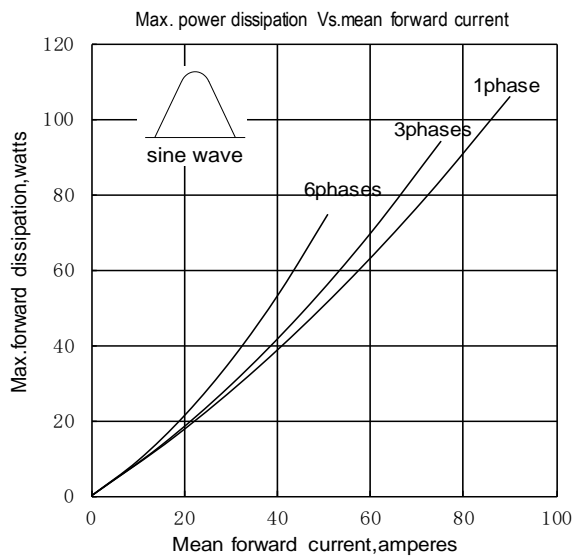


Fig.3

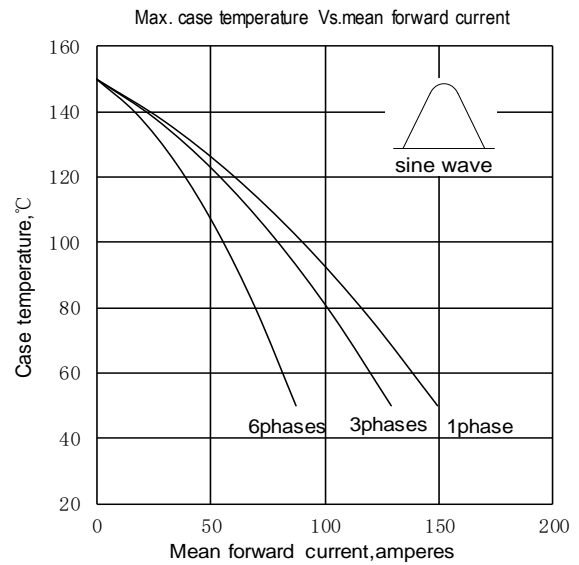


Fig.4

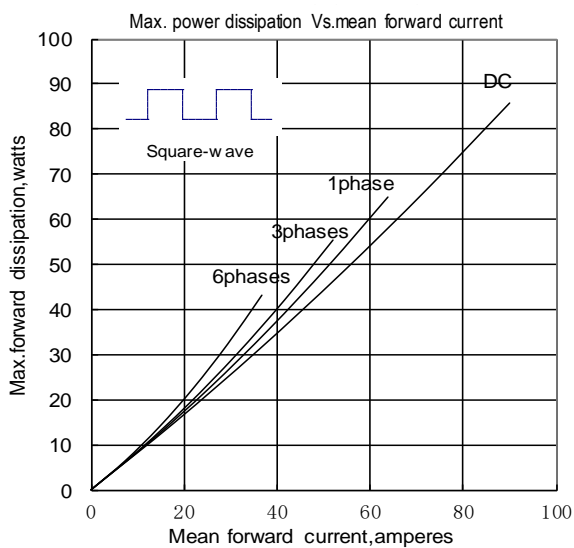


Fig.5

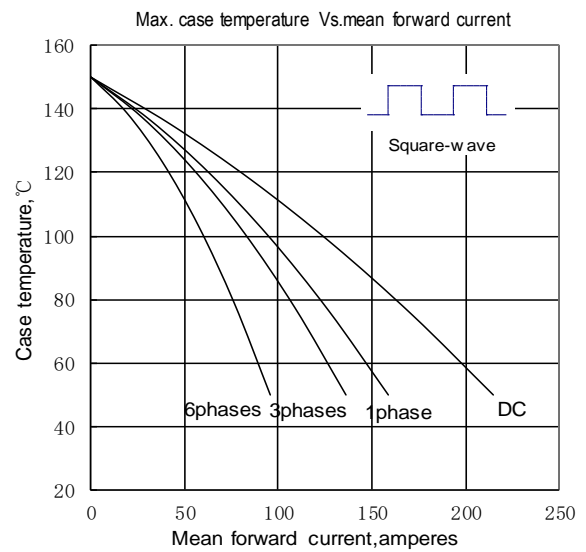


Fig.6

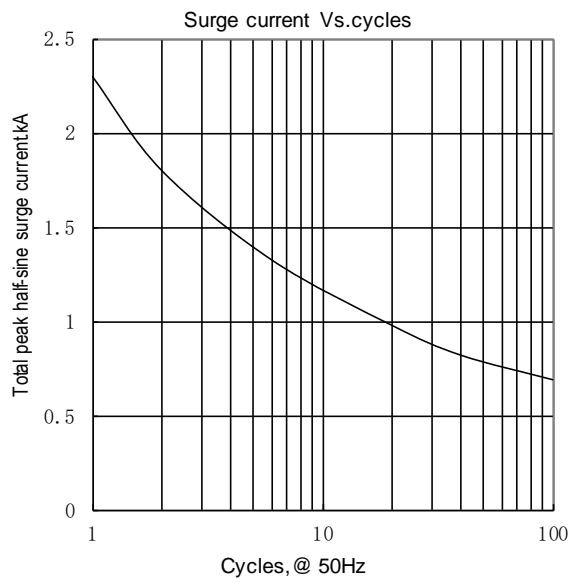


Fig.7

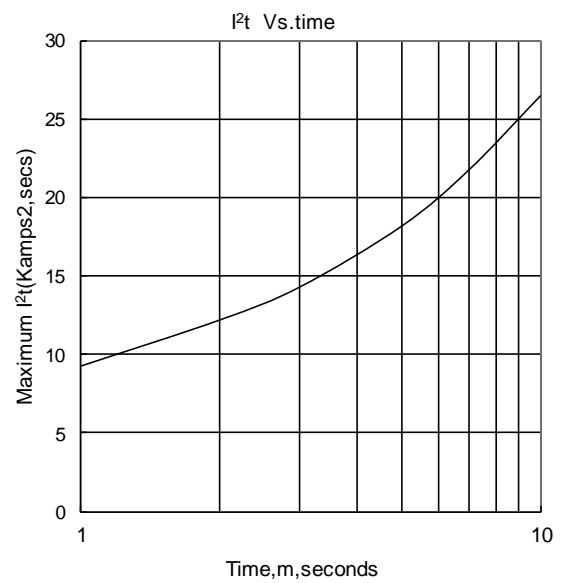
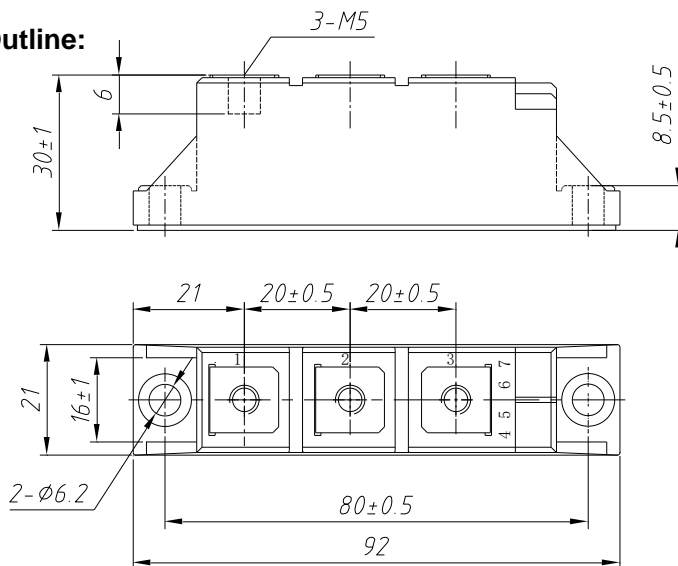
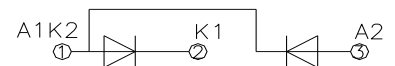


Fig.8

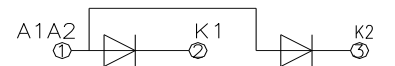
Outline:



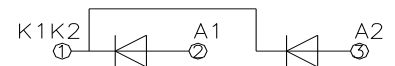
MD90D



MR90D



MC90D



MH90D

