

### Features :

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

### Typical Applications

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

$V_{RSM}$	$V_{RRM}$	Type & Outline
2100 V	2000 V	MDC500-20-416F3
2300 V	2200 V	MDC500-22-416F3
2600 V	2500 V	MDC500-25-416F3

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			500	A
$I_{F(RMS)}$	RMS forward current		150			785	A
$I_{RRM}$	Repetitive peak current	at $V_{RRM}$	150			40	mA
$I_{FSM}$	Surge forward current	10ms half sine wave	150			16.0	KA
$I^2t$	$I^2T$ for fusing coordination	$V_R=0.6V_{RRM}$				1280	$A^2s*10^3$
$V_{FO}$	Threshold voltage		150			0.85	V
$r_F$	Forward slop resistance					0.38	mΩ
$V_{FM}$	Peak forward voltage	$I_{FM}=1500A$	25			1.65	V
$R_{th(j-c)}$	Thermal resistance Junction to case	At 180° sine Single side cooled				0.075	$^{\circ}C/W$
$R_{th(c-h)}$	Thermal resistance case to heatsink	At 180° sine Single side cooled				0.04	$^{\circ}C/W$
$V_{iso}$	Isolation voltage	50Hz, R.M.S, t=1min, $I_{iso}:1mA(max)$		3000			V
$F_m$	Terminal connection torque(M10)				12		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				1487		g
Outline	416F3						

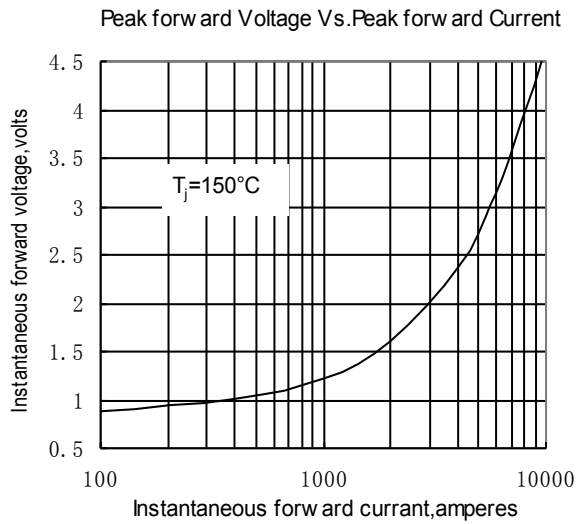


Fig.1

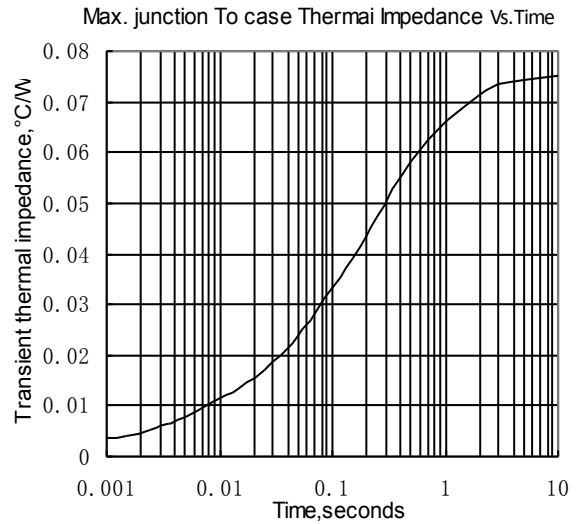


Fig.2

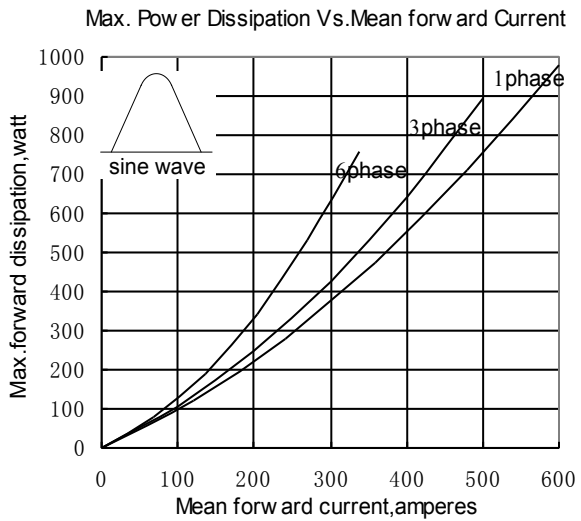


Fig.3

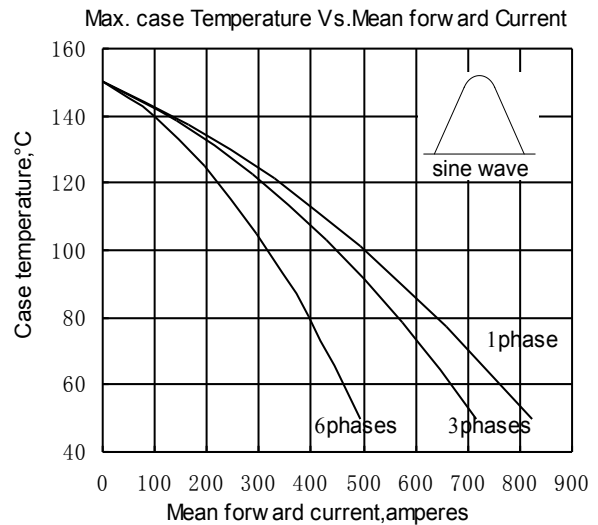


Fig.4

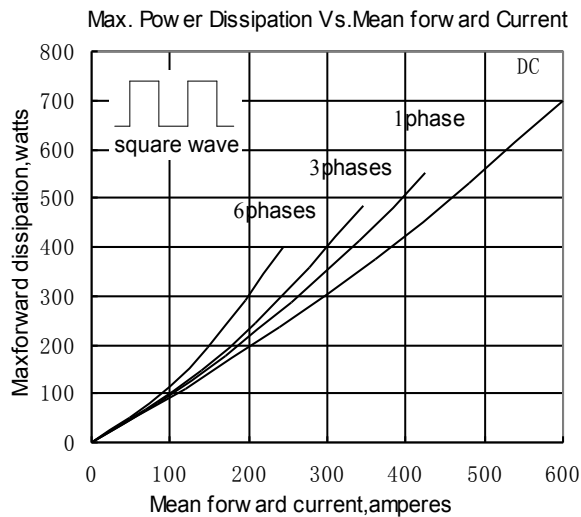


Fig.5

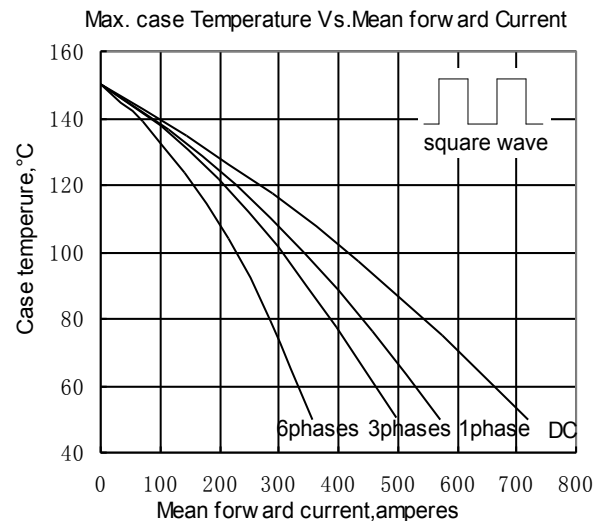


Fig.6

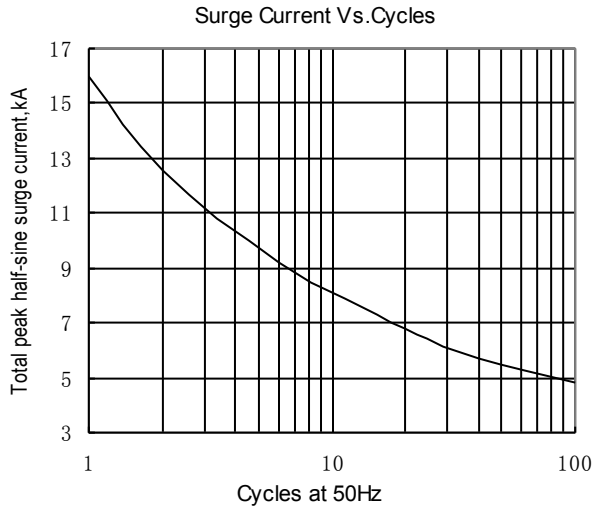


Fig.7

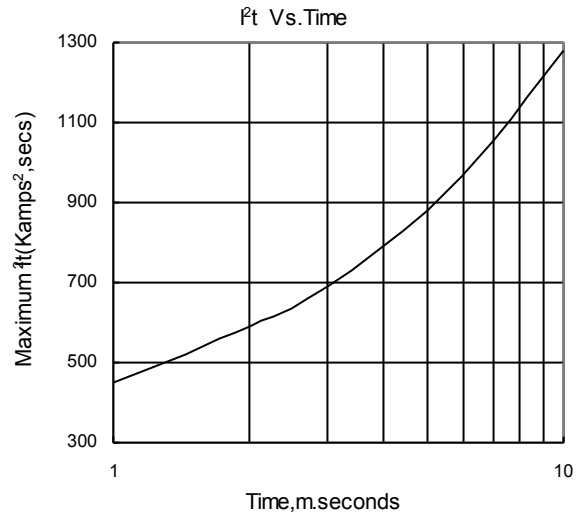
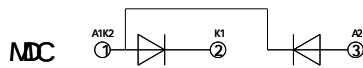
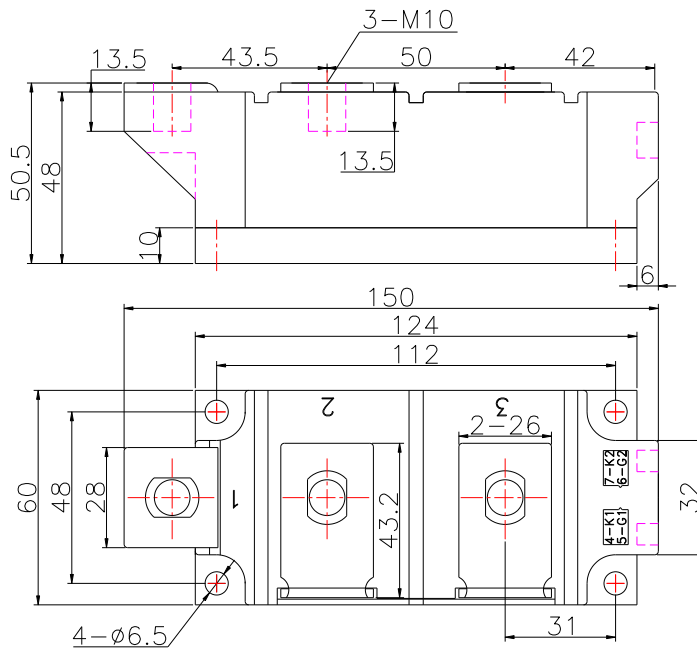


Fig.8

**Outline:**



**416F3**