

**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	MDx1200-08-412F3
1100V	1000V	MDx1200-10-412F3
1300V	1200V	MDx1200-12-412F3
1500V	1400V	MDx1200-14-412F3
1700V	1600V	MDx1200-16-412F3
1900V	1800V	MDx1200-18-412F3

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	$T_j(^{\circ}\text{C})$	VALUE			UNIT
				Min	Type	Max	
$I_{F(AV)}$	Mean forward current	180° half sine wave 50Hz Single side cooled, $T_c=100^{\circ}\text{C}$	150			1200	A
$I_{F(RMS)}$	RMS forward current		150			1884	A
I_{RRM}	Repetitive peak current	at V_{RRM}	150			50	mA
I_{FSM}	Surge forward current	10ms half sine wave $V_R=0.6V_{RRM}$	150			30	kA
I^2t	I^2t for fusing coordination					4500	$\text{A}^2\text{s}\cdot 10^3$
V_{FO}	Threshold voltage		150			0.71	V
r_F	Forward slope resistance					0.11	m Ω
V_{FM}	Peak forward voltage	$I_{FM}=3000\text{A}$	25			1.76	V
$R_{th(j-c)}$	Thermal resistance Junction to case	At 180° sine Single side cooled per chip				0.040	$^{\circ}\text{C}/\text{W}$
$R_{th(c-h)}$	Thermal resistance case to heat sink	At 180° sine Single side cooled per chip				0.020	$^{\circ}\text{C}/\text{W}$
V_{iso}	Isolation voltage	50Hz, R.M.S, $t=1\text{min}$, $I_{iso}:1\text{mA}(\text{max})$		2500			V
F_m	Terminal connection torque(M12)				14.0		N·m
	Mounting torque(M8)				12.0		N·m
T_{stg}	Stored temperature			-40		125	$^{\circ}\text{C}$
W_t	Weight				3660		g
Outline	412F3						

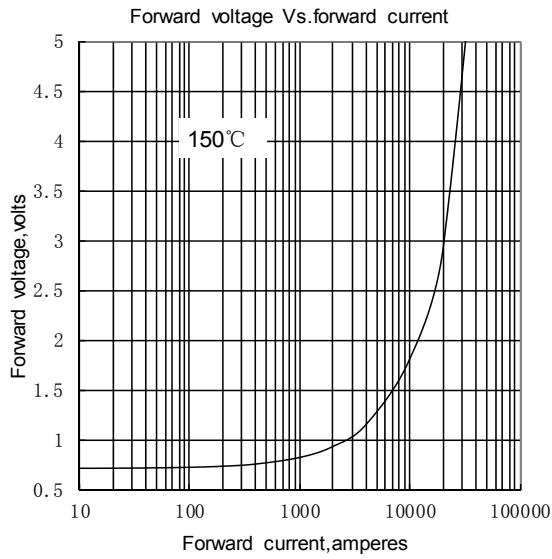


Fig.1

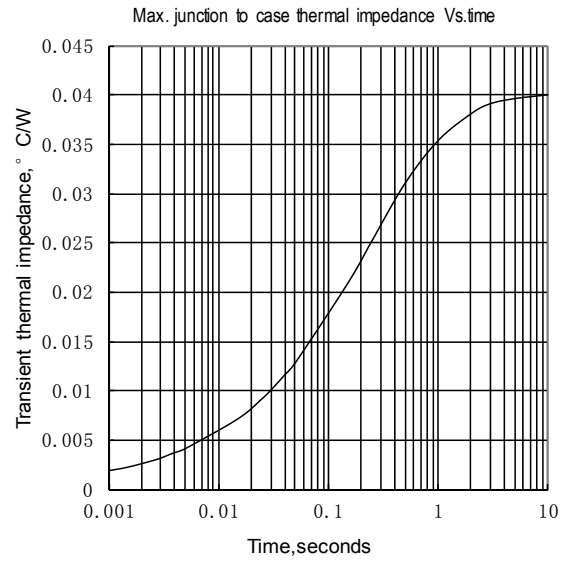


Fig.2

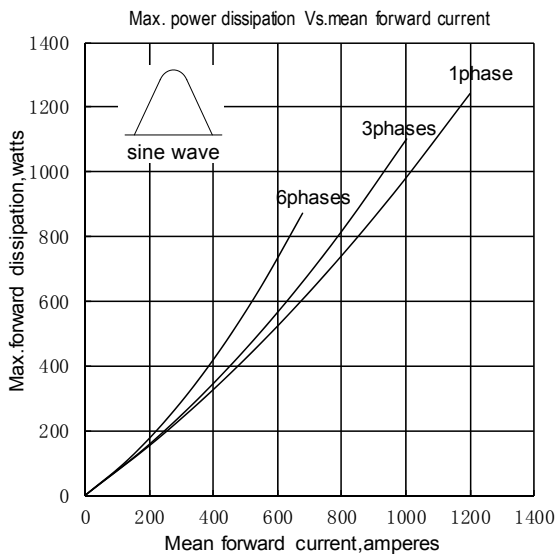


Fig.3

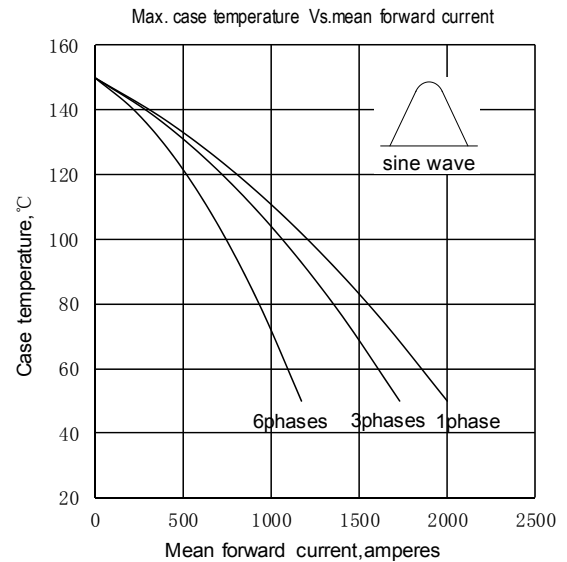


Fig.4

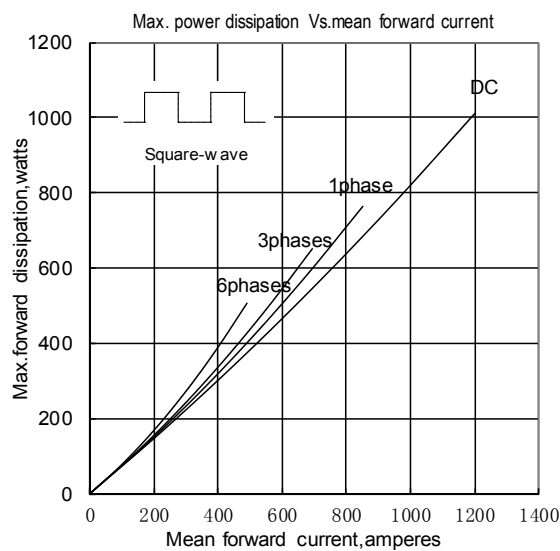


Fig.5

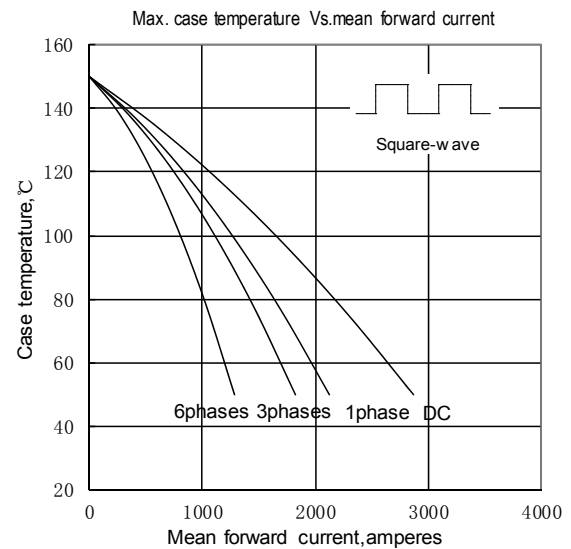


Fig.6

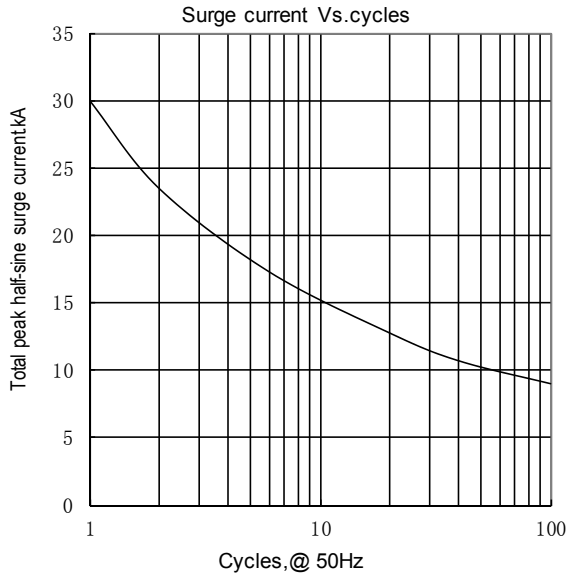


Fig.7

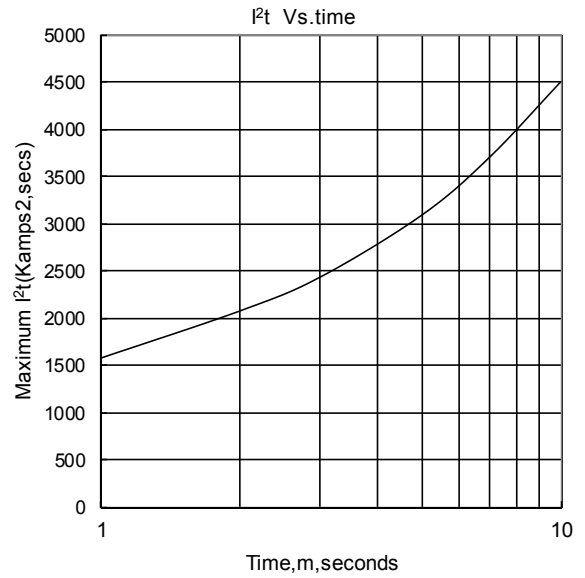


Fig.8

Outline:

