**Features:**

- n Non-isolated. Mounting base as common anode cathode terminal.
- n Pressure contact technology with Increased power cycling capability
- n Low forward voltage drop

Typical Applications:

- n Welding Power Supply
- n Various Dc power supplies

V_{RRM}	Type & Outline	
2000V	MD300-20-407F2NA	MD300-20-407F2NK
2200V	MD300-22-407F2NA	MD300-22-407F2NK
2500V	MD300-25-407F2NA	MD300-25-407F2NK

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			300	A
$I_{F(RMS)}$	RMS forward current					471	A
I_{RRM}	Repetitive peak current	at V_{RRM}	150			15	mA
I_{FSM}	Surge forward current	$V_R=60\%V_{RRM}$, $t=10\text{ms}$ half sine	150			9.2	kA
I^2t	I^2t for fusing coordination					432	$10^3\text{A}^2\text{s}$
V_{FO}	Threshold voltage		150			0.77	V
r_F	Forward slope resistance					0.60	$\text{m}\Omega$
V_{FM}	Peak forward voltage	$I_{FM}=900\text{A}$	25			1.57	V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled per chip				0.13	$^{\circ}\text{C}/\text{W}$
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled per chip				0.04	$^{\circ}\text{C}/\text{W}$
F_m	Terminal connection torque(M10)			10		12	N·m
	Mounting torque(M6)			4.5		6.0	N·m
T_{vj}	Junction temperature			-40		150	$^{\circ}\text{C}$
T_{stg}	Stored temperature			-40		125	$^{\circ}\text{C}$
W_t	Weight				330		g
Outline	407F2NA, 407F2NK						

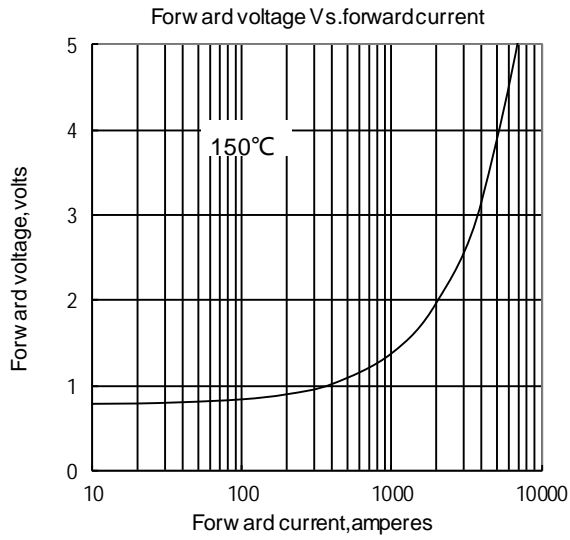


Fig.1

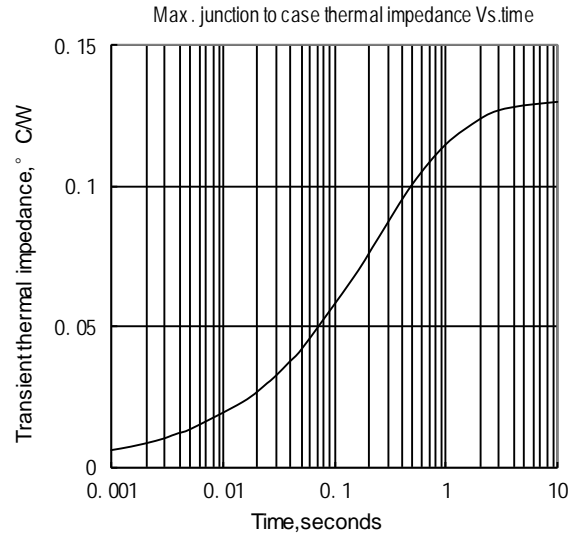


Fig.2

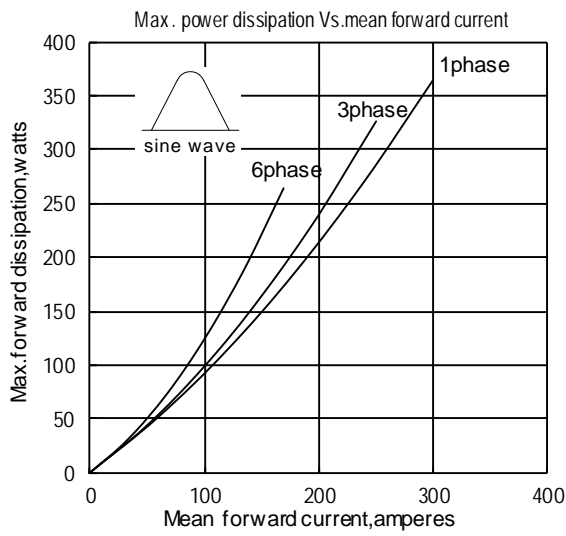


Fig.3

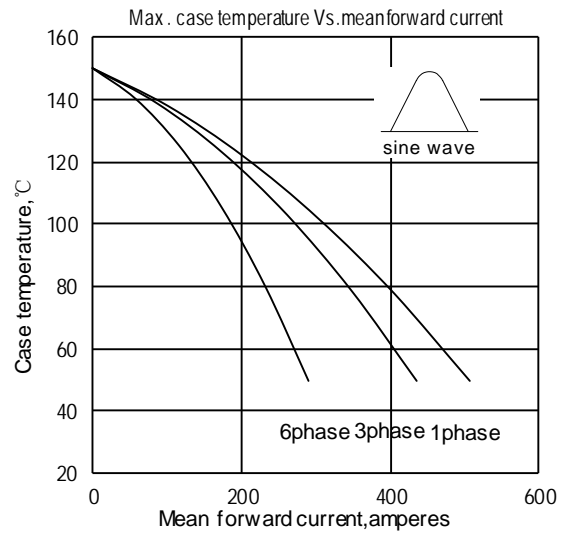


Fig.4

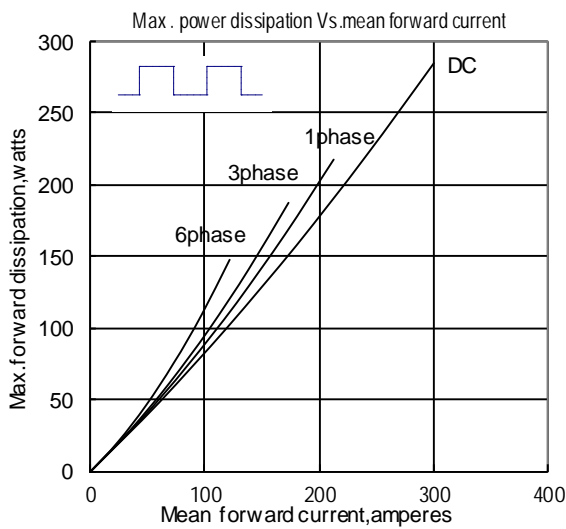


Fig.5

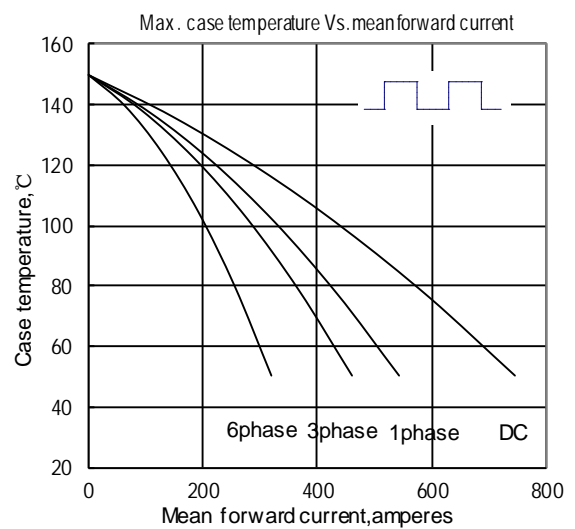


Fig.6

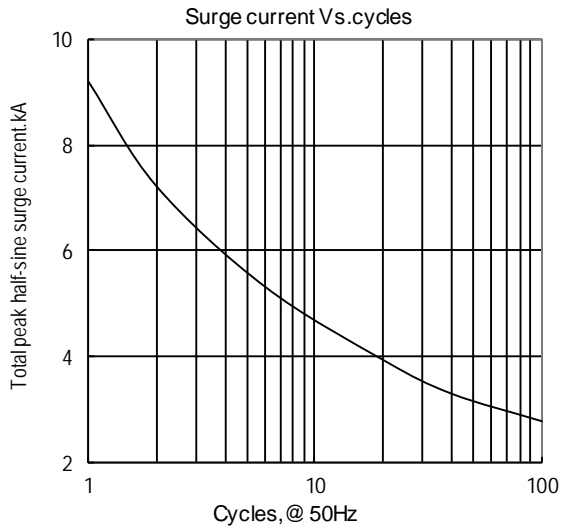


Fig.7

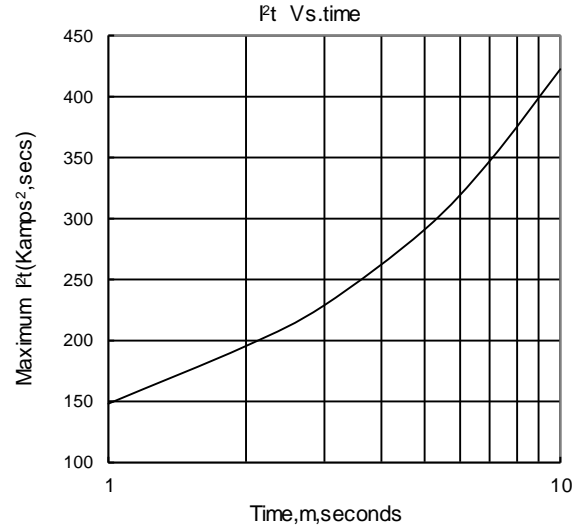
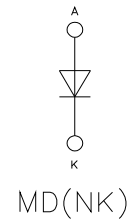
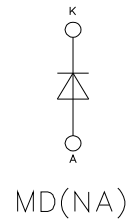
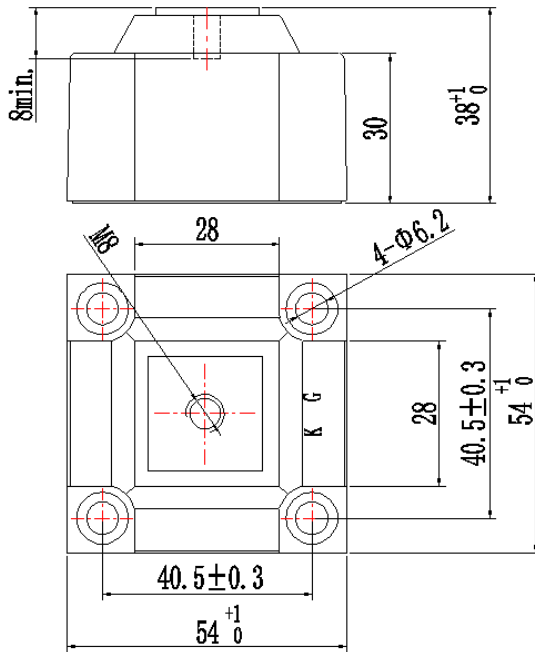


Fig.8

Outline:



Unmarked dimensional tolerance: ±0.5mm

TECHSEM reserves the right to change specifications without notice.