

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 (°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			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=10ms half sine	150			9.2	kA
I ² t	I ² t for fusing coordination					432	10 ³ A ² s
V _{FO}	Threshold voltage		150			0.77	V
r _F	Forward slope resistance					0.60	mΩ
V _{FM}	Peak forward voltage	I _{FM} =900A	25			1.57	V
R _{th(j-c)}	Thermal resistance Junction to case	Single side cooled per chip				0.13	°C/W
R _{th(c-h)}	Thermal resistance case to heatsink	Single side cooled per chip				0.04	°C/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	°C
T _{stg}	Stored temperature			-40		125	°C
W _t	Weight				330		g
Outline	407F2NA, 407F2NK						

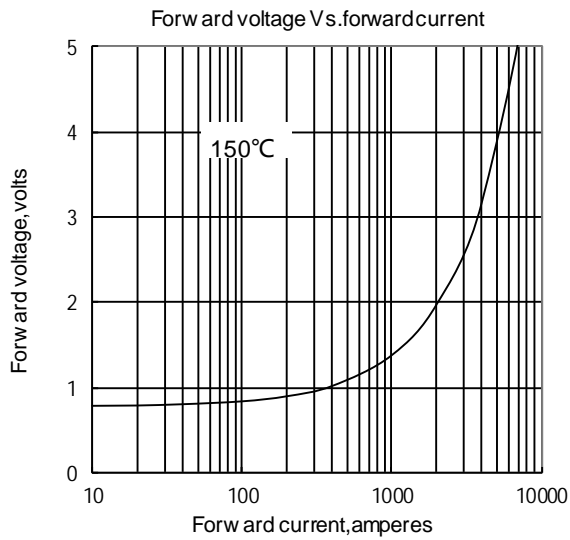


Fig.1

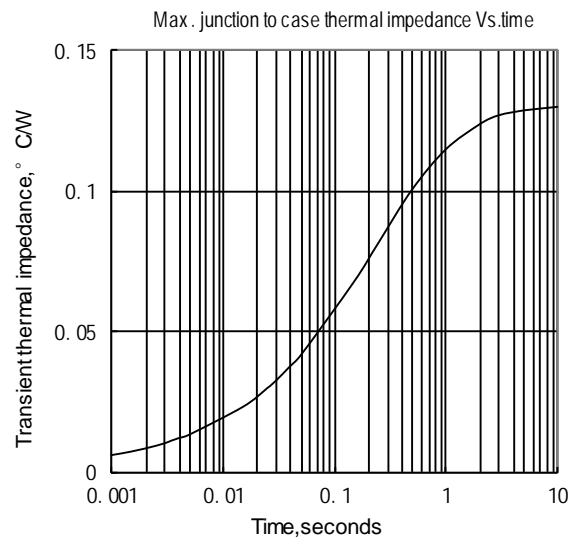


Fig.2

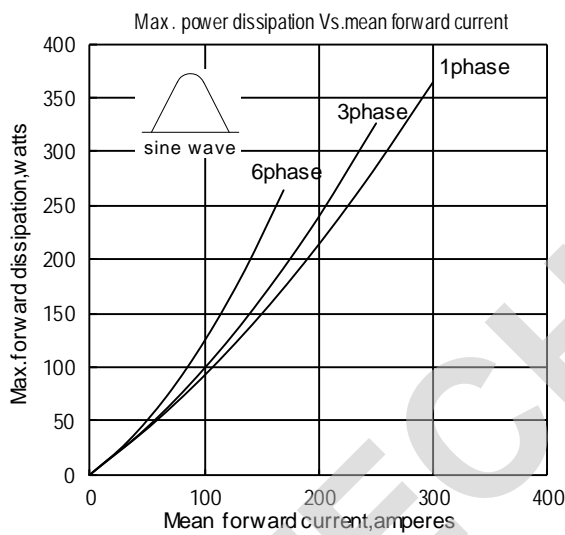


Fig.3

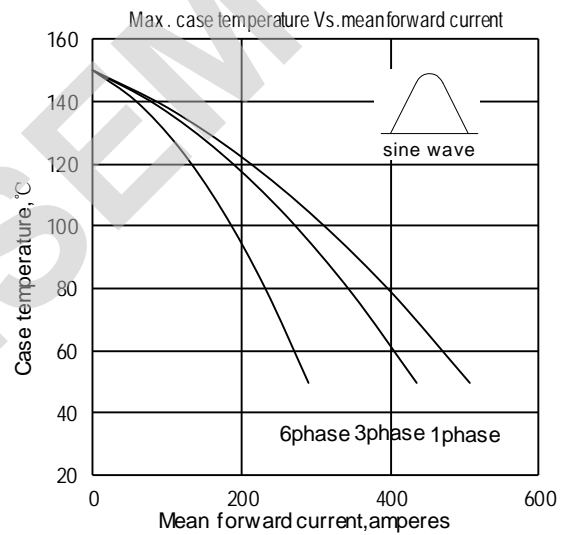


Fig.4

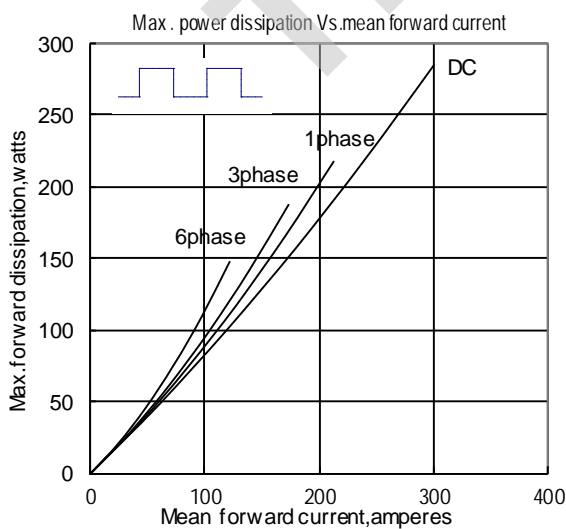


Fig.5

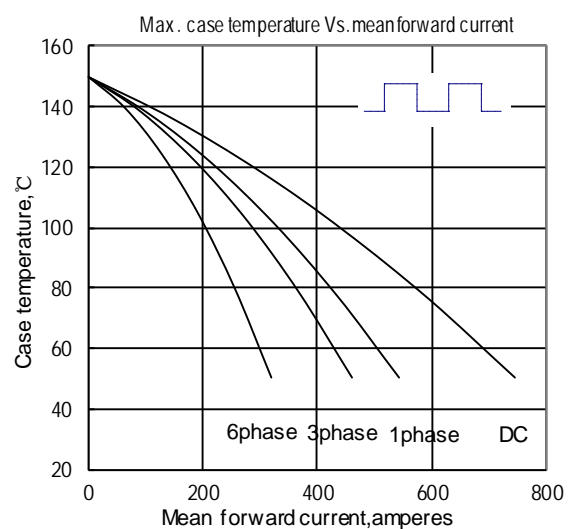


Fig.6

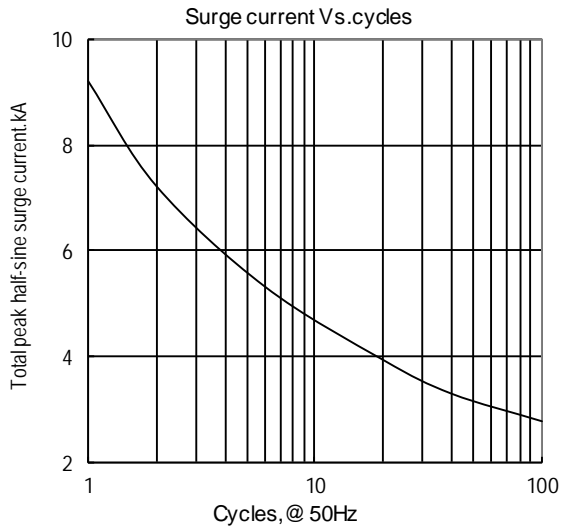


Fig.7

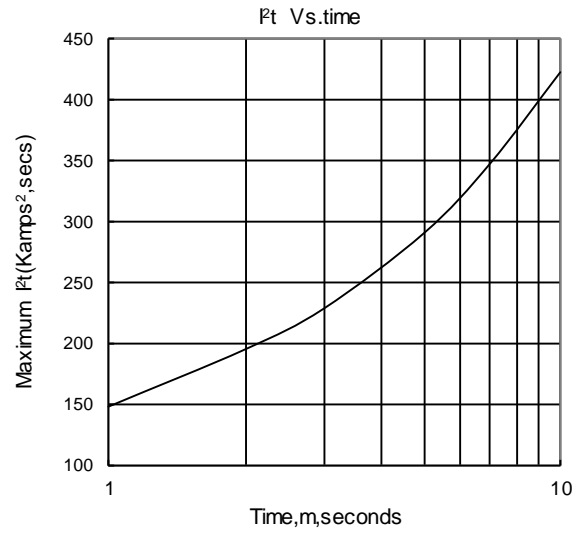
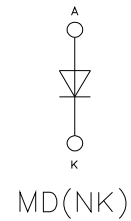
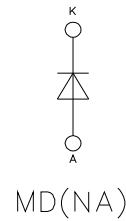
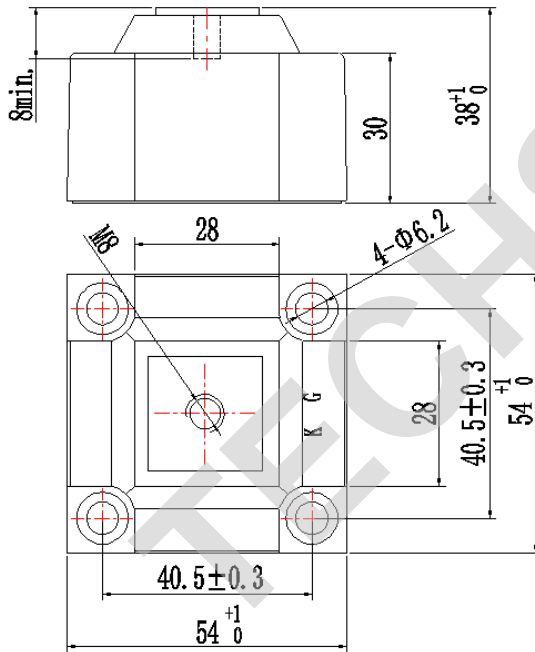


Fig.8

Outline:



Unmarked dimensional tolerance: $\pm 0.5\text{mm}$

TECHSEM reserves the right to change specifications without notice.