

### Features:

- Isolated mounting base 2500V~
- Pressure contact technology with  
Increased power cycling capability
- Space and weight savings

### Typical Applications

- Inverter
- Inductive heating
- Chopper

$I_{F(AV)}$	<b>200 A</b>
$V_{RRM}$	<b>600~1600 V</b>
$I_{FSM}$	<b>5.50 A × 10<sup>3</sup></b>
$I^2t$	<b>151 A<sup>2</sup> S × 10<sup>3</sup></b>



SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T <sub>J</sub> (°C)	VALUE			UNIT
				Min	Type	Max	
$I_{F(AV)}$	Mean forward current	180° half sine wave 50Hz Single side cooled, T <sub>C</sub> =100°C	140			200	
$I_F (RMS)$	RMS forward current		140			314	
$V_{RRM}$	Repetitive peak reverse voltage	$V_{RRM}$ tp=10ms $V_{RSM} = V_{RRM} + 100V$	140	600		1600	V
$I_{RRM}$	Repetitive peak current	at $V_{RRM}$	140			40	mA
$I_{FSM}$	Surge forward current	10ms half sine wave	140			5.5	KA
$I^2t$	$I^2T$ for fusing coordination	$V_R = 0.6V_{RRM}$					151
$V_{FO}$	Threshold voltage		140			0.85	V
$r_F$	Forward slop resistance						0.92
$V_{FM}$	Peak forward voltage	$I_{FM} = 600A$	25			1.58	V
$t_{rr}$	Reverse recovery time	$I_{FM} = 200A, tp = 1000\mu s,$ $-di/dt = 20A/\mu s,$ $V_R = 50V$	140		3.0		μs
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled				0.150	°C /W
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled				0.04	°C /W
$F_m$	Terminal connection torque(M8)				12		N·m
	Mounting torque(M6)				6		N·m
$T_{stg}$	Stored temperature			-40		125	°C
$W_t$	Weight				860		g
Outline	413F3						

Peak forward Voltage Vs. Peak forward Current

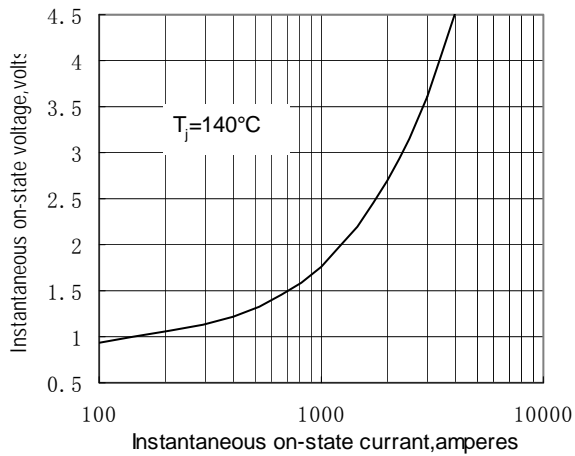


Fig.1

Max. junction To case Thermal Impedance Vs. Time

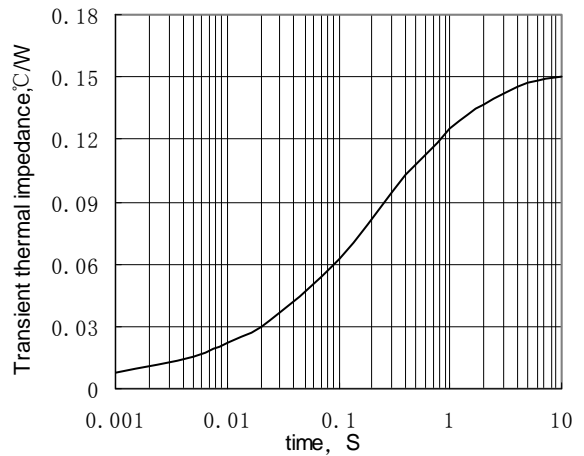


Fig.2

Surge Current Vs. Cycles

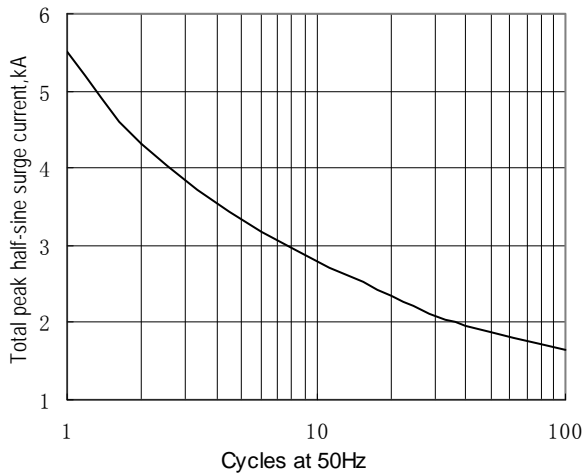


Fig.3

Pt Vs. Time

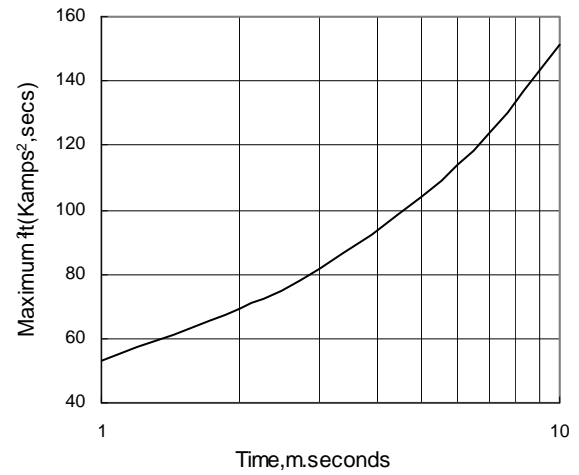
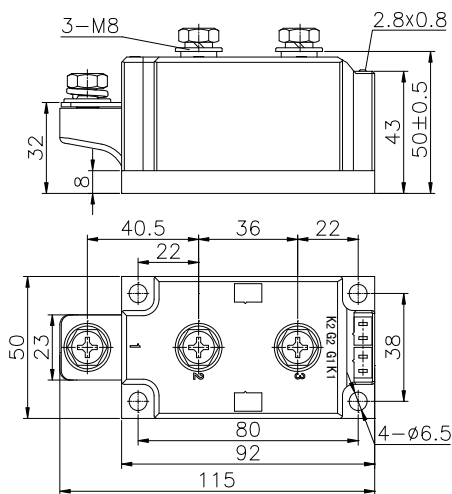


Fig.4

**Outline:**



**413F3**

