

Features:

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

Typical Applications

- Inverter
- Inductive heating
- Chopper

$I_{F(AV)}$ **300 A**
 V_{RRM} **600~1600 V**
 I_{FSM} **8.3 A × 10³**
 I^2t **344 A² S × 10³**



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	140			300	A
I _{F(RMS)}	RMS forward current		140			471	A
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			70	mA
I _{FSM}	Surge forward current	10ms half sine wave	140			8.30	KA
I ² t	I ² T for fusing coordination	V _R =0.6V _{RRM}					344
V _{FO}	Threshold voltage		140			0.85	V
r _F	Forward slop resistance						0.58
V _{FM}	Peak forward voltage	I _{FM} =900A	25			1.55	V
t _{rr}	Reverse recovery time	I _{FM} =300A, tp=1000μs, -di/dt=20A/μs, V _R =50V	140		4.0		μs
R _{th(j-c)}	Thermal resistance Junction to case	Single side cooled				0.100	°C /W
R _{th(c-h)}	Thermal resistance case to heatsink	Single side cooled				0.04	°C /W
F _m	Terminal connection torque(M10)				12		N·m
	Mounting torque(M6)				6		N·m
T _{stg}	Stored temperature			-40		125	°C
W _t	Weight				1350		g
Outline	415F3						

Peak forward Voltage Vs. Peak forward Current

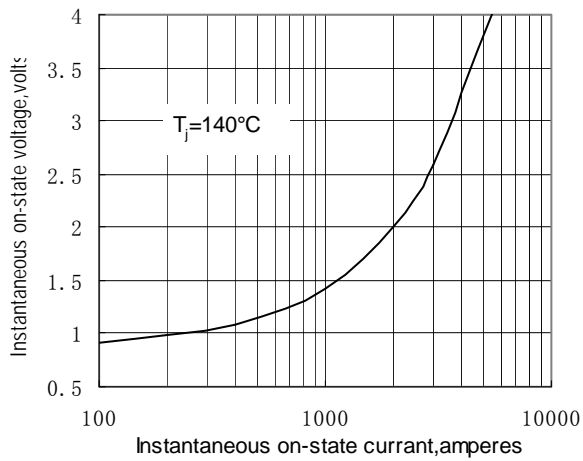


Fig.1

Max. junction To case Thermal Impedance Vs. Time

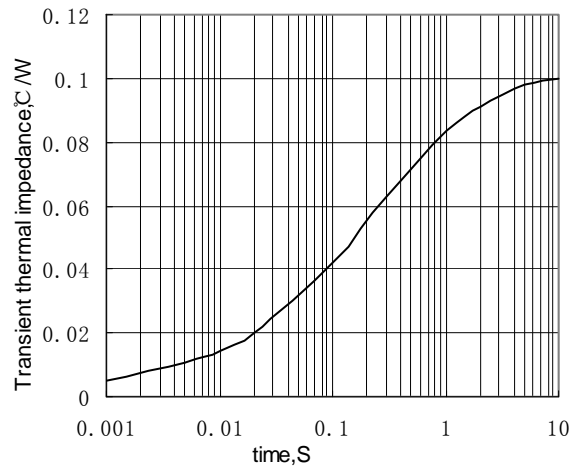


Fig.2

Surge Current Vs. Cycles

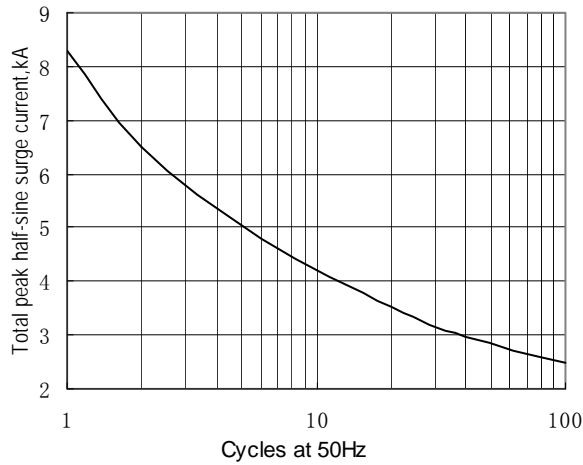


Fig.3

Pt Vs. Time

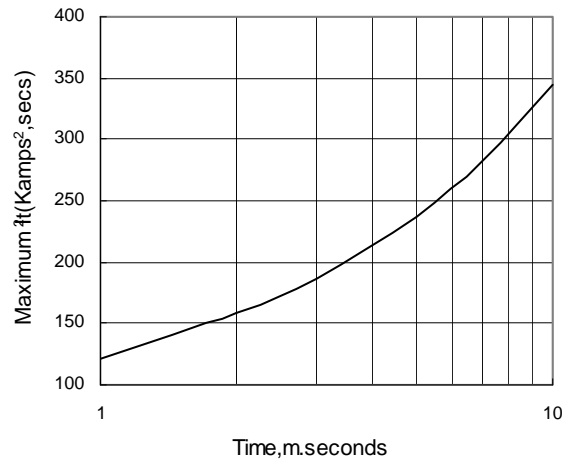
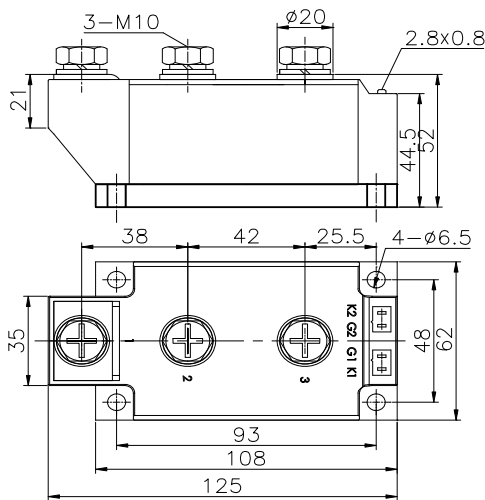


Fig.4

Outline:



415F3

