

**Features:**

- Isolated mounting base 3000V~
- Pressure contact technology with increased power cycling capability
- Space and weight saving

**Typical Applications**

- Inverter
- Inductive heating
- Chopper

V <sub>RSM</sub>	V <sub>RRM</sub>	Type & Outline
700V	600V	MZx300-06-415F3
900V	800V	MZx300-08-415F3
1100V	1000V	MZx300-10-415F3
1300V	1200V	MZx300-12-415F3
1500V	1400V	MZx300-14-415F3
1700V	1600V	MZx300-16-415F3
1900V	1800V	MZx300-18-415F3

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T <sub>j</sub> (°C)	VALUE			UNIT
				Min	Type	Max	
I <sub>F(AV)</sub>	Mean forward current	180° half sine wave 50Hz Single side cooled, T <sub>c</sub> =100°C	140			300	A
I <sub>F(RMS)</sub>	RMS forward current					471	A
I <sub>RRM</sub>	Repetitive peak current	at V <sub>RRM</sub>	140			70	mA
I <sub>FSM</sub>	Surge forward current	10ms half sine wave V <sub>R</sub> =0.6V <sub>RRM</sub>	140			8.30	kA
I <sup>2</sup> t	I <sup>2</sup> t for fusing coordination					344	A <sup>2</sup> s*10 <sup>3</sup>
V <sub>FO</sub>	Threshold voltage		140			0.85	V
r <sub>F</sub>	Forward slope resistance					0.58	mΩ
V <sub>FM</sub>	Peak forward voltage	I <sub>FM</sub> =900A	25			1.55	V
t <sub>rr</sub>	Reverse recovery time	I <sub>FM</sub> =300A, tp=1000μs, -di/dt=20A/μs, V <sub>R</sub> =50V	140		4.0		μs
R <sub>th(j-c)</sub>	Thermal resistance Junction to case	Single side cooled per chip				0.100	°C /W
R <sub>th(c-h)</sub>	Thermal resistance case to heatsink	Single side cooled per chip				0.040	°C /W
V <sub>iso</sub>	Isolation voltage	50Hz, R.M.S, t=1min, I <sub>iso</sub> :1mA(MAX)		3000			V
F <sub>m</sub>	Terminal connection torque(M10)				12.0		N·m
	Mounting torque(M6)				6.0		N·m
T <sub>vj</sub>	Junction temperature			-40		140	°C
T <sub>stg</sub>	Stored temperature			-40		125	°C
W <sub>t</sub>	Weight				1275		g
Outline	415F3						

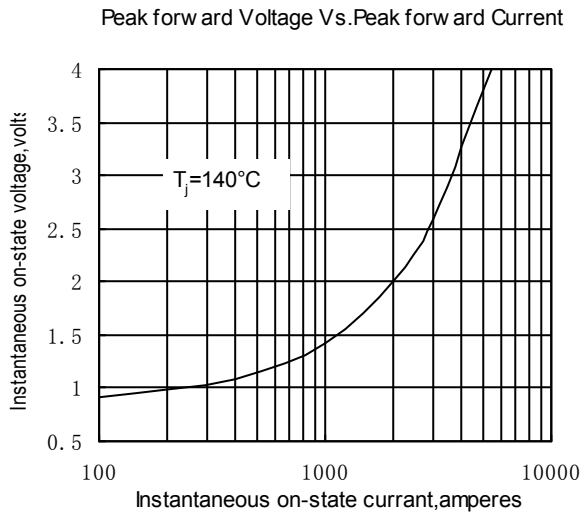


Fig.1

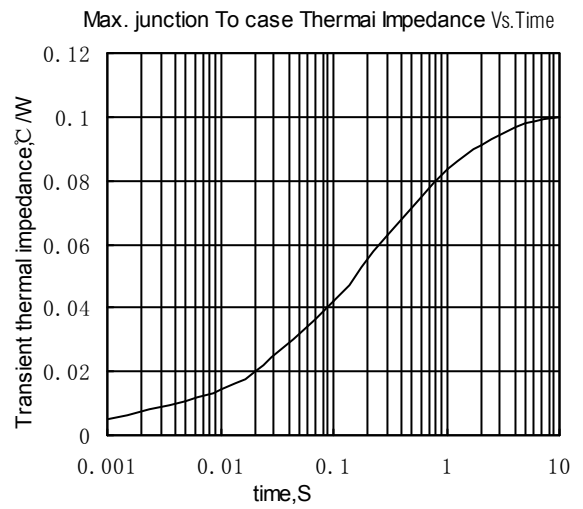


Fig.2

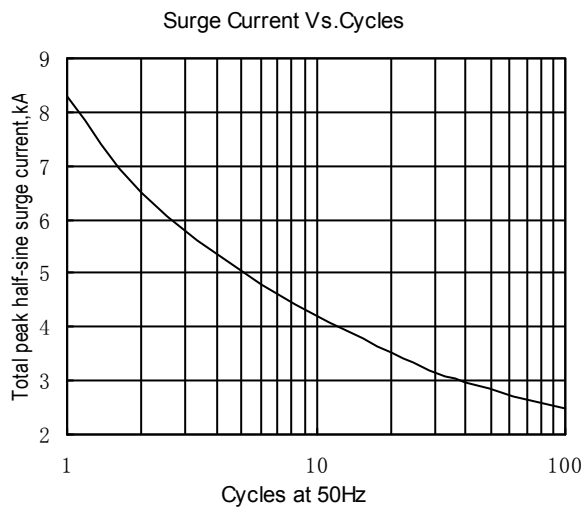


Fig.3

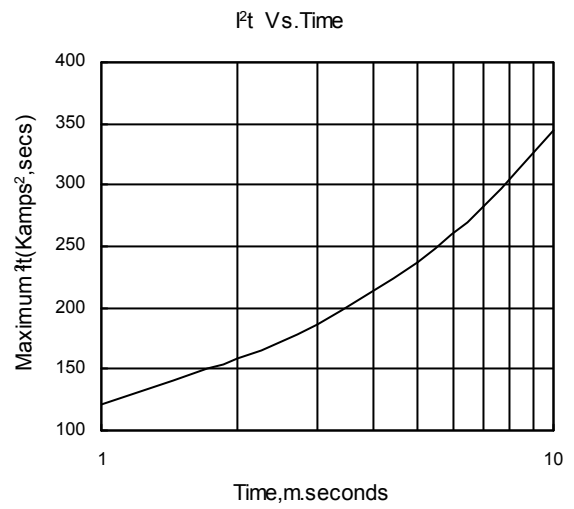


Fig.4

Outline:

