

**Features:**

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

**Typical Applications**

- n Inverter
- n Inductive heating
- n Chopper

V <sub>RRM</sub>	Type & Outline
800V	MZx400-08-410F3
1000V	MZx400-10-410F3
1200V	MZx400-12-410F3
1400V	MZx400-14-410F3
1600V	MZx400-16-410F3
1800V	MZx400-18-410F3
1800V	MZ400-18-410F3G

MZx stands for any type of **MZC, MZA, MZK**

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> =85°C	140			400	A
I <sub>F(RMS)</sub>	RMS forward current					628	A
I <sub>RRM</sub>	Repetitive peak current	at V <sub>RRM</sub>	140			90	mA
I <sub>FSM</sub>	Surge forward current	10ms half sine wave V <sub>R</sub> =0.6V <sub>RRM</sub>	140			9.5	kA
I <sup>2</sup> t	I <sup>2</sup> t for fusing coordination					451	10 <sup>3</sup> A <sup>2</sup> s
V <sub>FO</sub>	Threshold voltage		140			1.10	V
r <sub>F</sub>	Forward slope resistance					0.27	mW
V <sub>FM</sub>	Peak forward voltage	I <sub>FM</sub> =1200A	25			2.00	V
t <sub>rr</sub>	Reverse recovery time	I <sub>FM</sub> =300A, tp=4000µs, -di/dt=20A/µs, V <sub>R</sub> =50V	140		5		µs
			25		4		µs
R <sub>th(j-c)</sub>	Thermal resistance Junction to case	Single side cooled per chip				0.090	°C /W
R <sub>th(c-h)</sub>	Thermal resistance case to heatsink	Single side cooled per chip				0.020	°C /W
V <sub>iso</sub>	Isolation voltage	50Hz, R.M.S, t=1min, I <sub>iso</sub> :1mA(MAX)		2500			V
F <sub>m</sub>	Terminal connection torque(M12)			12.0		14.0	N·m
	Mounting torque(M8)			10.0		12.0	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				3240		g
Outline	410F3						

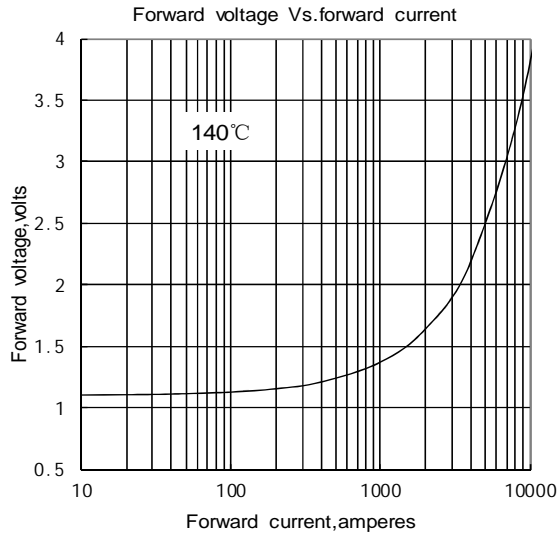


Fig.1

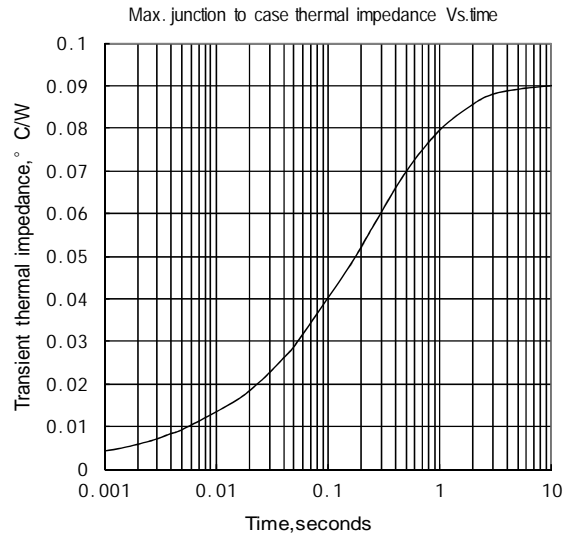


Fig.2

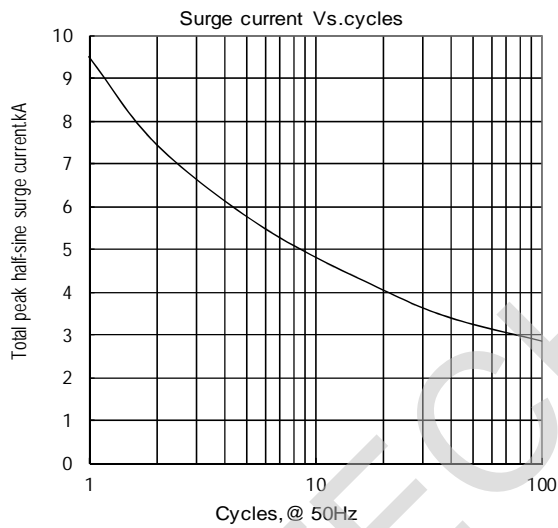


Fig.3

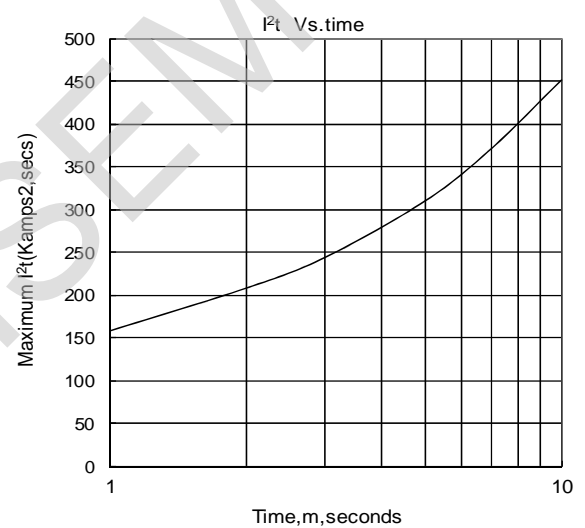
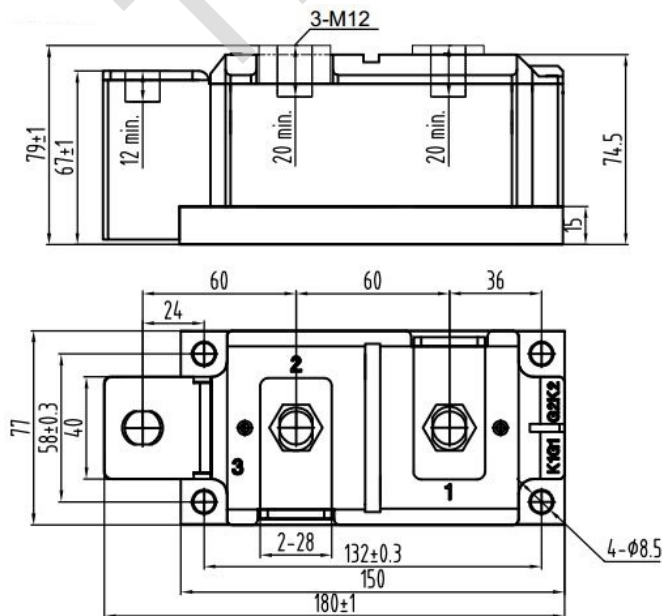
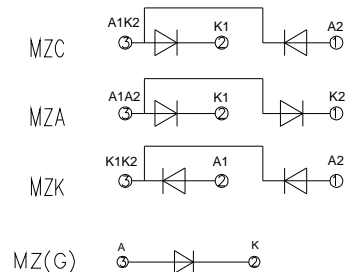


Fig.4

Outline:



Unmarked dimensional tolerance: ±0.5mm



TECHSEM reserves the right to change specifications without notice.