

**Features:**

- n Isolated mounting base 3000V~
- 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>R</sub> RM	Type & Outline
600V	MZx300-06-415F3
800V	MZx300-08-415F3
1000V	MZx300-10-415F3
1200V	MZx300-12-415F3
1400V	MZx300-14-415F3
1600V	MZx300-16-415F3
1800V	MZx300-18-415F3
1800V	MZ300-18-415F3G

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			300	A
I <sub>F(RMS)</sub>	RMS forward current					471	A
I <sub>R</sub> RM	Repetitive peak current	at V <sub>R</sub> RM	140			70	mA
I <sub>F</sub> SM	Surge forward current	10ms half sine wave V <sub>R</sub> =0.6V <sub>R</sub> RM	140			8.30	kA
I <sup>2</sup> t	I <sup>2</sup> t for fusing coordination					344	10 <sup>3</sup> A <sup>2</sup> s
V <sub>FO</sub>	Threshold voltage		140			0.95	V
r <sub>F</sub>	Forward slope resistance					0.48	m
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=4000µs, -di/dt=20A/µs, V <sub>R</sub> =50V	140		4		µs
			25		3		µs
R <sub>th(j-c)</sub>	Thermal resistance Junction to case	Single side cooled per chip				0.120	°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)			10.0		12.0	N·m
	Mounting torque(M6)			4.5		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				1260		g
Outline	415F3						

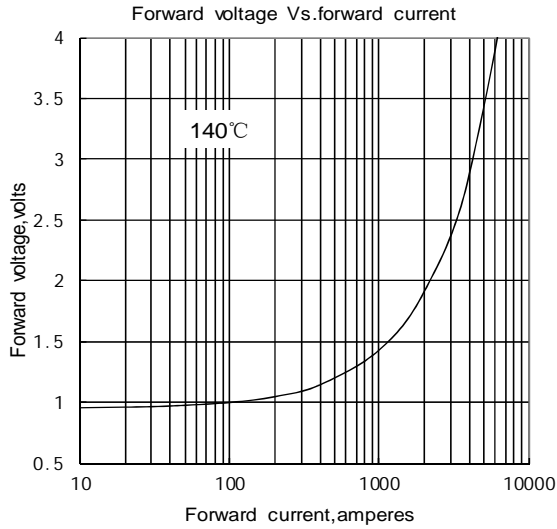


Fig.1

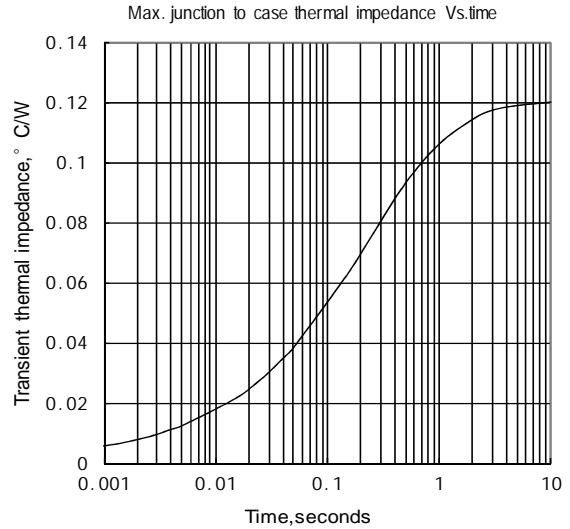


Fig.2

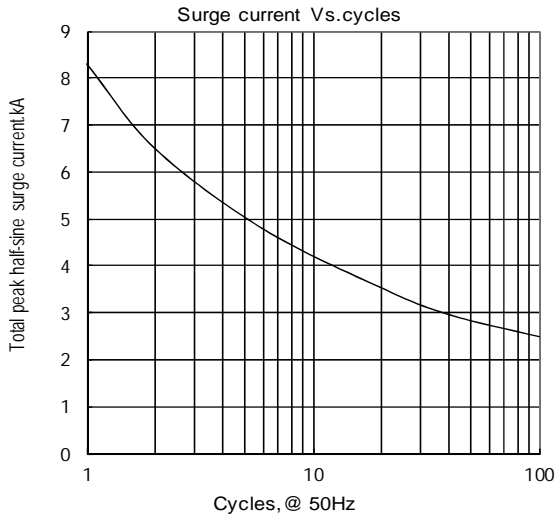


Fig.3

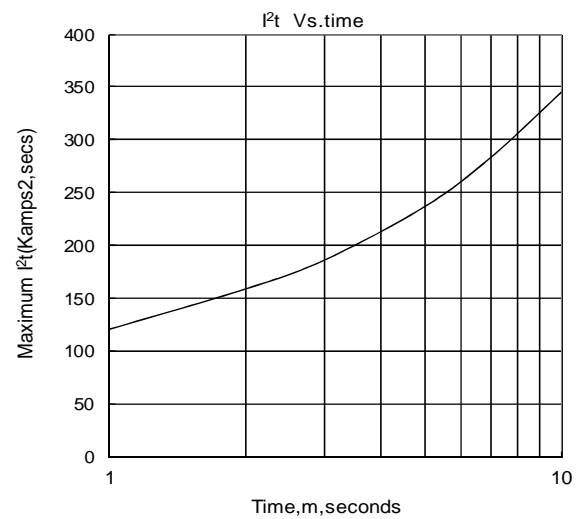
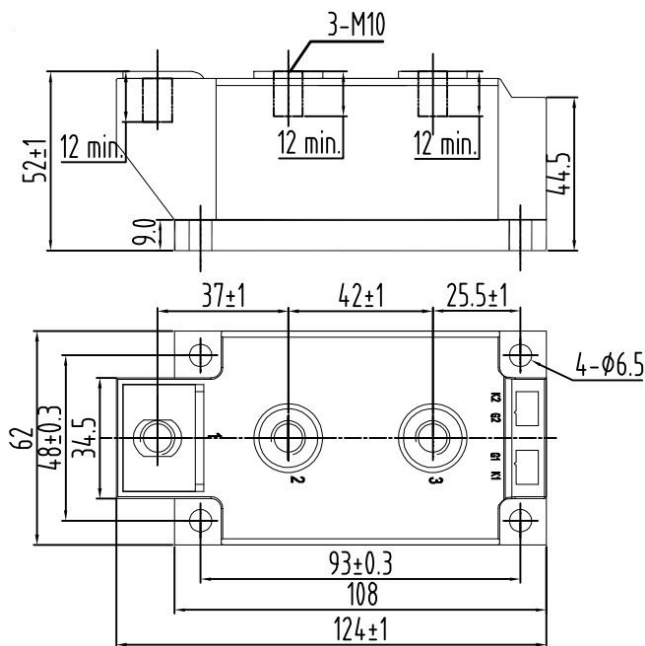
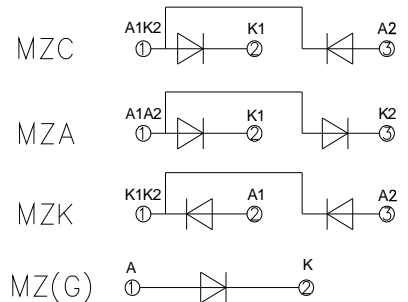


Fig.4

Outline:



Unmarked dimensional tolerance: ±0.5mm



TECHSEM reserves the right to change specifications without notice.