**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_{RRM}	Type & Outline
800V	MZ300-08-417F2
1000V	MZ300-10-417F2
1200V	MZ300-12-417F2
1400V	MZ300-14-417F2
1600V	MZ300-16-417F2
1800V	MZ300-18-417F2

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	$T_j(^{\circ}\text{C})$	VALUE			UNIT
				Min	Type	Max	
$I_{F(AV)}$	Mean forward current	180° half sine wave 50Hz Single side cooled, $T_C=85^{\circ}\text{C}$	140			300	A
$I_{F(RMS)}$	RMS forward current					471	A
I_{RRM}	Repetitive peak current	at V_{RRM}	140			70	mA
I_{FSM}	Surge forward current	10ms half sine wave $V_R=0.6V_{RRM}$	140			8.30	kA
I^2t	I^2t for fusing coordination					344	$10^3\text{A}^2\text{s}$
V_{FO}	Threshold voltage		140			1.10	V
r_F	Forward slope resistance					0.40	mW
V_{FM}	Peak forward voltage	$I_{FM}=900\text{A}$	25			1.60	V
t_{rr}	Reverse recovery time	$I_{FM}=300\text{A}, t_p=4000\mu\text{s},$ $-di/dt=20\text{A}/\mu\text{s}, V_R=50\text{V}$	140		4		μs
			25		3		μs
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled per chip				0.120	$^{\circ}\text{C}/\text{W}$
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled per chip				0.040	$^{\circ}\text{C}/\text{W}$
V_{iso}	Isolation voltage	50Hz, R.M.S, $t=1\text{min}, I_{iso}:1\text{mA}(\text{MAX})$		2500			V
F_m	Terminal connection torque(M10)			10.0		12.0	N·m
	Mounting torque(M6)			4.5		6.0	N·m
T_{vj}	Junction temperature			-40		140	$^{\circ}\text{C}$
T_{stg}	Stored temperature			-40		125	$^{\circ}\text{C}$
W_t	Weight				770		g
Outline	417F2						

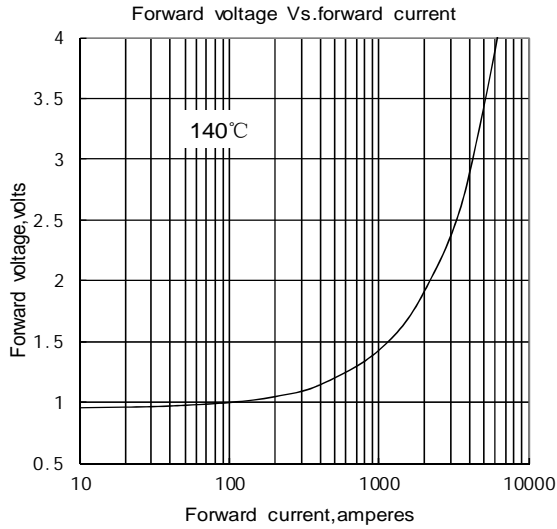


Fig.1

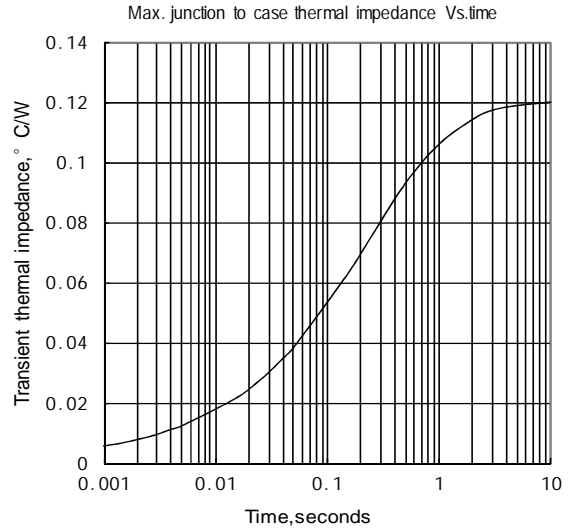


Fig.2

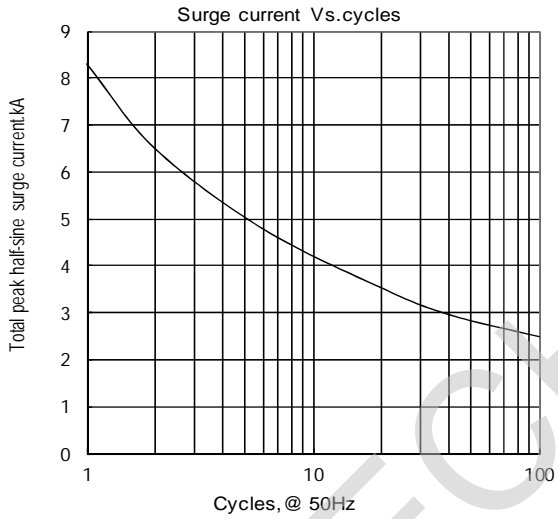


Fig.3

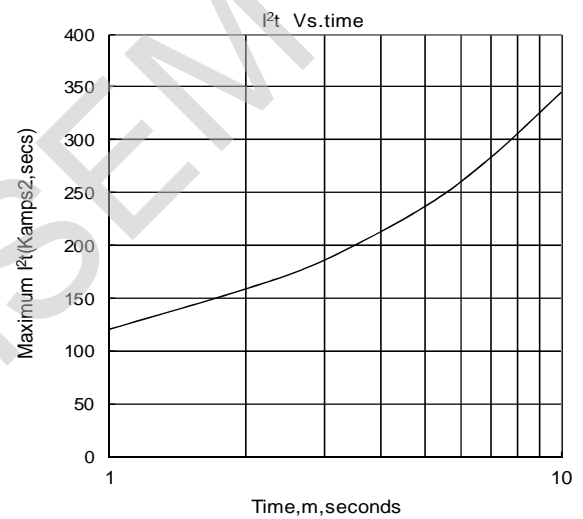
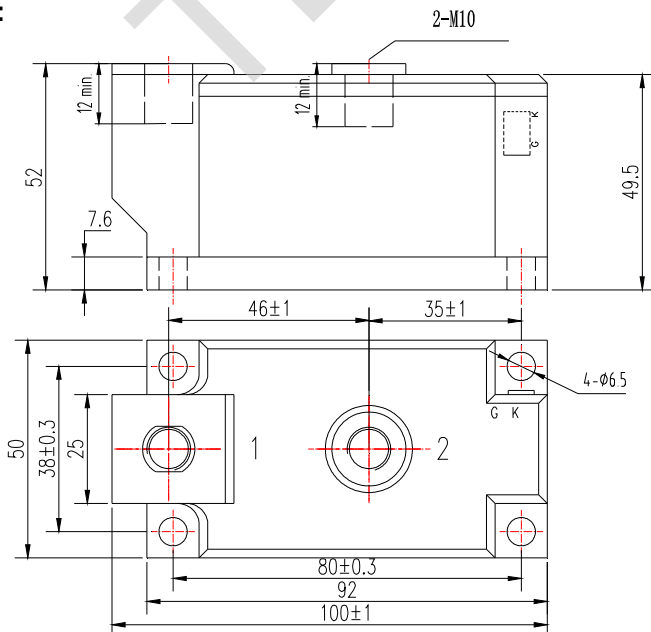


Fig.4

Outline:



MZ



Unmarked dimensional tolerance: ±0.5mm