HUAJING

HMD130A PV diode module

Feature

- The chips are electrically insulated from bottom plate,2500V AC voltage
- Complete pressure connection structure,with excellent temperature Characteristics and power cycling capacity
- Forced air cooling for modules below 400A and air cooling or water Cooling for modules above 500A

$I_{F(AV)}$	130A
V_{RRM}	500-2500V
I_{FSM}	2.6 KA

Typical application

- DC power supplies of appliances and devices
- AC ang DC motor control,Soft starting for motors
- Various rectifying power supply
- Electric welders,Frequency transformers,Battery charging and discharging

SYMBOL	CHARCTERISTIC	TEST CONDITIONS	T_J (℃)	VALUE		UNIT
				Min	Max	
$I_{F(AV)}$	Mean forward current	180° half sine wawe，50HZ Single heat sink，T_C=98℃	150		130	A
$I_{T(RMS)}$	RMS current		150		173	A
V_{RRM}	Repettive peak reverse voltage	V_{DRM}&V_{RRM} tp=10ms V_{DSM}&V_{RSM}=V_{DRM}&$V_{RRM+200}$	150	500	2500	V
I_{RRM}	Repetitive peak current	V_{RM}=0V_{RRM}	150		8	mA
I_{FSM}	Surge on-state current	10ms half sine wave V_R=0.6V_{RRM}	150		2.6	KA
I^2t	I^2t for fusing coordination				34.4	$A^{2S*}10$
V_{TO}	Threshold voltage		150		0.80	V
r_T	On-state slop resistance				1.74	mΩ
V_{FM}	Peak on-state voltage	I_{TM}=330A	25		1.45	V
$R_{th(j-c)}$	Thermal impedance node to the shell	180 ° sine wave, single heat sink			0.350	℃/W
$R_{th(c-h)}$	Thermal impedance (shell to powder)	180 ° sine wave, single heat sink			0.15	℃/W
V_{iso}	Insulantion voltage			2500		V
F_M	Mounting force（M5)				4	N-m
	Mounting force（M6)				6	N-m
T_{stq}	Stored temperature			-40	125	℃
W_t	Weight					g
Outline						

Peak forward Voltage Vs.Peak forward Current

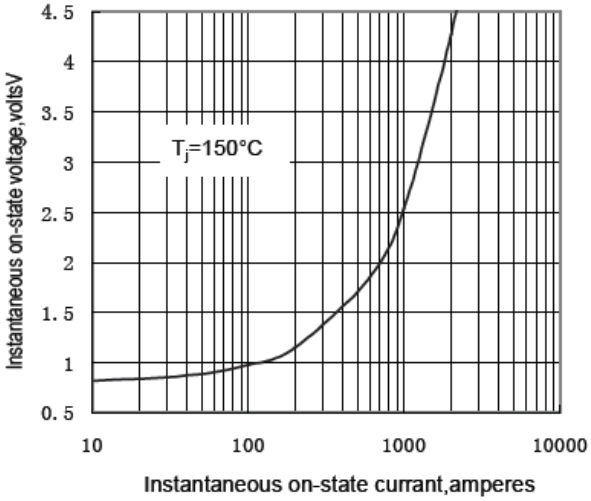


Fig.1

Max. junction To case Thermal Impedance Vs.Time

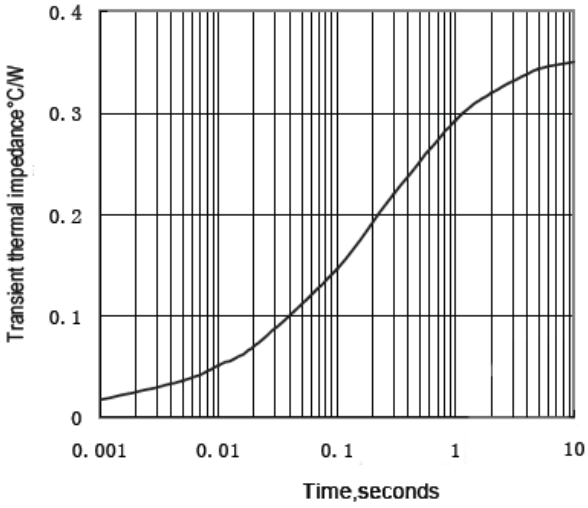


Fig.2

Max. Power Dissipation Vs.Mean forward Current

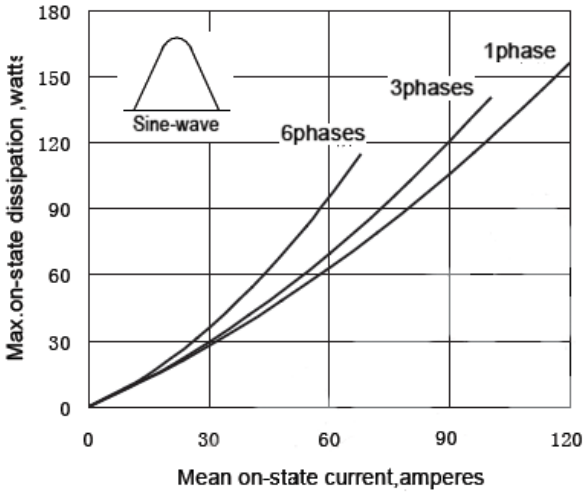


Fig.3

Max. heatsink Temperature Vs.Mean On-state Current

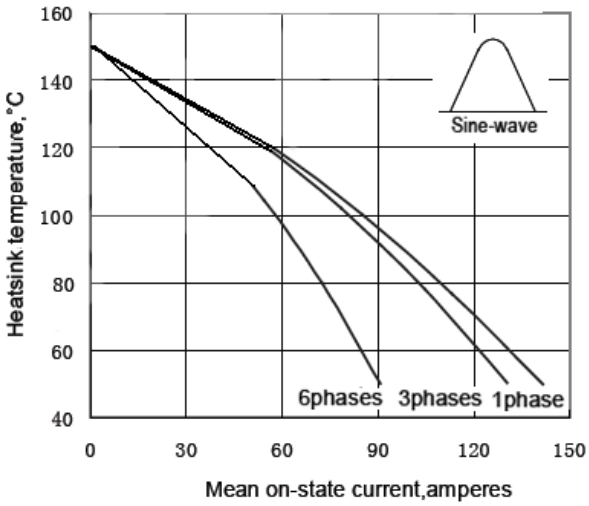


Fig.4

Max. Power Dissipation Vs.Mean On-state Current

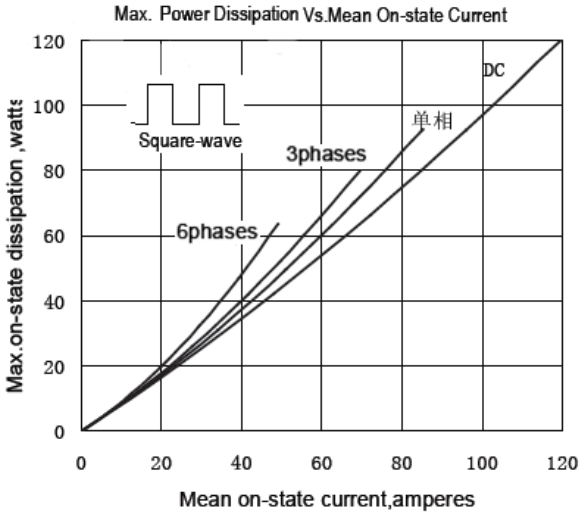


Fig.5

Max. case Temperature Vs.Mean forward Current

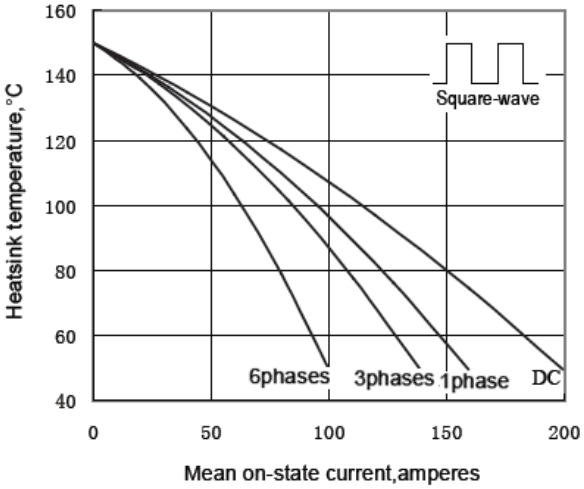


Fig.6

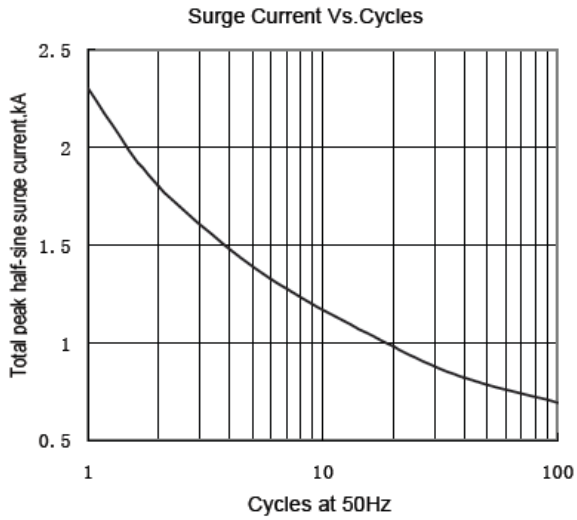


Fig.7

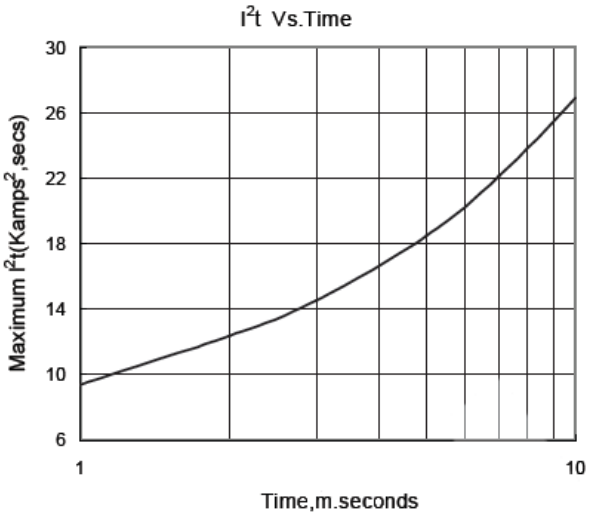
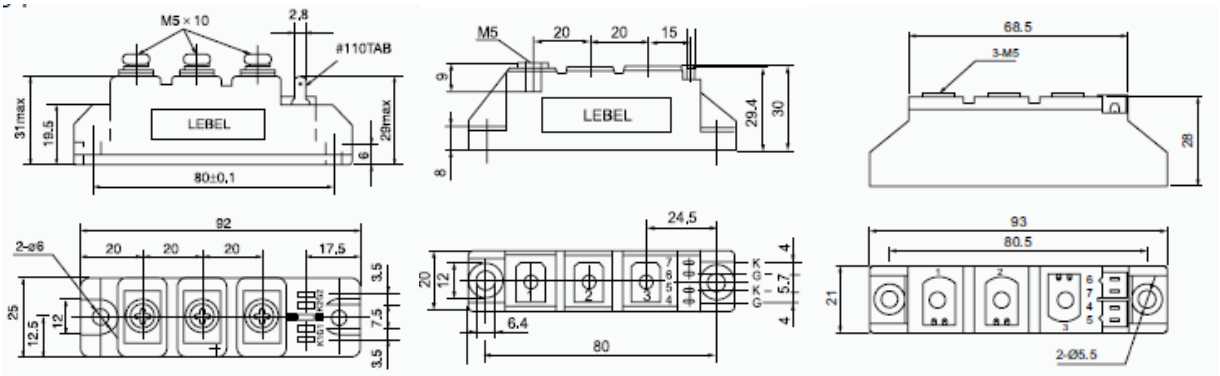


Fig.8

Outline:



1 2 3

Circuit Drawing:

