

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

Typical application

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

$I_{F(AV)}$	55A
V_{RRM}	500-2500V
I_{FSM}	1.3 KA
I^2t	8.6 $10^3 a^2 s$

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T_J (°C)	VALUE		UNIT
				Min	Max	
$I_{F(AV)}$	Mean forward current	180° half sine wave, 50HZ Single heat sink, $T_C=98^\circ C$	150		55	A
$I_{T(RMS)}$	RMS current		150		86	A
V_{RRM}	Repetitive peak reverse voltage	$V_{DRM} \& V_{RRM} t_p=10ms$ $V_{DSM} \& V_{RSM}=V_{DRM} \& V_{RRM}+200V$	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		1.3	KA
I^2t	I^2t for fusing coordination				8.6	$A^2s \times 10$
V_{TO}	Threshold voltage		150		0.80	V
r_T	On-state slop resistance				3.47	$m\Omega$
V_{FM}	Peak on-state voltage	$I_{TM}=170A$	25		1.46	V
$R_{th(j-c)}$	Thermal impedance node to the shell	180 ° sine wave, single heat sink			0.77	°C/W
$R_{th(c-h)}$	Thermal impedance (shell to powder)	180 ° sine wave, single heat sink			0.2	°C/W
V_{iso}	Insulation voltage			2500		V
F_M	Mounting force (M5)				4	N-m
	Mounting force (M6)				6	N-m
T_{stq}	Stored temperature			-40	125	°C
W_t	Weight					g
Outline						

Peak forward Voltage Vs. Peak forward Current

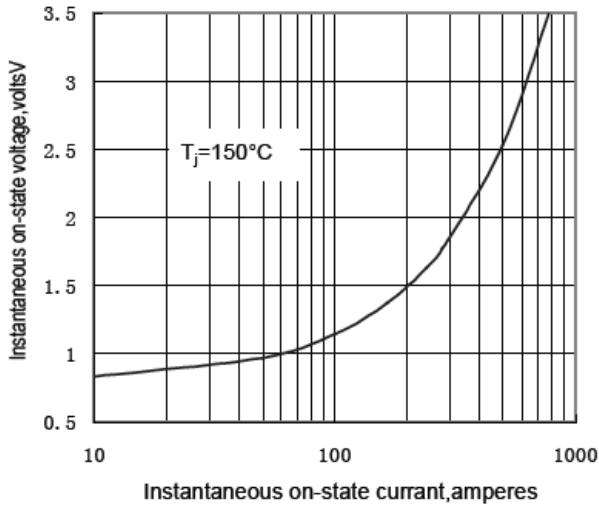


Fig.1

Max. junction To case Thermal Impedance Vs. Time

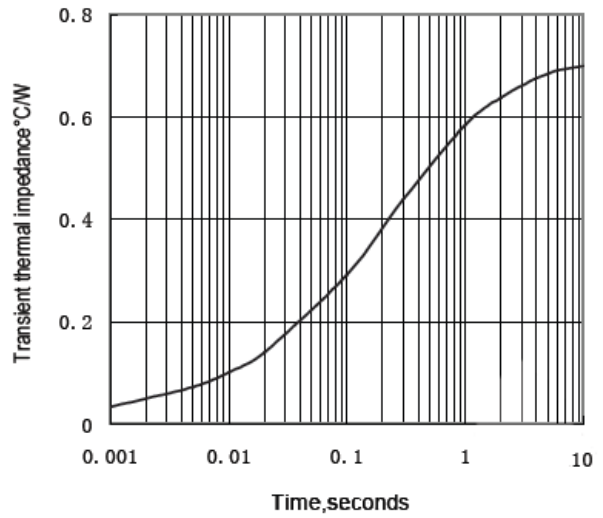


Fig.2

Max. Power Dissipation Vs. Mean forward Current

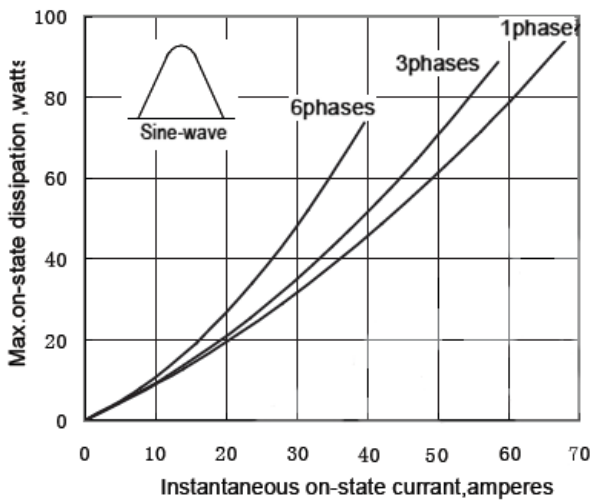


Fig.1

Max. heatsink Temperature Vs. Mean On-state Current

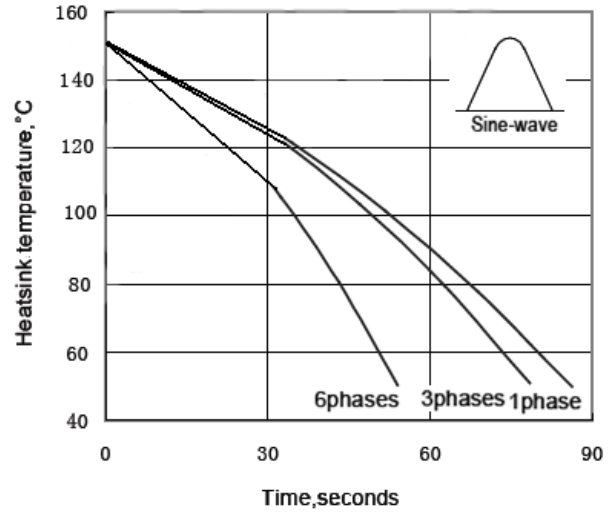


Fig.2

Max. Power Dissipation Vs. Mean On-state Current

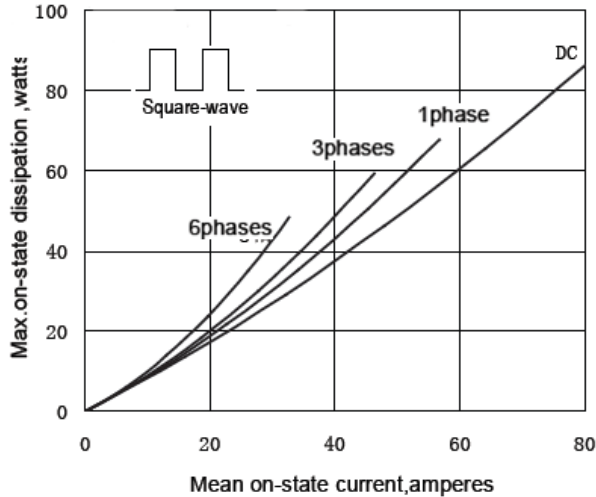


Fig.5

Max. case Temperature Vs. Mean forward Current

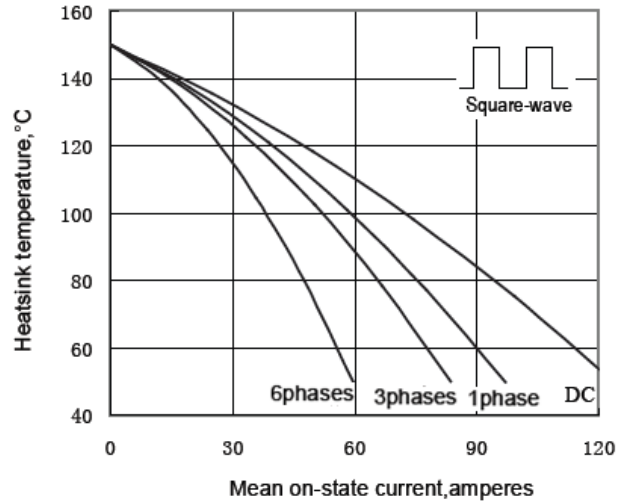


Fig.6

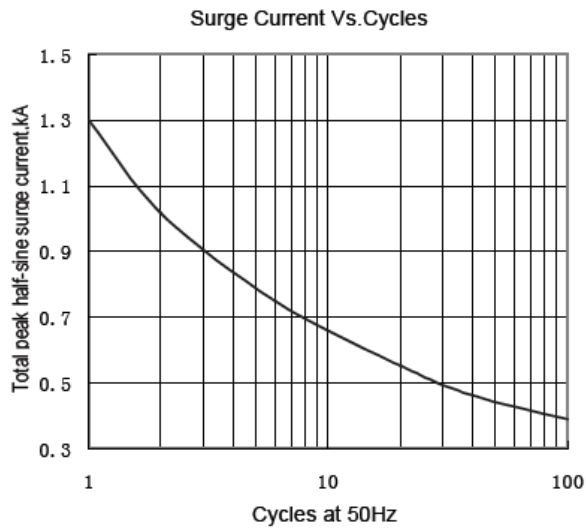


Fig.7

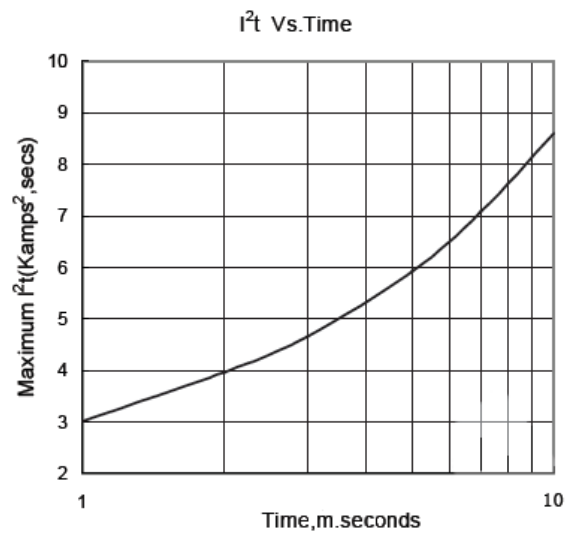
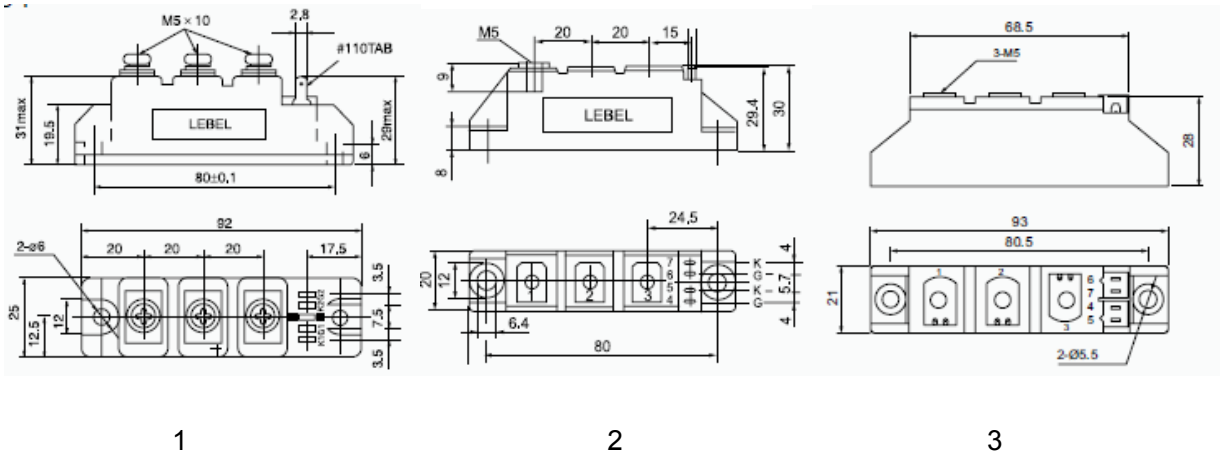


Fig.8

Outline:



Circuit Drawing:

