西安爱帕克电力电子有限公司

XI'AN IR-PERI Company

PRELIMINARY MTG150WM60

Benefits

- **TRIPLE ARMS**
- **Non-Insulated Type**

APPLICATION

- Welders

ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Voltage class	Unit
		6	
V_{RRM}	Repetitive peak reverse voltage	600	V
V_{RSM}	Non-repetitive peak reverse voltage	720	V
$V_{R\ (DC)}$	DC reverse voltage	480	V
V_{DRM}	Repetitive peak off-state voltage	600	V
V_{DSM}	Non-repetitive peak off-state voltage	720	V
$V_{D\ (DC)}$	DC off-state voltage	480	V

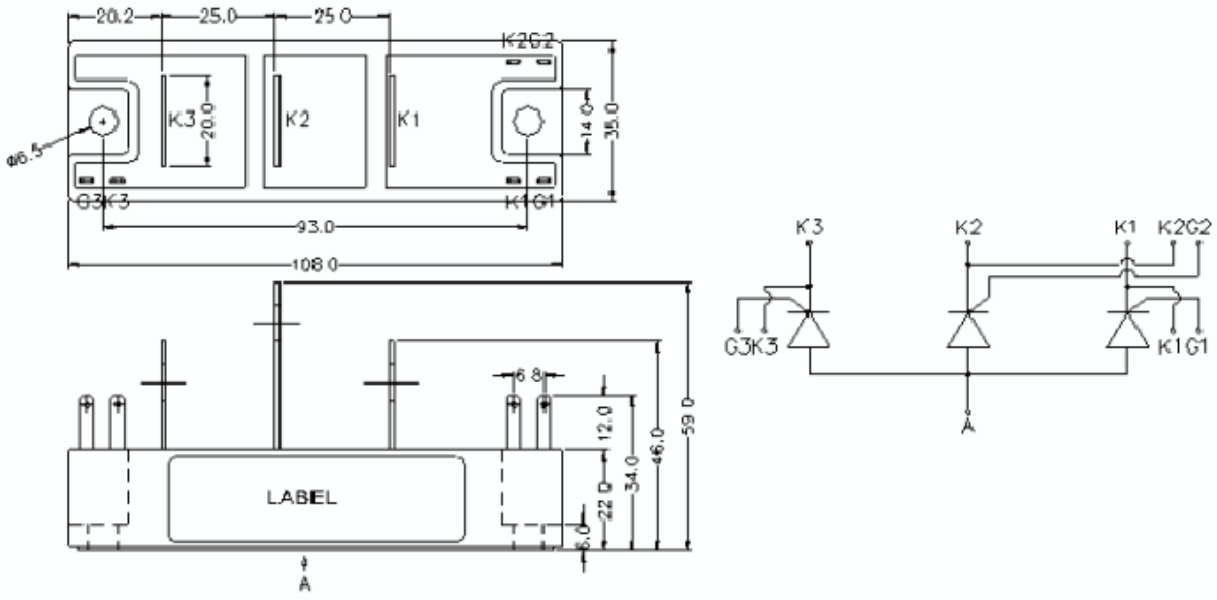
Absolute Maximum Ratings

Symbol	Parameter	Conditions	Ratings	Unit
$I_{T\ (RMS)}$	RMS on-state current		230	A
$I_{T\ (AV)}$	Average on-state current	Three-phase, half-wave, T_C=119°C	150	A
I_{TSM}	Surge (non-repetitive) on-state current	One half cycle at 60Hz, peak value	3000	A
I^2t	I^2t for fusing	Value for one cycle of surge current	45000	A^2s
di/dt	Critical rate of rise of on-state current	V_D=1/2V_{DRM}, I_G=1.0A, T_j=125°C	80	A/μs
P_{GM}	Peak gate power dissipation		5.0	W
$P_{G\ (AV)}$	Average gate power dissipation		0.5	W
V_{FGM}	Peak gate forward voltage		10	V
V_{RGM}	Peak gate reverse voltage		5.0	V
I_{FGM}	Peak gate forward current		2.0	A
T_j	Junction temperature		–40~+150	°C
T_{stg}	Storage temperature		–40~+125	°C
—	Mounting torque	Main terminal screw M8	8~10	N·m
			80~100	kg·cm
		Mounting screw M6	1.9~2.9	N·m
			20~35	kg·cm
—	Weight	Typical value	215	g

ELECTRICAL CHARACTERISTICS

Symbol	Parameter	Test conditions	Limits			Unit
			Min.	Typ.	Max.	
I_{RRM}	Repetitive peak reverse current	T_j=125°C, V_{RRM} applied	—	—	30	mA
I_{DRM}	Repetitive peak off-state current	T_j=125°C, V_{DRM} applied	—	—	30	mA
V_{TM}	On-state voltage	T_j=125°C, I_{TM}=600A, instantaneous meas.	—	—	1.2	V
dv/dt	Critical rate of rise of off-state voltage	T_j=125°C, V_D=2/3V_{DRM}	200	—	—	V/μs
V_{GT}	Gate trigger voltage	T_j=25°C, V_D=6V, I_T=1A	—	—	2.0	V
V_{GD}	Gate non-trigger voltage	T_j=125°C, V_D=1/2V_{DRM}	0.25	—	—	V
I_{GT}	Gate trigger current	T_j=25°C, V_D=6V, I_T=1A	15	—	100	mA
$R_{th\ (j-c)}$	Thermal resistance	Junction to case (per 1/3 module)	—	—	0.16	°C/W

Case outline-WM-pak



Dimensions are shown in millimeters