

XI'AN IR-PERI



Company

PRELIMINARY

MTG200WL60

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		314	A
I _{T(AV)}	Average on-state current	Three-phase, half-wave, T _C =119°C	200	A
I _{TSM}	Surge (non-repetitive) on-state current	One half cycle at 60Hz, peak value	5600	A
I ² _t	I ² _t for fusing	Value for one cycle of surge current	146000	A ² s
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 _{VRGM}	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	290	g

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ELECTRICAL CHARACTERISTICS

Symbol	Parameter	Test conditions	Limits			Unit
			Min.	Typ.	Max.	
I _{RRM}	Repetitive peak reverse current	T _j =125°C, V _{RRM} applied	—	—	40	mA
I _{DRM}	Repetitive peak off-state current	T _j =125°C, V _{DRM} applied	—	—	40	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	—	—	3.0	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	—	150	mA
R _{th(j-c)}	Thermal resistance	Junction to case (per 1/3 module)	—	—	0.15	°C/W

Case Outline - wL-pak

