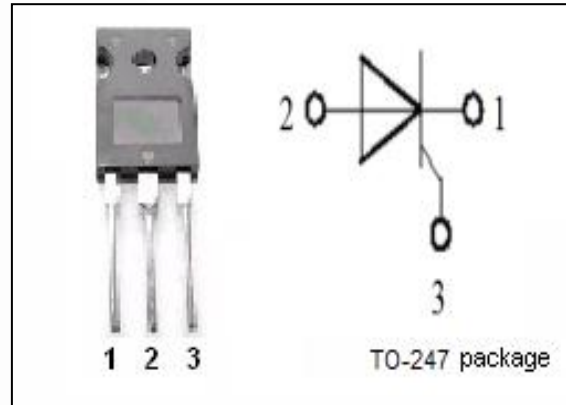


**isc Thyristors**
**CLA40E1200HR**
**DESCRIPTION**

- With TO-3P packaging
- High commutation capability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Switching applications
- Battery charging system
- Uninterruptible power supply
- Variable speed motor drive
- Industrial welding systems
- By pass AC switch


**ABSOLUTE MAXIMUM RATINGS(T<sub>a</sub>=25°C)**

SYMBOL	PARAMETER	MAX	UNIT	
V <sub>DRM</sub>	Repetitive peak off-state voltage	1200	V	
V <sub>RRM</sub>	Repetitive peak reverse voltage	1200	V	
I <sub>T(RMS)</sub>	Average on-state current @T <sub>c</sub> =95°C	63	A	
I <sub>TSM</sub>	Surge non-repetitive on-state current	50Hz 60Hz	650 700	A
P <sub>G(AV)</sub>	Average gate power dissipation ( over any 20 ms period ) @T <sub>c</sub> =125°C	0.5	W	
T <sub>j</sub>	Operating junction temperature	-40~150	°C	
T <sub>stg</sub>	Storage temperature	-40~150	°C	

**ELECTRICAL CHARACTERISTICS (T<sub>c</sub>=25°C unless otherwise specified)**

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
I <sub>RRM</sub>	Repetitive peak reverse current	V <sub>R</sub> =V <sub>RRM</sub> Rated; T <sub>j</sub> =25°C T <sub>j</sub> =125°C		50	μA
I <sub>DRM</sub>	Repetitive peak off-state current			4	mA
V <sub>TM</sub>	On-state voltage	I <sub>T</sub> =40A; t <sub>p</sub> =380 μs		1.25	V
I <sub>GT</sub>	Gate-trigger current	V <sub>D</sub> =6V		50	mA
V <sub>GT</sub>	Gate-trigger voltage	V <sub>D</sub> =6V		1.5	V
R <sub>th(j-c)</sub>	Junction to case	For AC		0.8	°C/W