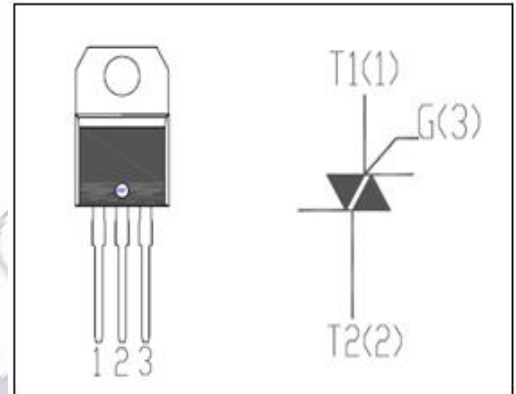


**isc Thyristors**
**T1635T-8I**
**DESCRIPTION**

- With TO-220 packaging
- Operating in 3 quadrants
- High commutation capability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Switching applications
- Phase control
- Static switching on inductive or resistive load


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

SYMBOL	PARAMETER	MAX	UNIT
V <sub>DRM</sub>	Repetitive peak off-state voltage	@T <sub>c</sub> =125°C	800 V
V <sub>RRM</sub>	Repetitive peak reverse voltage	@T <sub>c</sub> =125°C	800 V
I <sub>T(RSM)</sub>	Average on-state current	@T <sub>c</sub> =108°C T <sub>c</sub> =119°C	16 12 A
I <sub>TSM</sub>	Surge non-repetitive on-state current	50Hz 60Hz	120 126 A
P <sub>G(AV)</sub>	Average gate power dissipation ( over any 20 ms period )		1 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>R</sub> RM	Repetitive peak reverse current	V <sub>R</sub> =V <sub>RRM</sub> Rated; V <sub>D</sub> =V <sub>DRM</sub> Rated; T <sub>j</sub> =25°C T <sub>j</sub> =125°C		5	μA
I <sub>D</sub> RM	Repetitive peak off-state current		1	mA	
V <sub>TM</sub>	On-state voltage	I <sub>T</sub> =22.6A		1.55	V
I <sub>GT</sub>	Gate-trigger current	V <sub>D</sub> =12V;R <sub>L</sub> =30 Ω	I	35	mA
			II	35	
			III	35	
V <sub>GT</sub>	Gate-trigger voltage	V <sub>D</sub> =12V;R <sub>L</sub> =30 Ω		1.3	V
R <sub>th(j-c)</sub>	Junction to case	For DC		2.1	°C/W