

**Thyristors**

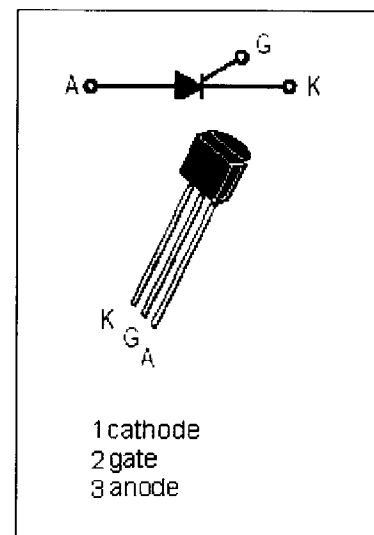
**MCR100-8**

**FEATURES**

- With TO-92 package
- Sensitive gate trigger current
- Low reverse and forward blocking current
- Low holding current
- Designed for high volume, line-powered consumer applications such as relay and lamp drivers, small motor controls, gate drivers for larger thyristors, and sensing and detection circuits.

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

SYMBOL	PARAMETER	MIN	UNIT
V <sub>DRM</sub>	Repetitive peak off-state voltage	600	V
V <sub>RRM</sub>	Repetitive peak off-state voltage	600	V
I <sub>T(AV)</sub>	Average on-state current (180° conduction angle)	0.7	A
I <sub>T(RMS)</sub>	RMS on-state current (180° conduction angle)	1	A
P <sub>GM</sub>	Peak gate power	0.5	W
P <sub>G(AV)</sub>	Average gate power	0.1	W
T <sub>j</sub>	Operating junction temperature	110	°C
T <sub>stg</sub>	Storage temperature range	-45-150	°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> V <sub>R</sub> = V <sub>RRM</sub> ; T <sub>j</sub> = 110°C		10 200	μA
I <sub>DRM</sub>	Repetitive peak off-state current	V <sub>D</sub> = V <sub>DRM</sub> V <sub>D</sub> = V <sub>DRM</sub> ; T <sub>j</sub> = 110°C		10 200	μA
I <sub>GT</sub>	Gate trigger current	V <sub>D</sub> = 6V; R <sub>L</sub> =100 Ω	10	120	μA
V <sub>TM</sub>	On-state voltage	I <sub>T</sub> =1.2A		1.5	V
I <sub>H</sub>	Holding current	I <sub>T</sub> =0.1A, Gate Open		3	mA
V <sub>GT</sub>	Gate trigger voltage	V <sub>D</sub> = 12V; R <sub>L</sub> =100 Ω		0.8	V

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