

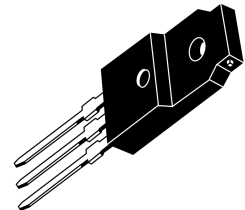
**MCR225FP
Series**

**Silicon Controlled Rectifiers
Reverse Blocking Thyristors**

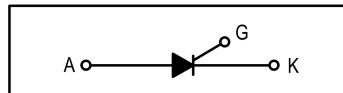
... designed primarily for half-wave ac control applications, such as motor controls, heating controls and power supply crowbar circuits.

- Glass Passivated Junctions with Center Gate Fire for Greater Parameter Uniformity and Stability
- Small, Rugged, Thermowatt Constructed for Low Thermal Resistance, High Heat Dissipation and Durability
- Blocking Voltage to 800 Volts
- 300 A Surge Current Capability
- Insulated Package Simplifies Mounting

**ISOLATED SCRs
25 AMPERES RMS
50 thru 800 VOLTS**



**CASE 221C-02
STYLE 2**



MAXIMUM RATINGS ($T_J = 25^\circ\text{C}$ unless otherwise noted.)

Rating	Symbol	Value	Unit
Peak Repetitive Forward and Reverse Blocking Voltage ⁽¹⁾ ($T_J = -40$ to $+125^\circ\text{C}$, Gate Open)	V_{DRM} V_{RRM}	50 200 400 600 800	Volts
On-State RMS Current ($T_C = +70^\circ\text{C}$) Full Cycle Sine Wave 50 to 60 Hz ⁽²⁾	$I_{T(RMS)}$	25	Amps
Peak Non-repetitive Surge Current (One Full Cycle, 60 Hz, $T_C = +70^\circ\text{C}$) Preceded and followed by rated current	I_{TSM}	300	Amps
Circuit Fusing ($t = 8.3$ ms)	I^2t	375	A^2s
Peak Gate Power ($T_C = +70^\circ\text{C}$, Pulse Width = 10 μs)	P_{GM}	20	Watts
Average Gate Power ($T_C = +70^\circ\text{C}$, $t = 8.3$ ms)	$P_{G(AV)}$	0.5	Watt
Peak Gate Current ($T_C = +70^\circ\text{C}$, Pulse Width = 10 μs)	I_{GM}	2	Amps
RMS Isolation Voltage ($T_A = 25^\circ\text{C}$, Relative Humidity $\leq 20\%$)	$V_{(ISO)}$	1500	Volts
Operating Junction Temperature Range	T_J	-40 to +125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-40 to +125	$^\circ\text{C}$

1. V_{DRM} and V_{RRM} for all types can be applied on a continuous basis. Ratings apply for zero or negative gate voltage; however, positive gate voltage shall not be applied concurrent with negative potential on the anode. Blocking voltages shall not be tested with a constant current source such that the voltage ratings of the devices are exceeded.
2. The case temperature reference point for all T_C measurements is a point on the center lead of the package as close as possible to the plastic body.