



MAXIMUM RATINGS ($T_j = 25^\circ\text{C}$ unless stated otherwise)						
Parameter	Symbol	MCR100-3	MCR100-4	MCR100-6	MCR100-8	Unit
Repetitive Peak Off-State Voltage	V_{RRM}	100	200	400	600	Volt
On-State RMS Current	$I_{T(RMS)}$	0.8 at $t_c = 85^\circ\text{C}$				Amp
Peak Non-Repetitive Surge Current	I_{TSM}	10				Amp
I^2T for Fusing 8.3ms	I^2T	0.415				A ² /S
Peak Reverse Gate Voltage	V_{GRM}	5				Volt
Peak Gate Current	I_{GM}	0.1				Amp
Forward Average Gate Power	$P_{G(AV)}$	0.1				Watt
Forward Peak Gate Power	P_{GM}	1.0				Watt
Maximum Storage Temperature Range	$T_{(STG)}$	-40 to +150				$^\circ\text{C}$
Maximum Junction Temperature Range	T_j	-40 to +110				$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS at $T_j = 25^\circ\text{C}$ Maximum. Unless stated Otherwise						
Parameter	Symbol	Condition	Value			Unit
			Min	Typ	Max	
Peak Forward On-State Voltage	V_{TM}	$I_{TM} = 1.0$ Amps			1.7	Volt
Repetitive Peak Reverse Current	I_{RRM}	$V_R = V_{RRM}$, $t_r = 110^\circ\text{C}$			100	
Gate Trigger Voltage	V_{GT}			0.62	0.80	Volt
Gate Trigger Current	I_{GT}			40	200	μA
Latch Current	I_L			0.60	10.0	mA
Holding Current	I_H			0.50	5.0	mA
Thermal Resistance (Junction to Case)	$R_{TH (J-C)}$				75	$^\circ\text{C}/\text{W}$
Rate of Rise of Off-State Voltage	dV/dt		20	35		$\text{V}/\mu\text{S}$
Rate of Rise of Off-State Current	dA/dt				50	$\text{A}/\mu\text{S}$

Mechanical Outline

