



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 <sup>2</sup> /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	$I_{RRM}$	$V_R = V_{RRM}$ , $t_f = 110^\circ\text{C}$			100	
Gate Trigger Voltage	$V_{GT}$			0.62	0.80	Volt
Gate Trigger Current	$I_{GT}$			40	200	$\mu\text{A}$
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**

