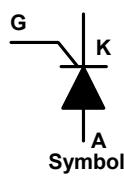
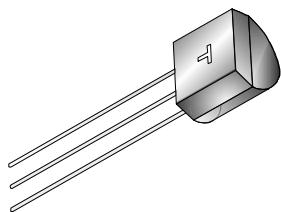




**Transys**  
Electronics  
**L I M I T E D**

**MCR100 SERIES**  
Silicon Controlled Rectifier  
 $V_{RRM} = 100\text{-}600V$ ,  $I_{F(RMS)} = 0.8A$



MAXIMUM RATINGS ( $T_j = 25^\circ C$  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 $t_c = 85^\circ C$			Amp
Peak Non-Repetitive Surge Current	$I_{TSM}$		10			Amp
$I \cdot T$ for Fusing 8.3ms	$I^2 T$		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			$^\circ C$
Maximum Junction Temperature Range	$T_j$		-40 to +110			$^\circ C$

ELECTRICAL CHARACTERISTICS at  $T_j = 25^\circ C$  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	$I_{RRM}$	$V_R = V_{RRM}$ , $t_s = 110^\circ C$			100	
Gate Trigger Voltage	$V_{GT}$			0.62	0.80	Volt
Gate Trigger Current	$I_{GT}$			40	200	$\mu A$
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	$^\circ C/W$
Rate of Rise of Off-State Voltage	$dV/dt$		20	35		$V/\mu s$
Rate of Rise of Off-State Current	$dA/dt$				50	$A/\mu s$

Mechanical Outline

