

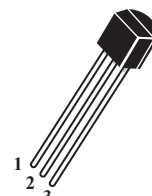
## Sensitive Gate Silicon Controlled Rectifiers Reverse Blocking Thyristors

**(Pb)** Lead(Pb)-Free



**SCRs**  
**0.8 A RMS**  
**400/600 Voltage**

1.Cathode  
2.Gate  
3.Anode



**TO-92**

### Maximum Ratings ( $T_A=25^{\circ}\text{C}$ unless otherwise noted)

Rating	Symbol	MCR100-6	MCR100-8	Unit
Repetitive Peak Off-stage Voltage	$V_{DRM}$	400	600	V
Collector-Base Voltage	$I_{TRMS}$	0.8		A
Junction Temperature Range	$T_J$	+150		$^{\circ}\text{C}$
Storage Temperature Range	$T_{stg}$	-55 to +150		$^{\circ}\text{C}$

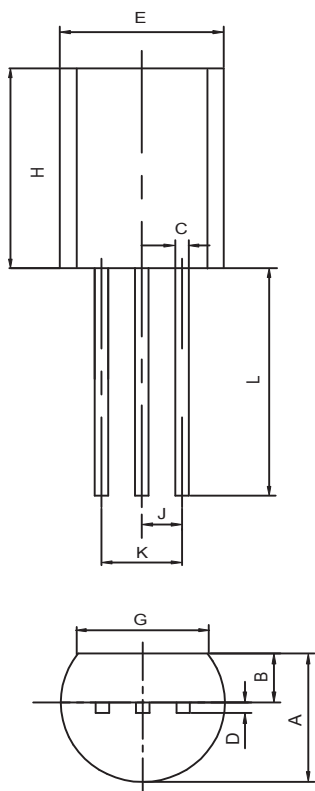
### ELECTRICAL CHARACTERISTICS

Characteristics	Symbol	Min	Max	Unit	
On State Voltage <sup>(1)</sup> $I_{TM} = 1\text{A}$	$V_{TM}$	-	1.7	V	
Gate Trigger Voltage $V_{AK} = 7\text{V}$	$V_{GT}$	-	0.8	V	
Peak Repetitive Forward and Reverse Blocking Voltage $I_{DRM} = 10\mu\text{A}$ , $V_{MAX} = 10\text{V}$	MCR100-6 MCR100-8 $V_{DRM}, V_{RRM}$	400 600	-	V	
Peak Forward or Reverse Blocking Current $V_{AK} = \text{Rated}$ , $V_{DRM}$ or $V_{RRM}$	$I_{DRM}, I_{RRM}$	-	10	$\mu\text{A}$	
Holding Current $I_{HL} = 20\text{mA}$ , $A_V = 7\text{V}$	$I_H$	-	5	mA	
Gate Trigger Current $V_{AK} = 7\text{V}$	$I_{GT}$	A2 A1 A B	5 15 30 80	15 30 80 200	$\mu\text{A}$

Note 1. Forward current applied for 1 ms maximum duration, duty cycle  $\leq 1\%$

## TO-92 Outline Dimensions

unit:mm



TO-92		
Dim	Min	Max
A	3.30	3.70
B	1.10	1.40
C	0.38	0.55
D	0.36	0.51
E	4.40	4.70
G	3.43	-
H	4.30	4.70
J	1.270TYP	
K	2.44	2.64
L	14.10	14.50