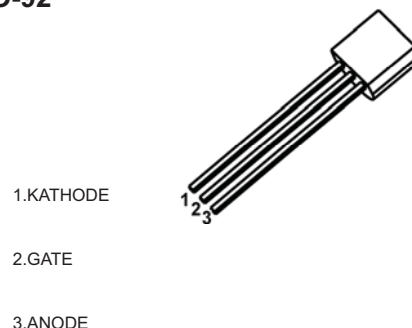


## MCR100- 6,- 8 Silicon Controlled Rectifier

### MAIN FEATURES

Symbol		value	unit
$I_{T(RMS)}$		0.8	A
$V_{DRM} / V_{RRM}$	MCR100-6	400	V
	MCR100-8	600	
$T_j$	Junction Temperature	-40 ~ 125	°C
$T_{stg}$	Storage Temperature	-55 ~ 150	°C

### TO-92



1.KATHODE

2.GATE

3.ANODE

### DESCRIPTION

Logic level sensitive gate triac intended to be interfaced directly to microcontrollers, logic integrated circuits and other low power gate trigger circuits.

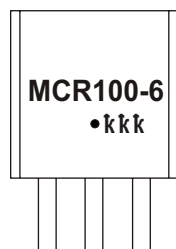
### FEATURES

- Blocking voltage to 400 V (MCR100-6)
- RMS on-state current to 0.8 A
- General purpose switching

### APPLICATIONS

- General purpose switching
- Phase control applications
- Solid state relays

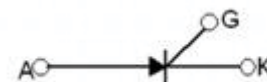
### MARKING



MCR100-6=Device code  
 Solid dot=Green molding compound device,  
 if none,the normal device  
 XXX=Code

**K G A**

### Equivalent Circuit



### ORDERING INFORMATION

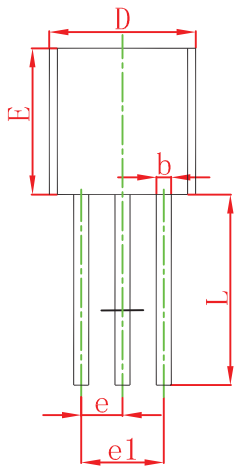
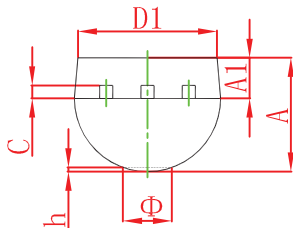
Part Number	Package	Packing Method	Pack Quantity
MCR100-6	TO-92	Bulk	1000pcs/Bag
MCR100-6-TA	TO-92	Tape	2000pcs/Box

T<sub>a</sub>=25 °C unless otherwise specified

Parameter	Symbol	Test conditions	Min	Max	Unit	
On state voltage *	V <sub>TM</sub>	I <sub>TM</sub> =1A		1.7	V	
Gate trigger voltage	V <sub>GT</sub>	V <sub>AK</sub> =7V		0.8	V	
Peak Repetitive forward and reverse blocking voltage MCR100-6 MCR100-8	V <sub>DRM</sub> /V <sub>RPM</sub>	I <sub>DRM</sub> /I <sub>RPM</sub> = 10 μA	400 600		V	
Peak forward or reverse blocking Current	I <sub>DRM</sub> I <sub>RPM</sub>	V <sub>AK</sub> = Rated V <sub>DRM</sub> or V <sub>RPM</sub>		10	μA	
Holding current	I <sub>H</sub>	I <sub>HL</sub> =20mA , V <sub>AK</sub> =7V		5	mA	
Gate trigger current	I <sub>GT</sub>	V <sub>AK</sub> =7V	A2	5	15	μA
			A1	15	30	μA
			A	30	80	μA
			B	80	200	μA

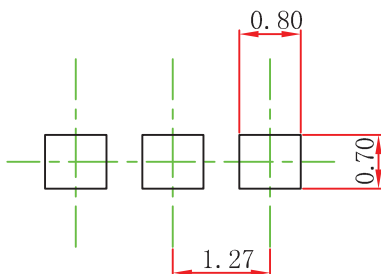
\* Forward current applied for 1 ms maximum duration, duty cycle≤1%.

### TO-92 Package Outline Dimensions



Dimension	Dimension in Millimeter		Dimension in Inche	
	Min	Max	Min	Max
A	3.300	3.700	0.130	0.146
A1	1.100	1.400	0.043	0.055
b	0.380	0.550	0.015	0.022
c	0.360	0.510	0.014	0.020
D	4.300	4.700	0.169	0.185
D1	3.430		0.135	
E	4.300	4.700	0.169	0.185
e	1.270 TYP		0.050 TYP	
e1	2.440	2.640	0.096	0.104
L	14.100	14.500	0.555	0.571
Φ		1.600		0.063
h	0.000	0.380	0.000	0.015

### TO-92 Suggested Pad Layout



**Note:**

1. Controlling dimension: in millimeters.
2. General tolerance: ± 0.05mm.
3. The pad layout is for reference purposes only.