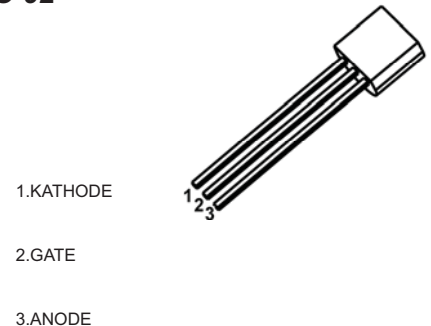


MAIN FEATURES

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

TO-92



DESCRIPTION

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

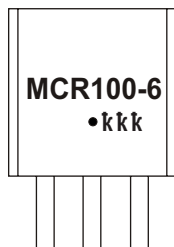
FEATURES

- 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

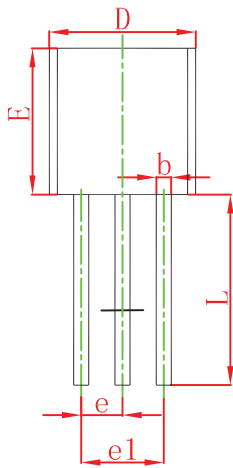
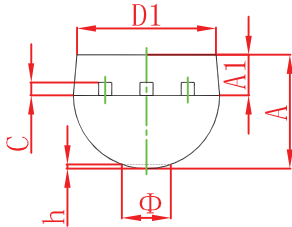
Part Number	Package	Packing Method	Pack Quantity
MCR100-6	TO-92	Bulk	1000pcs/Bag
MCR100-6-TA	TO-92	Tape	2000pcs/Box

$T_a=25\text{ }^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Test conditions	Min	Max	Unit	
On state voltage *	V_{TM}	$I_{TM}=1A$		1.7	V	
Gate trigger voltage	V_{GT}	$V_{AK}=7V$		0.8	V	
Peak Repetitive forward and reverse blocking voltage MCR100-6 MCR100-8	V_{DRM}/V_{RRM}	$I_{DRM}/I_{RRM}= 10\ \mu A$	400 600		V	
Peak forward or reverse blocking Current	I_{DRM} I_{RRM}	$V_{AK}= \text{Rated}$ V_{DRM} or V_{RRM}		10	μA	
Holding current	I_H	$I_{HL}=20mA, V_{AK}=7V$		5	mA	
Gate trigger current	I_{GT}	$V_{AK}=7V$	A2	5	15	μA
			A1	15	30	μA
			A	30	80	μA
			B	80	200	μA

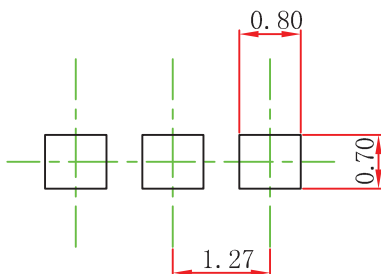
* Forward current applied for 1 ms maximum duration, duty cycle $\leq 1\%$.

TO-92 Package Outline Dimensions



Symbol	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.