

## TO-92 Plastic-Encapsulate Transistors

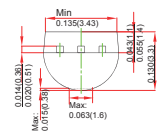
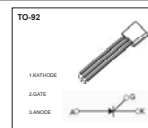
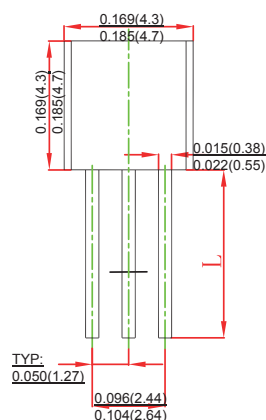
### FEATURES

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

### MECHANICAL DATA

- Case style: TO-92 molded plastic
- Mounting position: any

### TO-92



## MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

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

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	$V_{DRM}/V_{RRM}$	$I_{DRM}/I_{RRM}= 10 \mu A$	MCR100-6	400	V	
MCR100-8			600			
Peak forward or reverse blocking Current	$I_{DRM}$ $I_{RRM}$	$V_{AK}= \text{Rated}$ $V_{DRM}$ or $V_{RRM}$		10	$\mu A$	
Holding current	$I_H$	$I_{HL}=20mA, V_{AK}=7V$		5	mA	
Gate trigger current	$I_{GT}$	$V_{AK}=7V$	A2	5	15	$\mu A$
			A1	15	30	$\mu A$
			A	30	80	$\mu A$
			B	80	200	$\mu A$

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