

## Features

- Halogen free available upon request by adding suffix "-HF"
- Max. Output Current : 100mA
- Internal Short Circuit Current Limiting
- Internal Thermal Overload Protection
- No External Components Required
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)

## Maximum Ratings

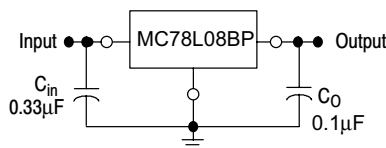
Parameter	Symbol	Value	Unit
Input Voltage	$V_1$	30	V
Operating Junction Temperature	$T_{OPR}$	-20---+120	°C
Storage Temperature Range	$T_{STG}$	-55---+150	°C

## Electrical Characteristics( $V_1=14V$ , $I_o=40mA$ , $0^\circ C < T_j < 125^\circ C$ , $C_1=0.33\mu F$ , $C_o=0.1\mu F$ , unless otherwise specified)

Parameter	Sym	Min	Typ	Max	Test conditions
Output Voltage	$V_o$	7.7V	8.0V	8.3V	$T_j=25^\circ C$
		7.6V		8.4V	$10.5V \leq V_1 \leq 23V$ , $I_o=1mA-40mA$
		7.6V		8.4V	$10.5V \leq V_1 \leq V_{MAX}$ , $I_o=1mA-70mA$ (Note)
Load Regulation	$\Delta V_o$		15mV	80mV	$I_o=1mA-100mA$ , $T_j=25^\circ C$
			8.0mV	40mV	$I_o=1mA-70mA$ , $T_j=25^\circ C$
Line regulation	$\Delta V_o$		10mV	175mV	$10.5V \leq V_1 \leq 23V$ , $T_j=25^\circ C$
			8.0mV	125mV	$11V \leq V_1 \leq 23V$ , $T_j=25^\circ C$
Quiescent Current	$I_q$		2.0mA	5.5mA	$11V \leq V_1 \leq 23V$
				1.5mA	
Quiescent Current Change	$\Delta I_q$			0.1mA	$1mA \leq I_o \leq 40mA$
Output Noise Voltage	$V_N$		49uV		$10Hz \leq f \leq 100KHz$
Ripple Rejection	RR	39dB	70dB		$11V \leq V_1 \leq 23V$ $f=120Hz$ , $T_j=25^\circ C$
Dropout Voltage	$V_d$		1.7V		$T_j=25^\circ C$

\*Note: Bypass Capacitors are recommended for optimum stability and transient response and should be located as close as possible to the regulators

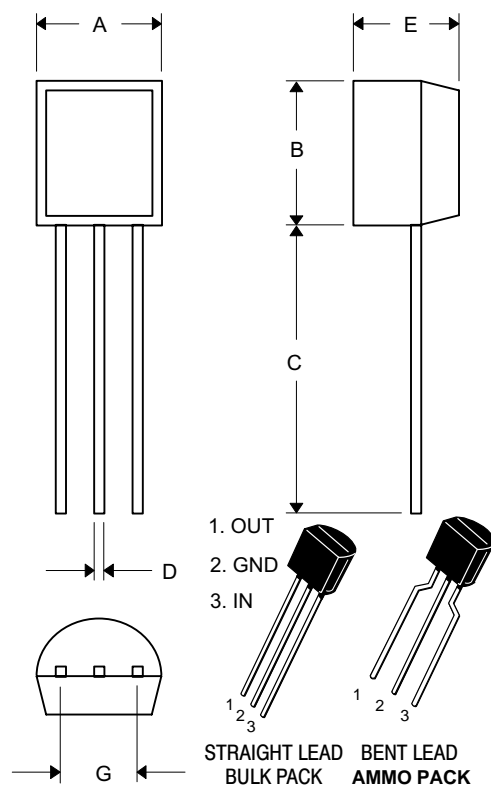
Typical Application:



## MC78L08BP

## Three-Terminal Low Current Positive Voltage Regulator

### TO-92



### DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.175	.185	4.45	4.70	
B	.175	.185	4.45	4.70	
C	.500	---	12.70	---	
D	.016	.020	0.41	0.63	
E	.135	.145	3.43	3.68	
G	.095	.105	2.42	2.67	Straight Lead
	.173	.220	4.40	5.60	Bent Lead

\* For ammo packing detailed specification, click here to visit our website of product packaging for details.

## Ordering Information :

Device	Packing
Part Number-AP	Ammo Packing: 20Kpcs/Carton
Part Number-BP	Bulk: 100Kpcs/Carton

Note : Adding "-HF" suffix for halogen free, eg. Part Number-AP-HF

### \*\*\*IMPORTANT NOTICE\*\*\*

**Micro Commercial Components Corp.** reserves the right to make changes without further notice to any product herein to make corrections, modifications, enhancements, improvements, or other changes. **Micro Commercial Components Corp.** does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold **Micro Commercial Components Corp.** and all the companies whose products are represented on our website, harmless against all damages.

### \*\*\*LIFE SUPPORT\*\*\*

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

### \*\*\*CUSTOMER AWARENESS\*\*\*

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources.** MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.