

Features

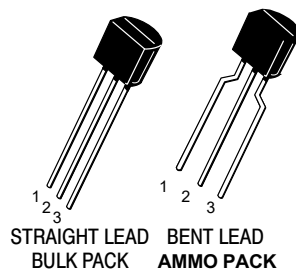
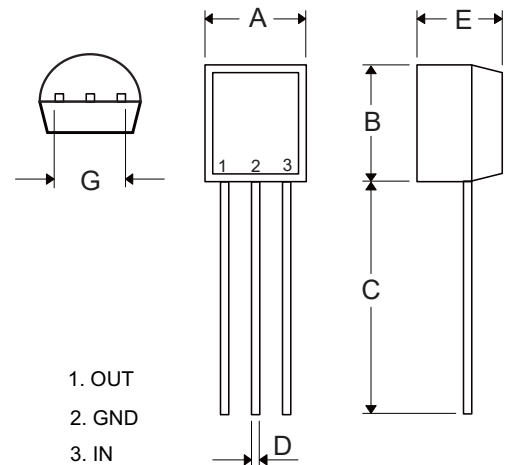
- Internal Thermal Overload Protection
- Internal Short Circuit Current Limiting
- No External Components Required
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)

Maximum Ratings

Parameter	Symbol	Value	Unit
Input Voltage (Vo=5.8V)	V ₁	30	V
Maximum Output Current	I _{CM}	0.1	A
Power Dissipation	P _D	0.625	W
Thermal Resistance Junction to ambient	R _{θJA}	200	°C/W
Operating Junction Temperature	T _{opr}	-40~125	°C
Storage Temperature Range	T _{STG}	-55~150	°C

Three-Terminal Low Current Positive Voltage Regulators

TO-92



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.169	0.185	4.30	4.70	
B	0.169	0.185	4.30	4.70	
C	0.500	-----	12.70	-----	
D	0.015	0.022	0.38	0.55	
E	0.130	0.146	3.30	3.70	
G	0.095	0.105	2.42	2.67	Straight Lead
	0.173	0.220	4.40	5.60	Bent

Electrical Characteristics

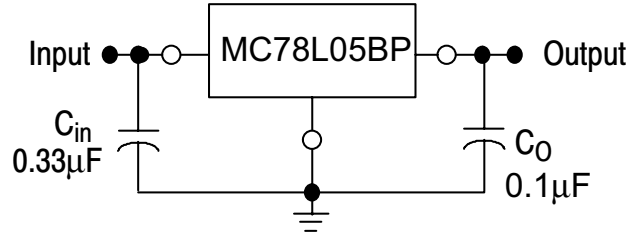
 ($V_i=10V$, $I_o=40mA$, $0^\circ C < T_j < 125^\circ C$, $C_i=0.33\mu F$, $C_o=0.1\mu F$, Unless Otherwise Specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Output Voltage	V_o	$T_j=25^\circ C$	4.8	5.0	5.2	V
		$7V \leq V_1 \leq 20V$, $I_o=1mA-40mA$	4.7	-	5.25	V
			5.0			V
		$7V \leq V_1 \leq V_{MAX}$ $I_o=1mA-700mA$ (Note1)	4.7	-	5.25	V
5.0	V					
Load Regulation	ΔV_o	$I_o=1mA-100mA, T_j=25^\circ C$	-	11	60	mV
		$I_o=1mA-40mA, T_j=25^\circ C$	-	5.0	30	mV
Line Regulation	ΔV_o	$7V \leq V_1 \leq 20V, T_j=25^\circ C$	-	8	150	mV
		$8V \leq V_1 \leq 20V, T_j=25^\circ C$	-	6	100	mV
Quiescent Current	I_q		-	2.0	5.5	mA
Quiescent Current Change	ΔI_q	$8V \leq V_1 \leq 20V$	-	-	1.5	mA
		$1mA \leq I_o \leq 40mA$	-	-	0.1	mA
Output Noise Voltage	V_N	$10Hz \leq f \leq 100KHz$	-	40	-	μV
Ripple Rejection	RR	$8V \leq V_1 \leq 20V, f=120Hz, T_j=25^\circ C$	41	80	-	dB
Dropout Voltage	V_d	$T_j=25^\circ C$	-	1.7	-	V

Note:

1. Bypass Capacitors are Recommended for Optimum Stability and Transient Response and should be Located as Close as Possible to The Regulators

Typical Application



Curve Characteristics

Figure 1. Representative Schematic Diagram

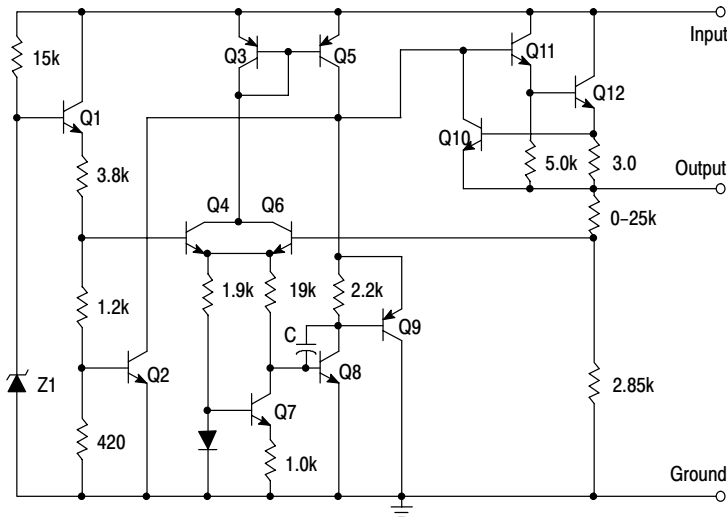
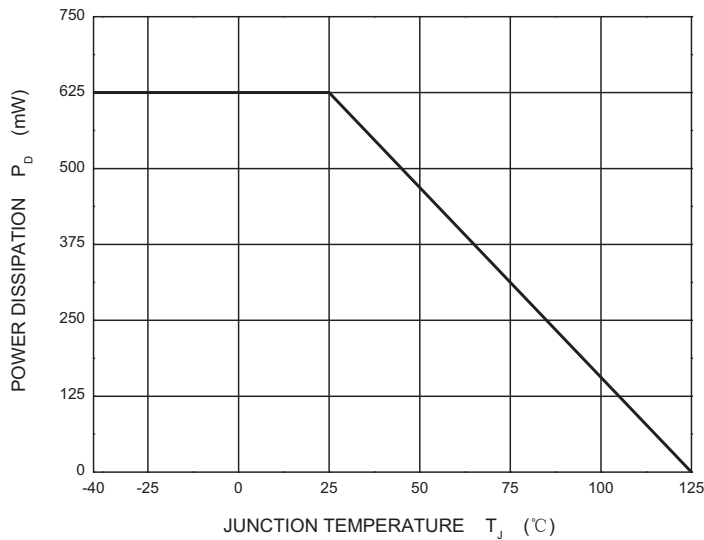


Figure 2. Power Derating Curve



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-BP-HF
 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.