



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





Micro Commercial Components

Micro Commercial Components
20736 Marilla Street Chatsworth
CA 91311
Phone: (818) 701-4933
Fax: (818) 701-4939

MC7812CT

Features

- Output current in excess of 1.0 Ampere
- No external components required
- Internal thermal overload protection
- Internal short-circuit current limiting
- Output voltage offered in 2% tolerance
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0

Maximum Ratings @ T_a=25°C, Unless Otherwise Noted

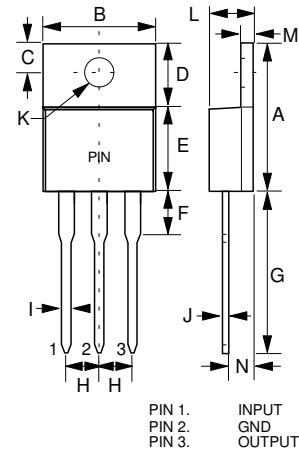
| Parameter | Symbol | Value | Unit |
|--------------------------------|------------------|------------|------|
| Input Voltage | V _I | 30 | V |
| Operating Ambient Temperature | P _D | 15 | W |
| Operating Junction Temperature | T _{OPR} | -20---+75 | °C |
| Storage Temperature Range | T _{STG} | -55---+125 | °C |

Electrical Characteristics (V_i=19V, I_o=500mA, 0°C<T_j<125°C, C_i=0.33µF, C_o=0.1µF, Unless Otherwise Specified)

| Parameter | Sym | Min | Typ | Max | Test conditions |
|---|----------------------------------|--------|----------|--------|--|
| Output Voltage | V _o | 11.76V | 12V | 12.24V | T _j =25°C |
| | | 11.66V | | 12.34V | 14.5V ≤ V _i ≤ 30V, 5mA ≤ I _o ≤ 1.0A, P _D =15W |
| Load Regulation | ΔV _o | | 12mV | 240mV | 5mA ≤ I _o ≤ 1.5A, T _j =25°C, |
| | | | 4.0mV | 120mV | 250mA ≤ I _o ≤ 750mA, T _j =25°C |
| Line regulation | ΔV _o | | 10mV | 240mV | 14.5V ≤ V _i ≤ 30V, T _j =25°C |
| | | | 3.0mV | 120mV | 16V ≤ V _i ≤ 22V, T _j =25°C |
| Quiescent Current | I _q | | 4.3mA | 8.0mA | T _j =25°C, I _o =0 |
| Quiescent Current Change | ΔI _q | | | 1.0mA | 14.5V ≤ V _i ≤ 30V |
| | | | | 0.5mA | 5mA ≤ I _o ≤ 1.0A |
| Output Noise Voltage | V _N | | 75µV | | 10Hz ≤ f ≤ 100KHz T _j =25°C |
| Ripple Rejection | RR | 55dB | 71dB | | f=120Hz |
| Dropout Voltage | V _d | | 2.0V | | I _o =1.0A, T _j =25°C |
| Output Short Circuit Current | R _o | | 18mohm | | f=1.0KHz |
| Output Short Circuit Current | I _{os} | | 350mA | | T _j =25°C |
| Peak Output Current | I _{opeak} | | 2.2A | | T _j =25°C |
| Temperature Coefficient of Output voltage | ΔV _o /ΔT _j | | 1.0mV/°C | | 0°C ≤ T _j ≤ 125°C, I _o =5mA |

Three-Terminal Positive Voltage Regulators

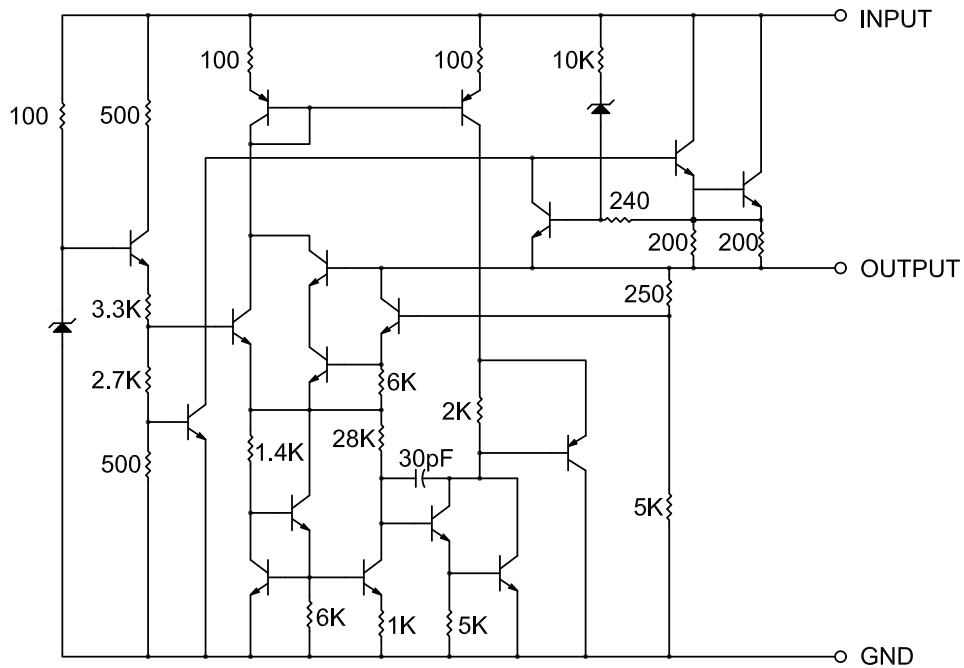
TO-220



| DIM | INCHES | | MM | | NOTE |
|-----|--------|------|-------|-------|------|
| | MIN | MAX | MIN | MAX | |
| A | .560 | .625 | 14.22 | 15.88 | |
| B | .380 | .420 | 9.65 | 10.67 | |
| C | .100 | .135 | 2.54 | 3.43 | |
| D | .230 | .270 | 5.84 | 6.86 | |
| E | .380 | .420 | 9.65 | 10.67 | |
| F | ----- | .250 | ----- | 6.35 | |
| G | .500 | .580 | 12.70 | 14.73 | |
| H | .090 | .110 | 2.29 | 2.79 | |
| I | .020 | .045 | 0.51 | 1.14 | |
| J | .012 | .025 | 0.30 | 0.64 | |
| K | .139 | .161 | 3.53 | 4.09 | ∅ |
| L | .140 | .190 | 3.56 | 4.83 | |
| M | .045 | .055 | 1.14 | 1.40 | |
| N | .080 | .115 | 2.03 | 2.92 | |

MC7812CT

Representation Schematic Diagram





Micro Commercial Components

Ordering Information

| | |
|----------------------------|---------------------------|
| Device (Part Number)-BP | Packing Bulk;1Kpcs/Box |
|----------------------------|---------------------------|

*****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.

*****APPLICATIONS DISCLAIMER*****

Products offer by *Micro Commercial Components Corp.* are not intended for use in Medical, Aerospace or Military Applications.

www.mccsemi.com