

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_j=25°C, Unless Otherwise Noted

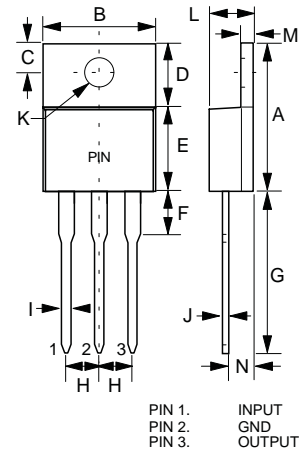
Parameter	Symbol	Value	Unit
Input Voltage	V _I	30	V
Operating Ambient Temperature	P _D	15	W
Operating Junction Temperature	T _{OPR}	-20---+75	°C
Storage Temperature Range	T _{STG}	-55---+125	°C

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

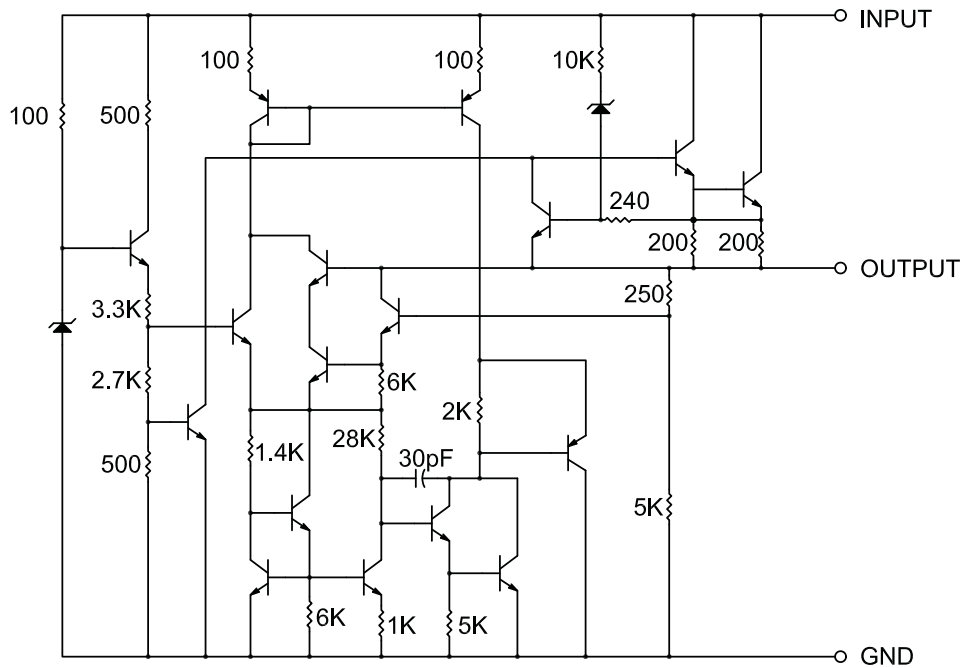


DIMENSIONS

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.