



Micro Commercial Components

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

MC7815CT

Three-Terminal Positive Voltage Regulators

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

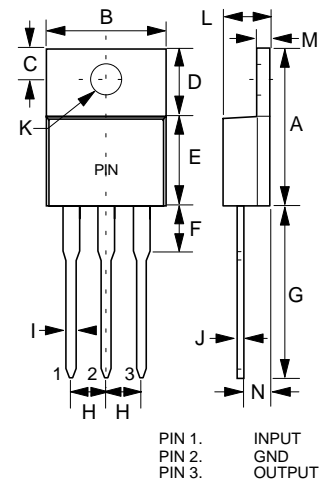
Maximum Ratings @ T_A=25°C, Unless Otherwise Noted

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=23V, 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	14.7V	15.0V	15.3V	T _J =25°C
		14.55V		15.45V	17.5V ≤ V _I ≤ 30V, 5mA ≤ I _O ≤ 1.0A, P _D =15W
Load Regulation	ΔV _O		12mV	300mV	5mA ≤ I _O ≤ 1.5A, T _J =25°C,
			4.0mV	150mV	250mA ≤ I _O ≤ 750mA, T _J =25°C
Line regulation	ΔV _O		11mV	300mV	17.5V ≤ V _I ≤ 30V, T _J =25°C
			3.0mV	150mV	16V ≤ V _I ≤ 22V, T _J =25°C
Quiescent Current	I _q		4.4mA	8.0mA	T _J =25°C, I _O =0
Quiescent Current Change	ΔI _q			1.0mA 0.5mA	14.5V ≤ V _I ≤ 30V 5mA ≤ I _O ≤ 1.0A
Output Noise Voltage	V _N		90µV		10Hz ≤ f ≤ 100KHz T _J =25°C
Ripple Rejection	RR	55dB	70dB		f=120Hz
Dropout Voltage	V _d		2.0V		I _O =1.0A, T _J =25°C
Output Short Circuit Current	R _O		19mohm		f=1.0KHz
Output Short Circuit Current	I _{OS}		230mA		T _J =25°C
Peak Output Current	I _{opeak}		2.1A		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

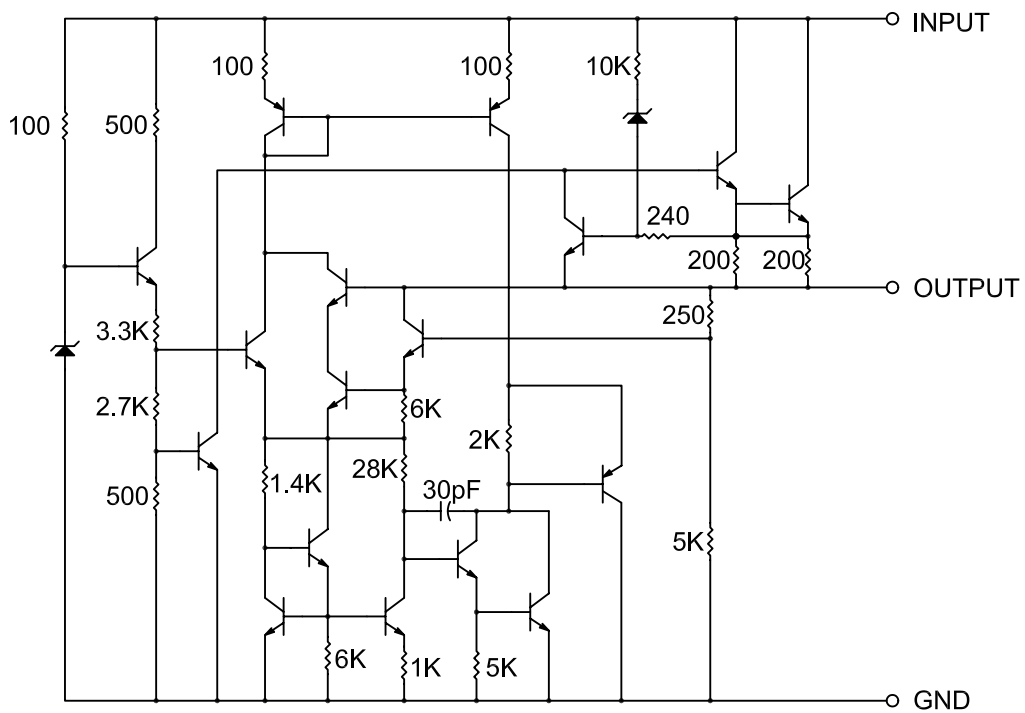
TO-220



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	

MC7815CT

Representation Schematic Diagram





TM

Micro Commercial Components

*****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