



M.C.C.

Micro Commercial Components

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

LM317DT

Adjustable Voltage Regulators

Features

- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1
- Marking: LM317
- Output voltage range: 1.2V to 37V
- Output current in excess of 1.5A
- Halogen free available upon request by adding suffix "-HF"

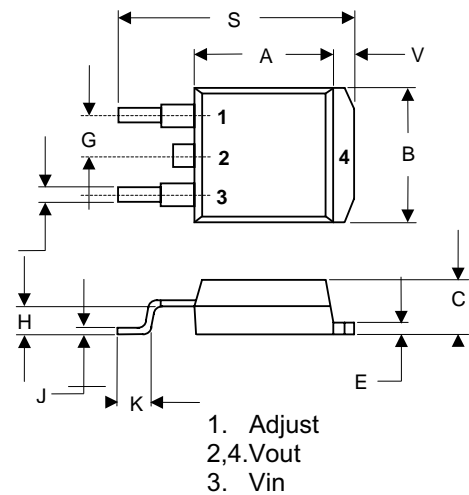
Maximum Ratings @ T_a=25°C, Unless Otherwise Noted

Parameter	Symbol	Value	Unit
Input-Output Voltage Differential	V _I -V _O	40	V
Operating Ambient Temperature	P _D	Internally Limited	W
Operating Junction Temperature	T _{OPR}	0---+125	°C
Storage Temperature Range	T _{STG}	-65---+125	°C
Temperature Coefficient of Output Voltage	ΔV _O /ΔT	±0.02	%/°C
Lead Temperature	T _{LEAD}	230	°C

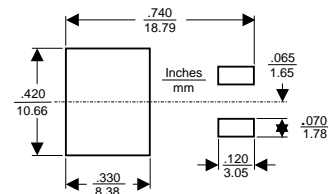
Electrical Characteristics (V_I-V_O=5V, I_O=500mA, I_{MAX}=1.5A, P_{MAX}=20W, unless otherwise specified)

Parameter	Sym	Min	Typ	Max	Test conditions
Reference Voltage	V _{REF}	1.2V	1.25V	1.3V	3V ≤ V _I -V _O ≤ 40V 10mA ≤ I _O ≤ I _{MAX}
Load regulation	R _{load}	---	18	25mV%/V	10mA ≤ I _O ≤ I _{MAX} , V _O < 5v
		---	0.4	0.5 mV%/V	V _O ≥ 5v
Line regulation	R _{line}	---	40	70 mV%/V	10mA ≤ I _O ≤ I _{MAX} , V _O < 5v
		---	0.8	1.5 mV%/V	V _O ≥ 5v
Adjustment pin current	I _Q	---	0.01%/V	0.04%/V	3V ≤ V _I -V _O ≤ 40V
		---	0.02%/V	0.07%/V	3V ≤ V _I -V _O ≤ 40V
Adjustment pin current charge	I _{Q(V)}	---	46uA	100 μ A	---
Adjustment pin current charge	I _{Q(V)}	---	2uA	5 μ A	V _I -V _O =3V to 40V, I _O =10mA to I _{MAX}
Minimum Load Current to Main Regulation	I _L	---	3.5mA	12mA	V _I -V _O =40v
Ripple rejection	RR	66dB	60dB	75dB	V _O =10V F=120Hz, C _{ADJ} =10 μ F
Temperature Stability	ST _T	---	0.7%/N _O	---	---
RMS Noise, % of V _{OUT}	eN	---	0.003%/V _O	0.01%/V _O	10Hz-10kHz
Longterm, T _J =T _{HIGH}	ST	---	0.3%	1%	T _a =25°C for end point measurements, 1000H R
Thermal Resistance Junction to Case	R _{JC}	---	5°C/W	---	---

D2-PACK



DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.320	.359	8.13	9.14	
B	.380	.411	9.65	10.45	
C	.160	.190	4.06	4.83	
D	.020	.035	0.51	0.89	
E	.045	.055	1.14	1.40	
G	.095	.105	2.41	2.67	
H	.096	.120	2.43	3.03	
J	.014	.021	0.35	0.53	
K	.090	.110	2.29	2.79	
S	.575	.625	14.60	15.80	
V	.045	.055	1.14	1.40	



www.mccsemi.com



TM

Micro Commercial Components

Ordering Information

Device	Packing
(Part Number)-TP	Tape&Reel;800pcs/Reel
(Part Number)-BP	Bulk;50pcs/Box

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

www.mccsemi.com