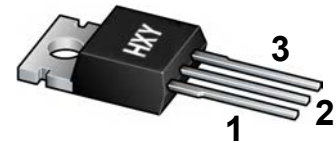




Features

- Output Voltage Range: 1.2V to 37V
- Output Current In Excess of 1.5A
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)



1. Adj 2. Output 3. Input

TO-220

Package Marking and Ordering Information

Product ID	Pack	Marking	Units Tube
LM317T-DG	TO-220		50

Maximum Ratings

Parameter	Symbol	Value	Unit
Input Voltage	V_I	40	V
Output Current	I_o	1.5	A
Power Dissipation	P_D	Internally Limited	W
Operating Junction Temperature Range	T_{OPR}	0~125	°C
Storage Temperature Range	T_{STG}	-65~125	°C
Operating Junction Temperature Range	T_J	0~125	°C

Electrical Characteristics

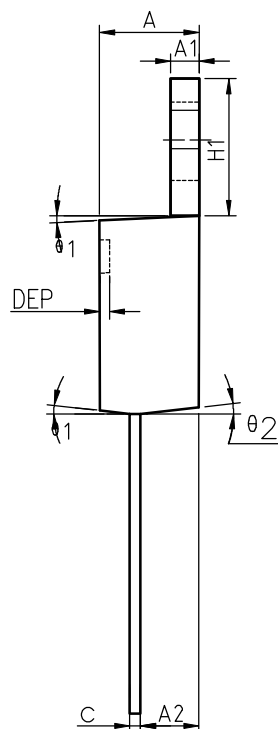
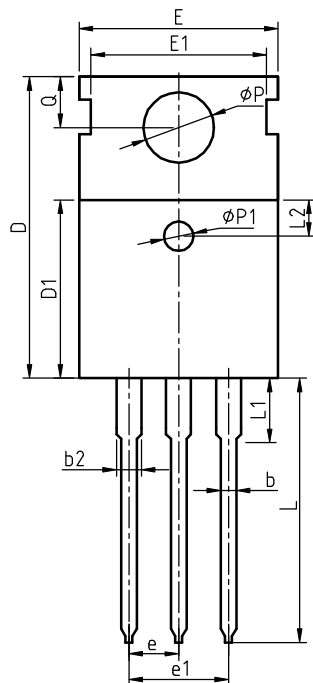
@ 25°C ($V_i - V_o = 5V$, $I_o = 500mA$, $I_{MAX} = 1.5A$, $P_{MAX} = 20W$ Unless Otherwise Specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reference Voltage	V_{ref}	$V_i - V_o = 5V$, $I_o = 40mA$ to $500mA$	1.20	1.25	1.30	V
Load Regulation	ΔV_o	$V_i - V_o = 5V$, $I_o = 5mA$ to $1.5A$	-	-	1.0	%
Line Regulation	ΔV_o	$V_i - V_o = 3V$ to $40V$, $I_o = 40mA$ to $500mA$	-	-	0.05	%/V
Adjustment Pin Current	I_q	$V_i - V_o = 5V$, $I_o = 40mA$ to $500mA$	-	-	100	μA
Adjustment Pin Current	$I_{q(V)}$	$V_i - V_o = 3V$ to $40V$, $I_o = 40mA$ to $500mA$	-	-	5	μA
Adjustment Pin Current	$I_{q(I)}$	$V_i - V_o = 5V$, $I_o = 5mA$ to $1.5A$	-	-	5	μA
Ripple Rejection	Strip	$V_o = 10V$ $F = 100Hz$, $C_{ADJ} = 10\mu F$	66	-	-	dB



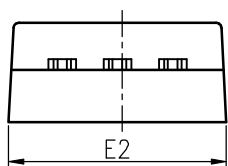
Package Information

TO-220



COMMON DIMENSIONS

SYMBOL	MIN	NOM	MAX	MIN	NOM	MAX
A	4.40	4.57	4.70	0.173	0.180	0.185
A1	1.27	1.30	1.33	0.050	0.051	0.052
A2	2.35	2.40	2.50	0.093	0.094	0.098
b	0.77	0.80	0.90	0.030	0.031	0.035
b2	1.17	1.27	1.36	0.046	0.050	0.054
c	0.48	0.50	0.56	0.019	0.020	0.022
D	15.40	15.60	15.80	0.606	0.614	0.622
D1	9.00	9.10	9.20	0.354	0.358	0.362
DEP	0.05	0.10	0.20	0.002	0.004	0.008
E	9.80	10.00	10.20	0.386	0.394	0.402
E1	-	8.70	-	-	0.343	-
E2	9.80	10.00	10.20	0.386	0.394	0.402
e		2.54	BSC		0.100	BSC
e1		5.08	BSC		0.200	BSC
H1	6.40	6.50	6.60	0.252	0.256	0.260
L	12.75	13.50	13.65	0.502	0.531	0.537
L1	-	3.10	3.30	-	0.122	0.130
L2		2.50	REF		0.098	REF
P	3.50	3.60	3.63	0.138	0.142	0.143
P1	3.50	3.60	3.63	0.138	0.142	0.143
Q	2.73	2.80	2.87	0.107	0.110	0.113
θ 1	5°	7°	9°	5°	7°	9°
θ 2	1°	3°	5°	1°	3°	5°
θ 3	1°	3°	5°	1°	3°	5°





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