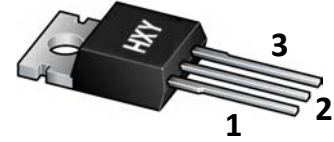




### FEATURES

- 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	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



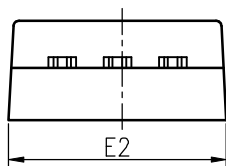
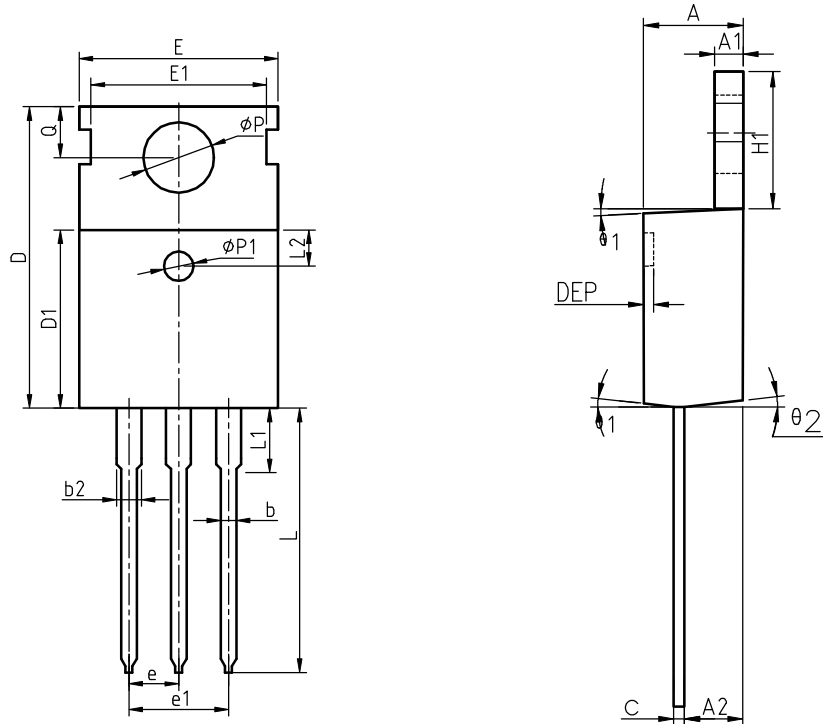
**Electrical Characteristics @ 25°C ( $V_i-V_o=5V$ ,  $I_o=500mA$ ,  $I_{MAX}=1.5A$ ,  $P_{MAX}=20W$  Unless Otherwise Specified)**

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	$\Delta V_o$	$V_i-V_o=5V$ , $I_o=5mA$ to 1.5A	-	-	1.0	%
Line Regulation	$\Delta V_o$	$V_i-V_o=3V$ 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	$\mu A$
Adjustment Pin Current	$I_{q(V)}$	$V_i-V_o=3V$ to 40V, $I_o=40mA$ to 500mA	-	-	5	$\mu A$
Adjustment Pin Current	$I_{q(i)}$	$V_i-V_o=5V$ , $I_o=5mA$ to 1.5A	-	-	5	$\mu A$
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
theta 1	5°	7°	9°	5°	7°	9°
theta 2	1°	3°	5°	1°	3°	5°
theta 3	1°	3°	5°	1°	3°	5°



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