LM317K

3-Terminal Positive Adjustable Regulators

GENERAL DESCRIPTION

The LM317T are monolithic integrated circuits in TO220 packages.
They are intended for use as positive adjustable voltage regulators, and designed to supply more than 1.5A of load current whit an output voltage adjustable over a 1.2 to 37V range.
Compliance to RoHS.

ABSOLUTE MAXIMUM RATINGS

Symbol	Ratings	Value	Unit
V_i-V_o	Input-Output Voltage Differential	40	V
I_o	Output Current	1.5	A
P_D	Power Dissipation	Internally Limited	W
T_{OP}	Operating Junction Temperature	0° to 125	°C
T_{STG}	Storage Temperature	-65° to 150	°C

THERMAL DATA

Symbol	Ratings	Value	Unit
R_{thJC}	From Junction to Case Thermal Resistance	1.67	°C/W
R_{thJA}	From Junction to Free-Air Thermal Resistance	62.5	

CHARACTERISTICS

V_i-V_o = 5 V, I_O = 500 mA, I_{MAX} = 1.5 A, P_{MAX} = 20 W, unless otherwise specified

Symbol	Ratings	Test Condition(s)	Min	Typ	Max	Unit
V_{REF}	Reference Voltage	V_i-V_o = 5 V I_O = 40 to 500 mA	1.2	1.25	1.3	V
ΔV_o	Line Regulation	V_i-V_o = 3 to 40 V I_O = 500 mA	-	-	0.05	%/V
ΔV_o	Load Regulation	V_i-V_o = 5 V I_O = 10mA to 1.5 A	-	-	1	%
I_{ADJ}	Adjustment Pin Current	V_i-V_o = 5 V I_O = 40 to 500 mA	-	-	100	µA
ΔI_{ADJ}	Adjustment Pin Current	V_i-V_o = 3 to 40 V I_O = 40 to 500 mA	-	-	5	µA
ΔI_{ADJ}	Adjustment Pin Current	V_i-V_o = 5 V I_O = 10mA to 1.5 A	-	-	5	µA
S_{VR}	Ripple Rejection	V_i-V_o = 5 V; I_O= 500 m A V_O= 10 V; f= 100 Hz C_{ADJ} = 10 µF	66	-	-	dB

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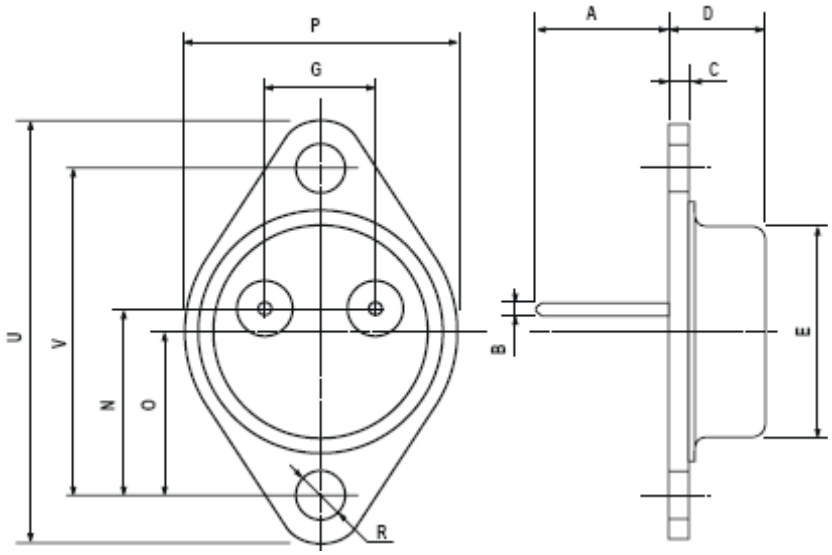
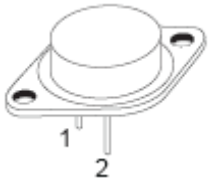
MECHANICAL DATA CASE TO-3

DIMENSIONS (mm)		
	min	max
A	11	13.10
B	0.97	1.15
C	1.5	1.65
D	8.32	8.92
F	19	20
G	10.70	11.1
N	16.50	17.20
P	25	26
R	4	4.09
U	38.50	39.30
V	30	30.30



Pin 1 :	Adjust.
Pin 2 :	Input
Case :	Output



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