

### 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 <sub>i</sub> -V <sub>o</sub>	Input-Output Voltage Differential	40	V
l <sub>o</sub>	Output Current	1.5	А
P <sub>D</sub>	Power Dissipation	Internally Limited	W
T <sub>OP</sub>	Operating Junction Temperature	0° to 125	°C
T <sub>STG</sub>	Storage Temperature	-65° to 150	°C

### THERMAL DATA

Symbol	Ratings	Value	Unit
<b>R</b> <sub>thJC</sub>	From Junction to Case Thermal Resistance	1.67	8 <b>0</b> (M)
<b>R</b> <sub>thJA</sub>	From Junction to Free-Air Thermal Resistance	62.5	°C/W

### **CHARACTERISTICS**

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

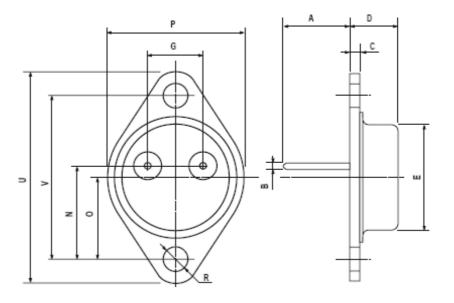
Symbol	Ratings	Test Condition(s)	Min	Тур	Max	Unit
V <sub>REF</sub>	Reference Voltage	$V_i - V_o = 5 V$ $I_o = 40 \text{ to } 500 \text{ mA}$	1.2	1.25	1.3	V
ΔVo	Line Regulation	$V_i - V_o = 3 \text{ to } 40 \text{ V}$ $I_O = 500 \text{ mA}$	-	-	0.05	%/V
ΔVo	Load Regulation	$V_i - V_o = 5 V$ $I_o = 10 mA$ to 1.5 A	-	-	1	%
I <sub>ADJ</sub>	Adjustment Pin Current	$V_i - V_o = 5 V$ $I_o = 40 \text{ to } 500 \text{ mA}$	-	-	100	μA
$\Delta I_{ADJ}$	Adjustment Pin Current	$V_i - V_o = 3 \text{ to } 40 \text{ V}$ $I_O = 40 \text{ to } 500 \text{ mA}$	-	-	5	μA
$\Delta I_{ADJ}$	Adjustment Pin Current	$V_i - V_o = 5 V$ $I_o = 10 mA$ to 1.5 A	-	-	5	μA
S <sub>VR</sub>	Ripple Rejection	$V_i-V_o = 5 V; I_o = 500 m A$ $V_o = 10 V; f = 100 Hz$ $C_{ADJ} = 10 \mu F$	66	-	-	dB



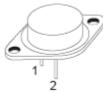
## LM317K

### **MECHANICAL DATA CASE TO-3**

DIMENSIONS (mm)		
	min	max
А	11	13.10
В	0.97	1.15
С	1.5	1.65
D	8.32	8.92
F	19	20
G	10.70	11.1
Ν	16.50	17.20
Р	25	26
R	4	4.09
U	38.50	39.30
V	30	30.30



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



#### **Revised September 2012**

Information furnished is believed to be accurate and reliable. However, Comset Semiconductors assumes no responsibility for the consequences of use of such information nor for any infringement of patents or other rights of third parties which may results from its use. Data are subject to change without notice. Comset Semiconductors makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does Comset Semiconductors assume any liability arising out of the application or use of any product and specifically disclaims any and all liability, including without limitation consequential or incidental damages. Comset Semiconductors' products are not authorized for use as critical components in life support devices or systems.

www.comsetsemi.com

info@comsetsemi.com