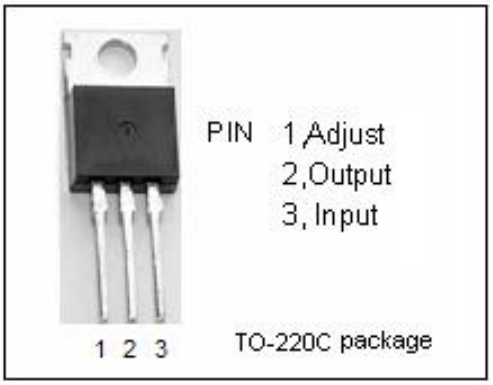
isc Adjustable Voltage Regulator LM317T

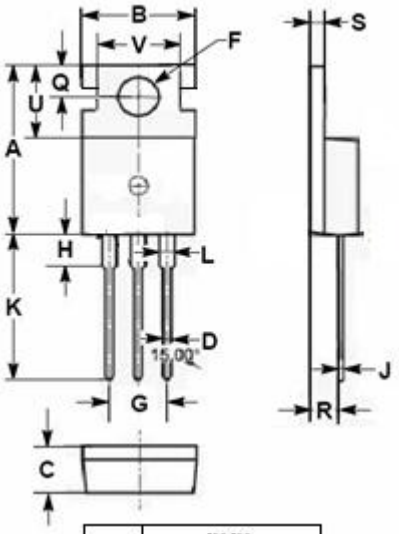


FEATURES

- Output Voltage Range :1.2V to 37V
- Output Current In Excess of 1.5A
- 0.1% Line and Load Regulation
- Floating Operation for High Voltage
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

DESCRIPTION

- They are designed to supply more than 1.5A of load current with an output voltage adjustable over a 1.2 to 37V range.
- The nominal output voltage is selected by means of only a resistive divider,making the device exceptionally easy to use and eliminating the stocking of many fixed regulators.



DIM	mm MIN	MAX
A	15.50	15.90
B	9.80	10.20
C	4.20	4.50
D	0.70	0.90
F	3.40	3.70
G	4.98	5.18
H	2.68	2.90
J	0.44	0.60
K	12.80	13.40
L	1.20	1.45
Q	2.70	2.90
R	2.30	2.70
S	1.29	1.35
U	6.45	6.65
V	8.66	8.86

ABSOLUTE MAXIMUM RATING(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_i -V_o	Input-output Differential Voltage	40	V
I_O	Output Current	1.5	A
P_D	Power Dissipation	Internally Limited	W
T_{OP}	Operating Junction Temperature	0~125	℃
T_{STG}	Storage Temperature	-65~125	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance, Junction to Case	5	℃/W
$R_{th\ j\text{-}a}$	Thermal Resistance,Junction to Ambient	35	℃/W

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• ELECTRICAL CHARACTERISTICS

(V_i -V_o =5V, I_O=0.5A ,I_{MAX}=1.5A ,P_{MAX}=20W,unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$\triangle V_O$	Line Regulation	V_i -V_o= 3V to 40V;I_O=10mA to 1.5A			0.07	%/ V
S_{VR}	Ripple Rejection	V_o= 10V; f= 120Hz, C_{ADJ}= 10 μ F	66			dB
$\triangle V_O$	Load Regulation	I_O= 10mA to 1.5A;V_o≤5V ； T_j = 25 °C			25	mV
		I_O= 10mA to 1.5A;V_o>5V ； T_j = 25 °C			0.5	%
Io (min)	Minimum Load Current	Vi - Vo = 40 V			12	mA
I_O (max)	Maximum Load Current	V_i - V_o ≤ 15 V	1.5			A
		Vi - Vo = 40 V;T_j = 25 °C		0.3		A
I_{ADJ}	Adjustment Pin Current	V_i -V_o= 5V ;I_O= 500mA			100	μ A
$\triangle I_{ADJ}$	Adjustment Pin Current	V_i -V_o= 3V to 40V;I_O= 10mA to1.5A			5	μ A
V_{REF}	Reference Voltage	V_i -V_o= 3V to 40V ; I_O= 10mA to 1.5A, P≤15W	1.2	1.25	1.3	V