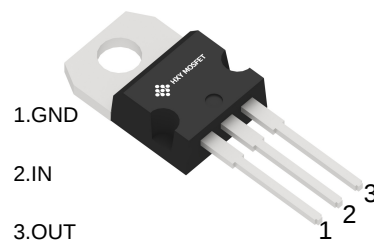




Features

- Maximum output current: $I_{OM} = -1.5A$
- Output voltage: $V_O = -12V$
- Continuous total dissipation: $P_D: 1.5 W$ ($T_a = 25^\circ C$)



TO-220S

Maximum Ratings ($T_a = 25^\circ C$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Input Voltage	V_i	-35	V
Thermal Resistance from Junction to Air	$R_{\theta JA}$	83.3	$^\circ C/W$
Operating Junction Temperature Range	T_{POR}	-40~+125	$^\circ C$
Storage Temperature Range	T_{STG}	-65~+150	$^\circ C$

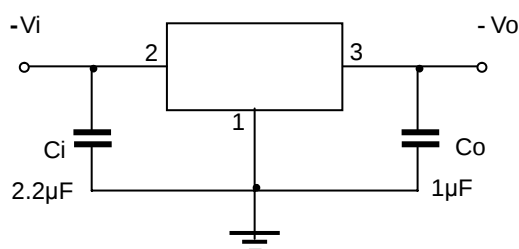
Electrical Characteristics ($T_a = 25^\circ C$ unless otherwise specified)

($V_i = -19V$, $I_o = 500mA$, $C_i = 2.2\mu F$, $C_o = 1\mu F$, unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Output Voltage	V_o	$25^\circ C$	-11.52	-12	-12.48	V
		$-14.5V \leq V_i \leq -27V$, $I_o = 5mA-1A$	-11.4	-12	-12.6	V
Load Regulation	ΔV_o	$I_o = 5mA-1.5A$		15	200	mV
		$I_o = 250mA-750mA$		5	75	mV
Line Regulation	ΔV_o	$-14.5V \leq V_i \leq -30V$		5	80	mV
		$-16V \leq V_i \leq -22V$		3	30	mV
Quiescent Current	I_q	$25^\circ C$		2	3	mA
Quiescent Current Change	ΔI_q	$-14.5V \leq V_i \leq -30V$			0.5	mA
	ΔI_q	$5mA \leq I_o \leq 1A$			0.5	mA
Output Noise Voltage	V_N	$10Hz \leq f \leq 100KHz$		300		$\mu V/V_o$
Output Voltage Drift	$\Delta V_o / \Delta T$	$I_o = 5mA$		-0.8		mV/ $^\circ C$
Ripple Rejection	RR	$-15V \leq V_i \leq -25V$, $f = 120Hz$	54	60		dB
Dropout Voltage	V_d	$I_o = 1A$		1.1		V
Peak Current	I_{pk}	$25^\circ C$		2.1		A

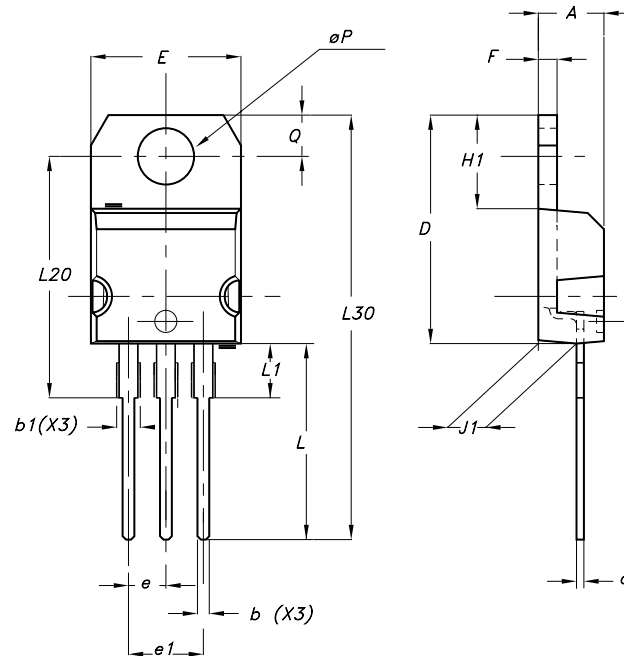
* Pulse test.

Typical Application





Package Information TO-220S



DIM.	mm.			inch		
	MIN.	TYP	MAX.	MIN.	TYP.	MAX.
A	4.40		4.60	0.173		0.181
b	0.61		0.88	0.024		0.034
b1	1.15		1.70	0.045		0.066
c	0.49		0.70	0.019		0.027
D	15.25		15.75	0.60		0.620
E	10		10.40	0.393		0.409
e	2.40		2.70	0.094		0.106
e1	4.95		5.15	0.194		0.202
F	1.23		1.32	0.048		0.052
H1	6.20		6.60	0.244		0.256
J1	2.40		2.72	0.094		0.107
L	13		14	0.511		0.551
L1	3.50		3.93	0.137		0.154
L20		16.40			0.645	
L30		28.90			1.137	
øP	3.75		3.85	0.147		0.151
Q	2.65		2.95	0.104		0.116



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