

#### **Features**

Maximum output current I<sub>OM</sub>: 1 A

Output voltage V<sub>O</sub>: 6V

Continuous total dissipation P<sub>D</sub>: 1.5 W (T<sub>a</sub>= 25 °C)



## Maximum Ratings (Ta=25 ℃ unless otherwise noted)

**TO-220S** 

Parameter	Symbol	Value	Unit
Input Voltage	Vi	35	V
Thermal Resistance from Junction to Air	$R_{\theta JA}$	66.7	°C/W
Operating Junction Temperature Range	T <sub>OPR</sub>	-25~+125	°C
Storage Temperature Range	$T_{STG}$	-65~+150	°C

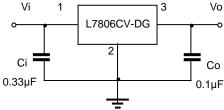
## Electrical Characteristics (Ta=25°C unless otherwise specified)

(V<sub>i</sub>=-11V, Io=500mA, C<sub>i</sub>=2.2 $\mu$ F,Co=1 $\mu$ F, unless otherwise specified )

Parameter	Symbol	Test conditions	Min	Тур	Ма	Unit	
			25℃	5.75	6	6.25	V
Output voltage	Vo	8V≤V i≤21V, Io=5mA-1A	-25-125℃	5.7	6	6.3	V
Load Regulation	△Vo	Io=5mA-1A	25℃		14	120	mV
		Io=250mA-750mA	25℃		4	60	mV
Line regulation	△Vo	8V≤V i≤25V	25℃		5	120	mV
		9V≤V i≤13V	25℃		1.5	60	mV
Quiescent Current	Iq		25℃		4.3	8	mA
Quiescent Current Change	△lq	8V≤V i≤25V	-25-125℃			1.3	mA
		5mA≤l <sub>0</sub> ≤1A	-25-125℃			0.5	mA
Output voltage drift	△Vo/△T	I <sub>O</sub> =5mA	0-125℃		-0.8		mV/℃
Output Noise Voltage	V <sub>N</sub>	10Hz≤f≤100KHz	25℃		45		μV/Vo
Ripple Rejection	RR	9V≤V <sub>i</sub> ≤19V,f=120Hz	-25-125℃	59	75		dB
Dropout Voltage	Vd	Io=1A	25℃		2		V
Output resistance	Ro	f=1KH <sub>Z</sub>	25℃		10		mΩ
Short Circuit Current	Isc		25℃		550		mA
Peak Current	lpk		25℃		2.2		А

<sup>\*</sup> Pulse test.

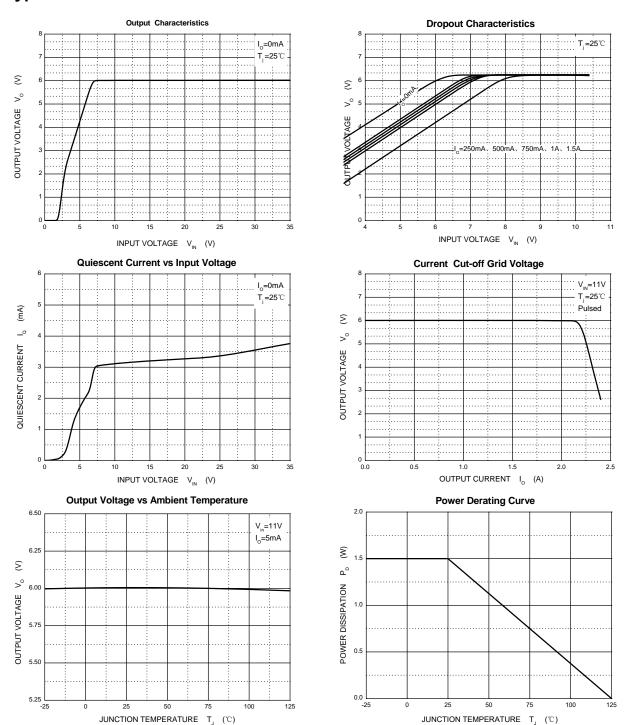
## **Typical Application**



Note: Bypass capacitors are recommended for optimum stability and transient response and should be located as close as possible to the regulators.

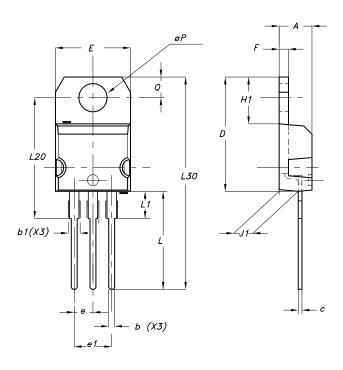


# **Typical Characteristics**





# Package Information TO-220S



DIM.	mm.			inch			
	MIN.	TYP	MAX.	MIN.	TYP.	MAX.	
Α	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	
С	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	
е	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		
øΡ	3.75		3.85	0.147		0.151	
Q	2.65		2.95	0.104		0.116	



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