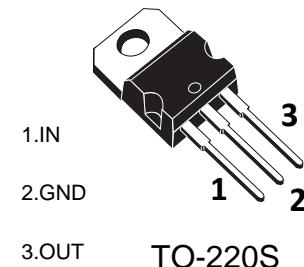




Features

- Maximum output current: $I_{OM}= 1.5A$
- Output voltage: $V_{O}= 8V$
- Continuous total dissipation: $P_D: 1.5 W (T_a= 25 ^\circ C)$



Maxmim Ratings (Ta=25°C unless otherwise noted)

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

Electrcal Charcteristics (Ta=25°C unless otherwise specified)

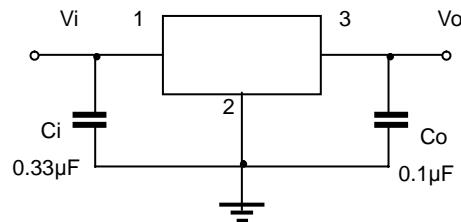
($V_i=-23V$, $I_o=500mA$, $C_i=2.2\mu F$, $C_o=1\mu F$, unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit	
Output Voltage	V_o		25°C	7.7	8	8.3	V
		10.5V≤ V_i ≤23V, $I_o=5mA-1A$	-25-125°C	7.6	8	8.4	V
Load Regulation	ΔV_o	$I_o=5mA-1.5A$	25°C		12	160	mV
		$I_o=250mA-750mA$	25°C		4	80	mV
Line Regulation	ΔV_o	10.5V≤ V_i ≤25V	25°C		6	160	mV
		11V≤ V_i ≤17V	25°C		2	80	mV
Quiescent Current	I_q		25°C		4.3	8	mA
Quiescent Current Change	ΔI_q	10.5V≤ V_i ≤25V	-25-125°C		1	mA	
		5mA≤ I_o ≤1A	-25-125°C		0.5	mA	
Output Voltage Drift	$\Delta V_o/\Delta T$	$I_o=5mA$	-25-125°C		-0.8		mV/°C
Output Noise Voltage	V_N	10Hz≤f≤100KHz	25°C		52		μV/Vo
Ripple Rejection	RR	11.5V≤ V_i ≤21.5V, f=120Hz	-25-125°C	55	72		dB
Dropout Voltage	V_d	$I_o=1A$	25°C		2		V
Output Resistance	R_o	f=1KHz	25 °C		10		mΩ
Short Circuit Current	I_{sc}		25°C		450		mA
Peak Current	I_{pk}		25°C		2.2		A

* Pulse test.

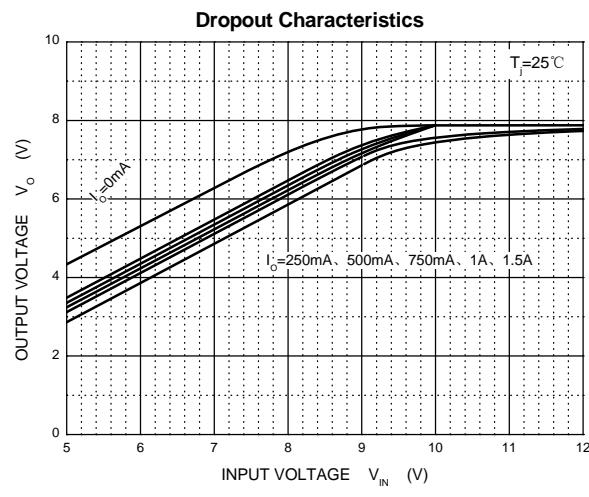
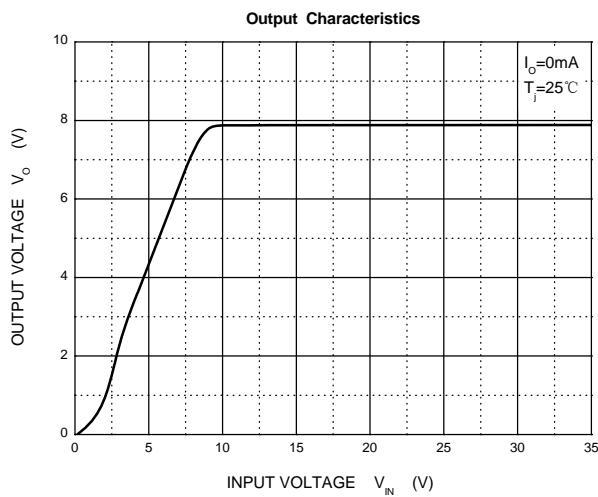


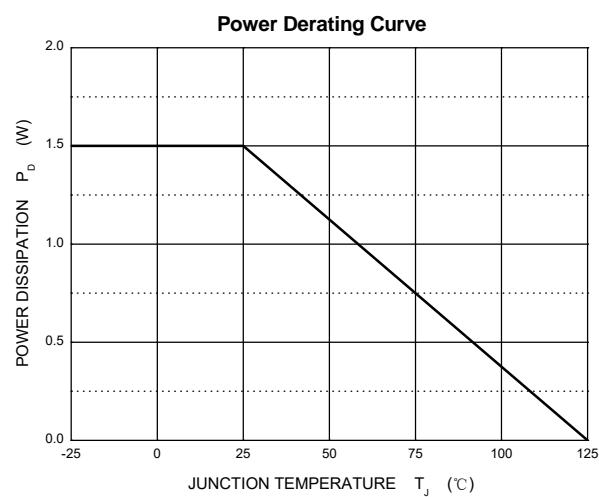
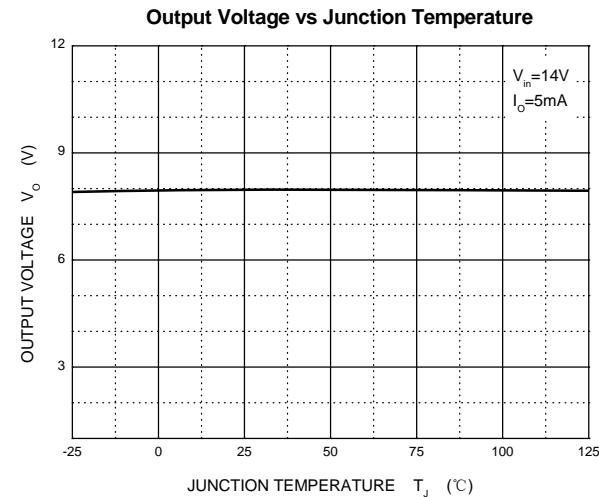
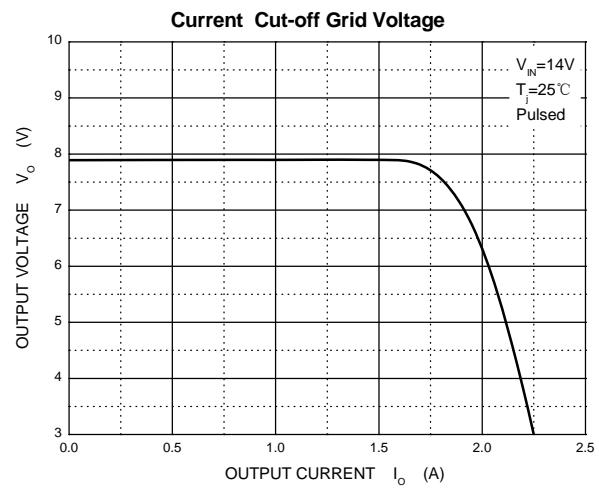
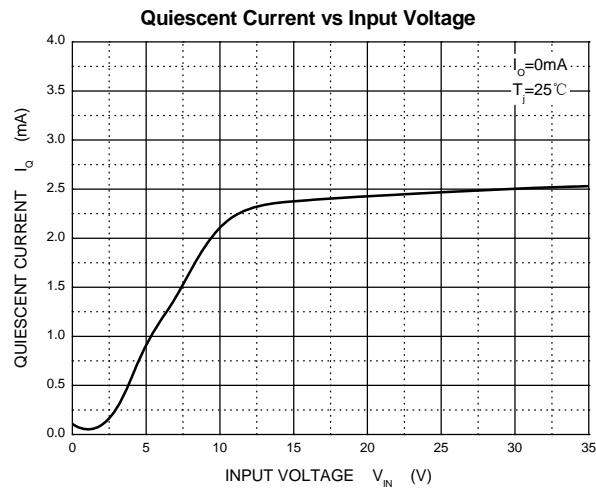
Typical Application



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

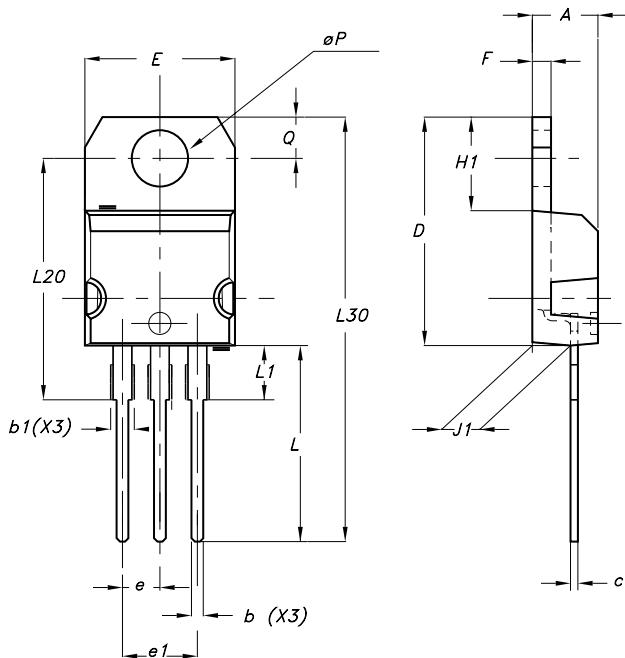
Typical Characteristics







Package Information TO-220S



DIM.	mm.			inch		
	MIN.	Typ	MAX.	MIN.	Typ.	MAX.
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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