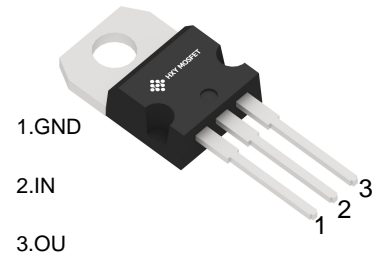




## Features

- Maximum output current:  $I_{OM} = -1.5A$
- Output voltage:  $V_O = -5V$
- 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	$T_{OPR}$	-40~+125	$^\circ C$
Storage Temperature Range	$T_{STG}$	-65~+150	$^\circ C$

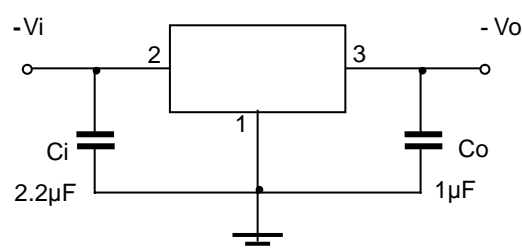
## Electrical Characteristics ( $T_a = 25^\circ C$ unless otherwise specified)

( $V_i = -10V$ ,  $I_o = 500mA$ ,  $C_i = 2.2\mu F$ ,  $C_o = 1\mu F$ , unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Output Voltage	$V_o$	$25^\circ C$	-4.8	-5	-5.2	V
		$-7V \leq V_i \leq -20V$ , $I_o = 5mA - 1A$	-4.75	-5	-5.25	V
Load Regulation	$\Delta V_o$	$I_o = 5mA - 1.5A$		15	100	mV
		$I_o = 250mA - 750mA$		5	50	mV
Line Regulation	$\Delta V_o$	$-7V \leq V_i \leq -25V$		12.5	50	mV
		$-8V \leq V_i \leq -12V$		4	15	mV
Quiescent Current	$I_q$	$25^\circ C$		1.5	2	mA
Quiescent Current Change	$\Delta I_q$	$-7V \leq V_i \leq -25V$			0.5	mA
	$\Delta I_q$	$5mA \leq I_o \leq 1A$			0.5	mA
Output Noise Voltage	$V_N$	$10Hz \leq f \leq 100KHz$		125		$\mu V/V_o$
Output Voltage Drift	$\Delta V_o / \Delta T$	$I_o = 5mA$		-0.4		mV/ $^\circ C$
Ripple Rejection	RR	$-8V \leq V_i \leq -18V$ , $f = 120Hz$	54	60		dB
Dropout Voltage	$V_d$	$I_o = 1A$		1.1		V
Peak Current	$I_{pk}$	$25^\circ C$		2.1		A

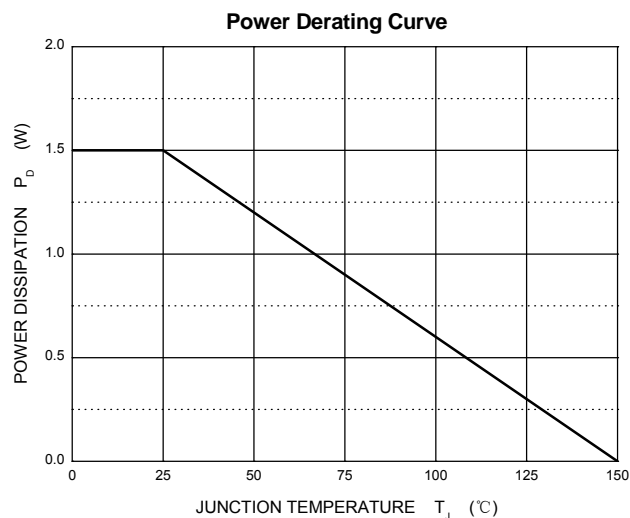
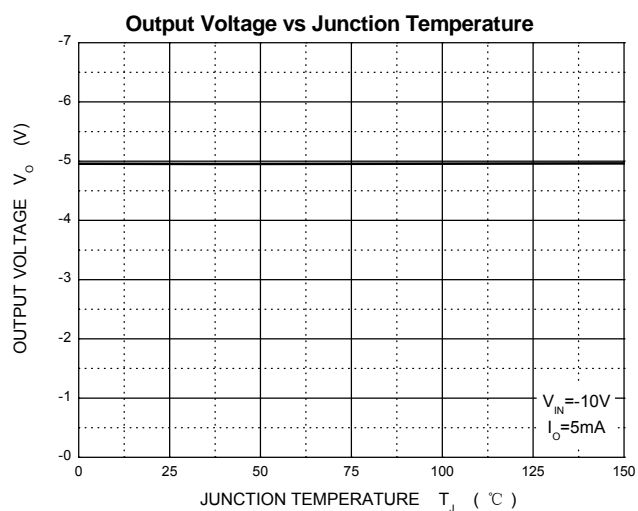
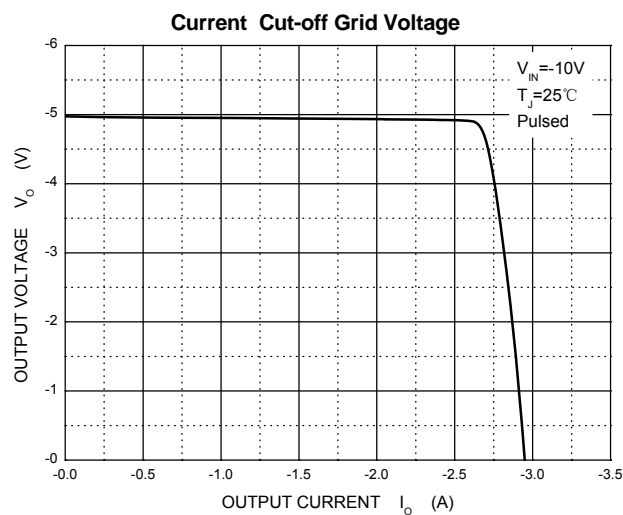
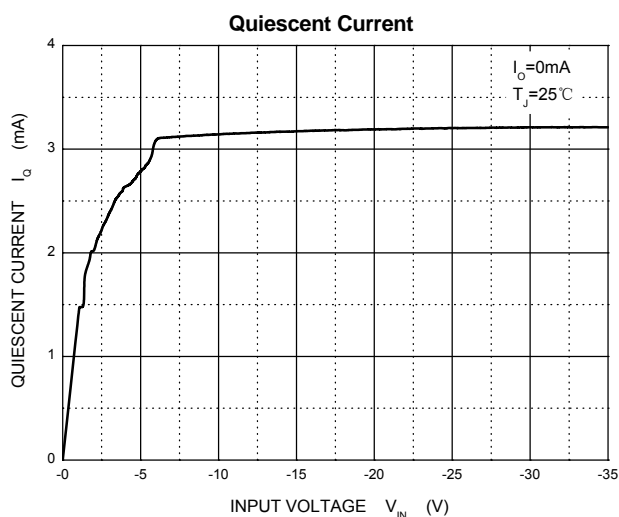
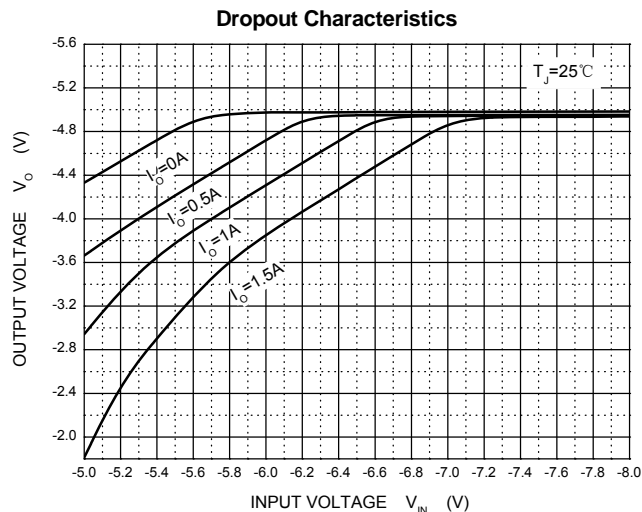
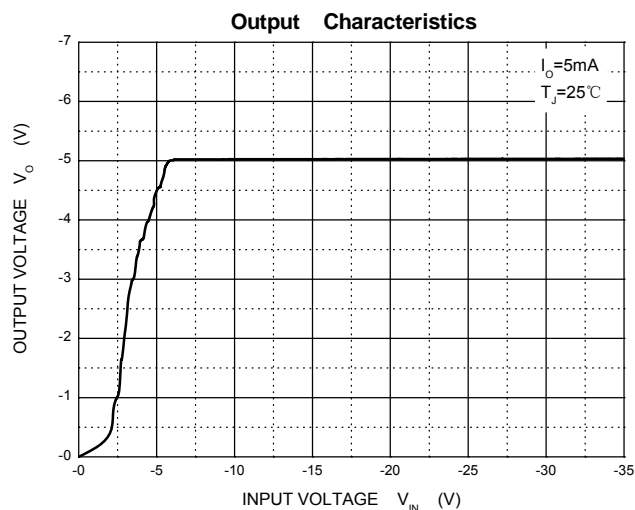
\* Pulse test.

## Typical Application



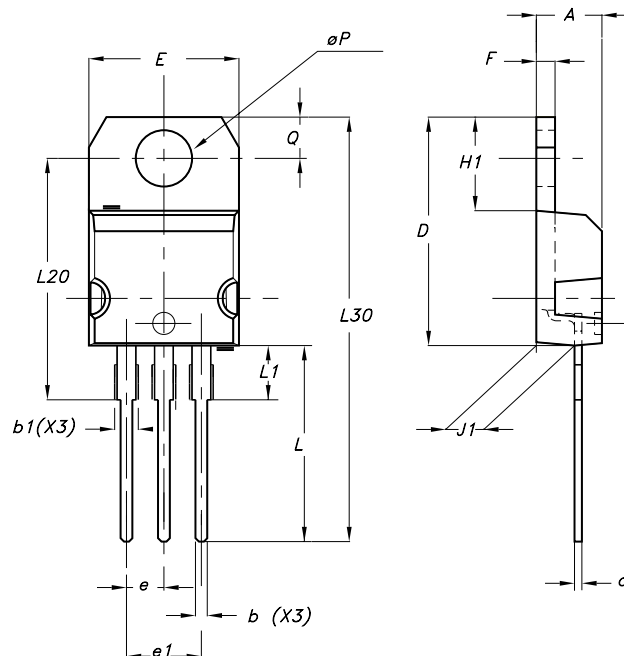


## Typical Characteristics





## 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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