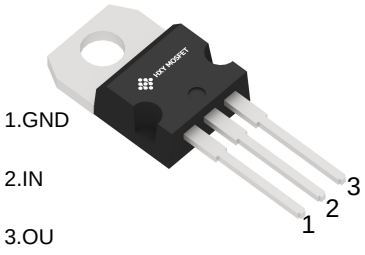
HL7912CV

Three-terminal negative voltage regulator

Features

- Maximum output current: $I_{OM=}$ -1.5A
- Output voltage: $V_{O=}$ -12V
- Continuous total dissipation: P_D: 1.5 W (T_a= 25 °C)



TO-220S

Maximum Ratings (Ta=25℃unless otherwise noted)

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

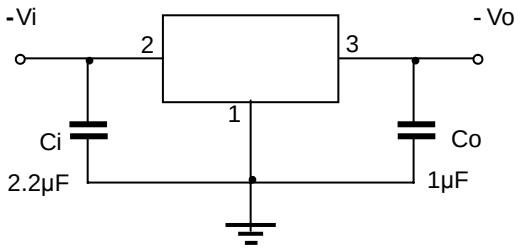
Electrical Characteristics (Ta=25℃unless otherwise specified)

(V_i=-19V, Io=500mA, C_i=2.2μF,Co=1μF, unless otherwise specified)

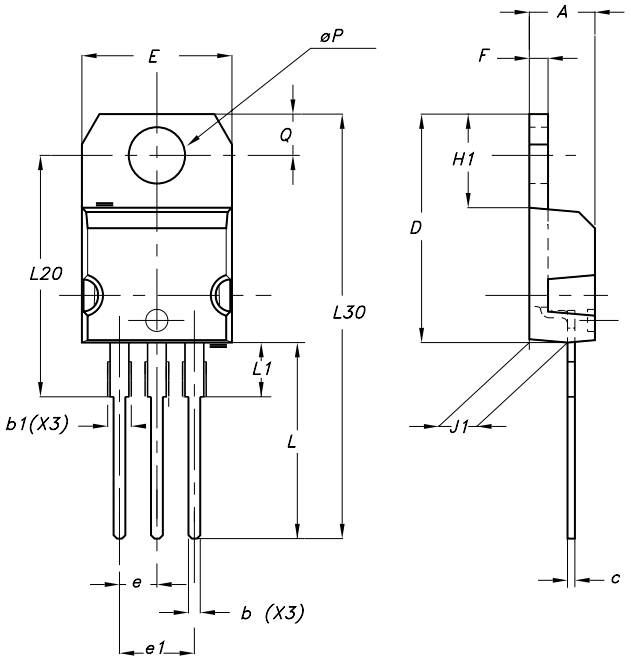
Parameter	Symbol	Test conditions		Min	Typ	Max	Unit
Output Voltage	Vo		25℃	-11.52	-12	-12.48	V
		-14.5V≤V_i≤-27V, Io=5mA-1A	0-125℃	-11.4	-12	-12.6	V
Load Regulation	ΔVo	Io=5mA-1.5A	25℃		15	200	mV
		Io=250mA-750mA	25℃		5	75	mV
Line Regulation	ΔVo	-14.5V≤V_i≤-30V	25℃		5	80	mV
		-16V≤V_i≤-22V	25℃		3	30	mV
Quiescent Current	Iq		25℃		2	3	mA
Quiescent Current Change	ΔIq	-14.5V≤V_i≤-30V	0-125℃			0.5	mA
	ΔIq	5mA≤I_O≤1A	0-125℃			0.5	mA
Output Noise Voltage	V_N	10Hz≤f≤100KHz	25℃		300		μV/Vo
Output Voltage Drift	△Vo/△T	I_O=5mA	0-125℃		-0.8		mV/℃
Ripple Rejection	RR	-15V≤V_i≤-25V,f=120Hz	0-125℃	54	60		dB
Dropout Voltage	Vd	Io=1A	25℃		1.1		V
Peak Current	Ipk		25℃		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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