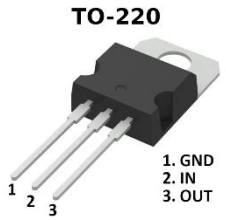
L7908CV

Three-terminal negative voltage regulator



FEATURES

- Maximum Output Current I_{OM}: 1.5A

ABSOLUTE MAXIMUM RATINGS

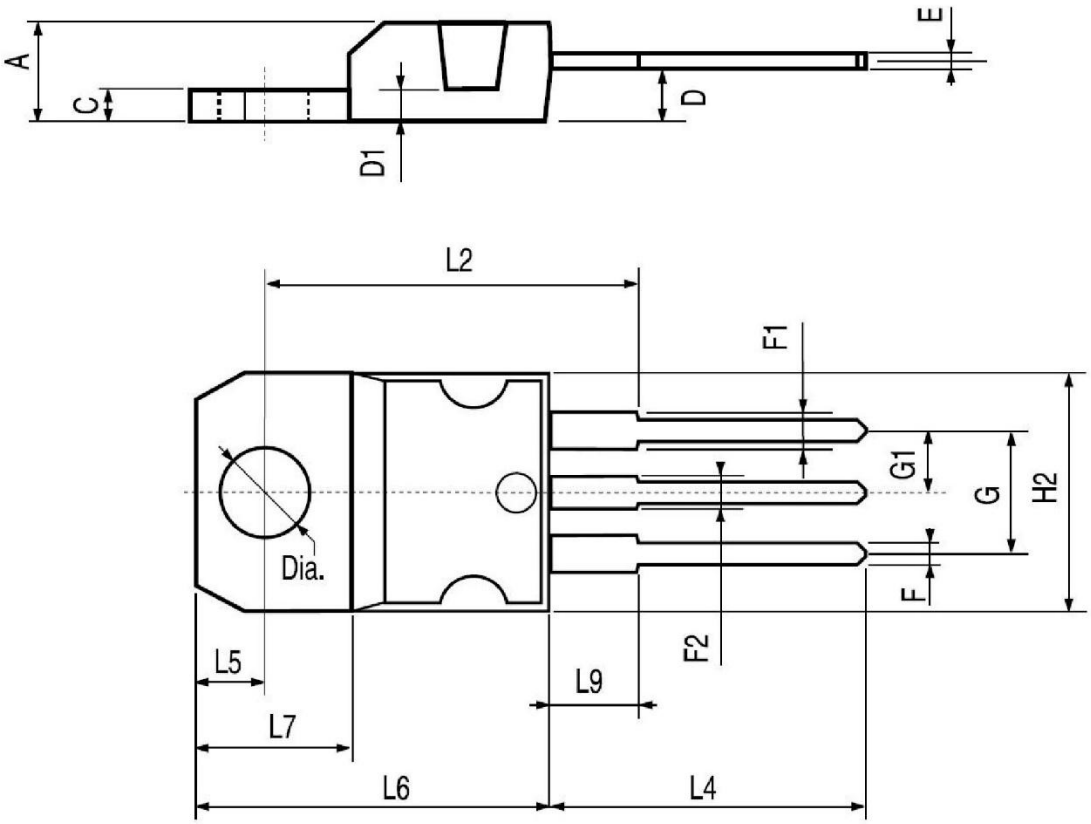
Parameter	Symbol	Value	UNIT
Input Voltage	V_i	-35	V
Operating Junction Temperature Range	T_{OPR}	-20 ~ +150	°C
Storage Temperature Range	T_{STG}	-65 ~ +150	°C

ELECTRICAL CHARACTERISTICS

(V_i=-14V, I_O=500mA, C_i=0.33μF, C_O=0.1μF, T_A=-20~125°C)

Parameter	Symbol	Test conditions		MIN	TYP	MAX	UNIT
Output Voltage	V_O	T_A=25°C		-7.68	-8.0	-8.32	V
		10.6V≤V_i≤23V, I_O=5mA-1A, P_O≤15W		-7.60	-8.0	-8.40	
Load Regulation	ΔV_O	I_O=5mA-1.5A	T_A=25°C		12	78	mV
		I_O=250mA-750mA			5.0	40	
Line Regulation	ΔV_O	10.6V≤V_i≤25V			6	78	mV
		11V≤V_i≤17V			3	78	
		10.4V≤V_i≤21V	T_A=25°C		6	78	
		11V≤V_i≤17V			2	40	
Quiescent Current	I_Q	T_A=25°C			2.5	5	mA
Quiescent Current Change	ΔI_Q	11V≤V_i≤25V				0.8	mA
		10.6V≤V_i≤23V, T_A=25°C				0.8	
		5mA≤I_O≤1A				0.5	
Output Noise Voltage	V_N	10Hz≤F≤100KHz, T_A=25°C			175		μV
Output Voltage Drift	$\Delta V_O/\Delta T$	I_O=5mA			-0.8		mV/°C
Ripple Rejection	RR	11.5V≤V_i≤21.5V, F=120Hz			60		dB
Dropout Voltage	V_D	I_O=1A, T_A=25°C			1.5		V
Output Resistance	R_O	F=1KHz			18		mΩ
Short Circuit Current	I_{SC}	V_i=35V, T_A=25°C			10		mA
Peak Current	I_{PK}	T_A=25°C			1.8		A

TO-220-3L Package Outline Dimensions



DIM.	mm.			inch		
	MIN.	TYP	MAX.	MIN.	TYP.	MAX.
A	4.40		4.60	0.173		0.181
C	1.23		1.32	0.048		0.051
D	2.40		2.72	0.094		0.107
D1		1.27			0.050	
E	0.49		0.70	0.019		0.027
F	0.61		0.88	0.024		0.034
F1	1.14		1.70	0.044		0.067
F2	1.14		1.70	0.044		0.067
G	4.95		5.15	0.194		0.203
G1	2.4		2.7	0.094		0.106
H2	10.0		10.40	0.393		0.409
L2		16.4			0.645	
L4	13.0		14.0	0.511		0.551
L5	2.65		2.95	0.104		0.116
L6	15.25		15.75	0.600		0.620
L7	6.2		6.6	0.244		0.260
L9	3.5		3.93	0.137		0.154
DIA.	3.75		3.85	0.147		0.151