

MSKSEMI 美森科

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED

L7912CV(MS)

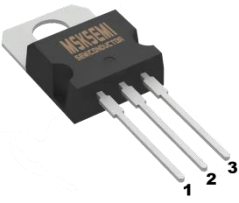

Product specification

Three-terminal positive voltage regulator

FEATURES

- Maximum Output current IOM : 1.2 A
- Output voltage Vo:-12V
- Continuous total dissipation
 $P_D: 2\text{ W (}T_a = 25\text{ °C)}$
 $15\text{ W (}T_c = 25\text{ °C)}$

Reference News

PACKAGE OUTLINE	Marking
 <p>1.GND 2.IN 3.OUT</p>	

ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

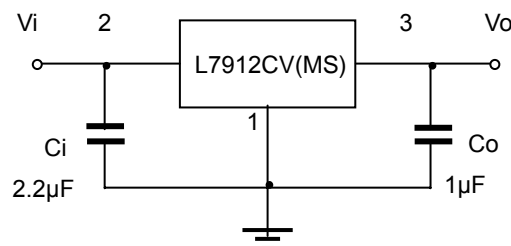
Parameter	Symbol	Value	Unit
Input Voltage	V_i	-35	V
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	83.3	°C/W
Thermal Resistance from Junction to Case	$R_{\theta JC}$	8.33	°C/W
Operating Junction Temperature Range	T_{OPR}	0~+150	°C
Storage Temperature Range	T_{STG}	-55~+150	°C

ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE

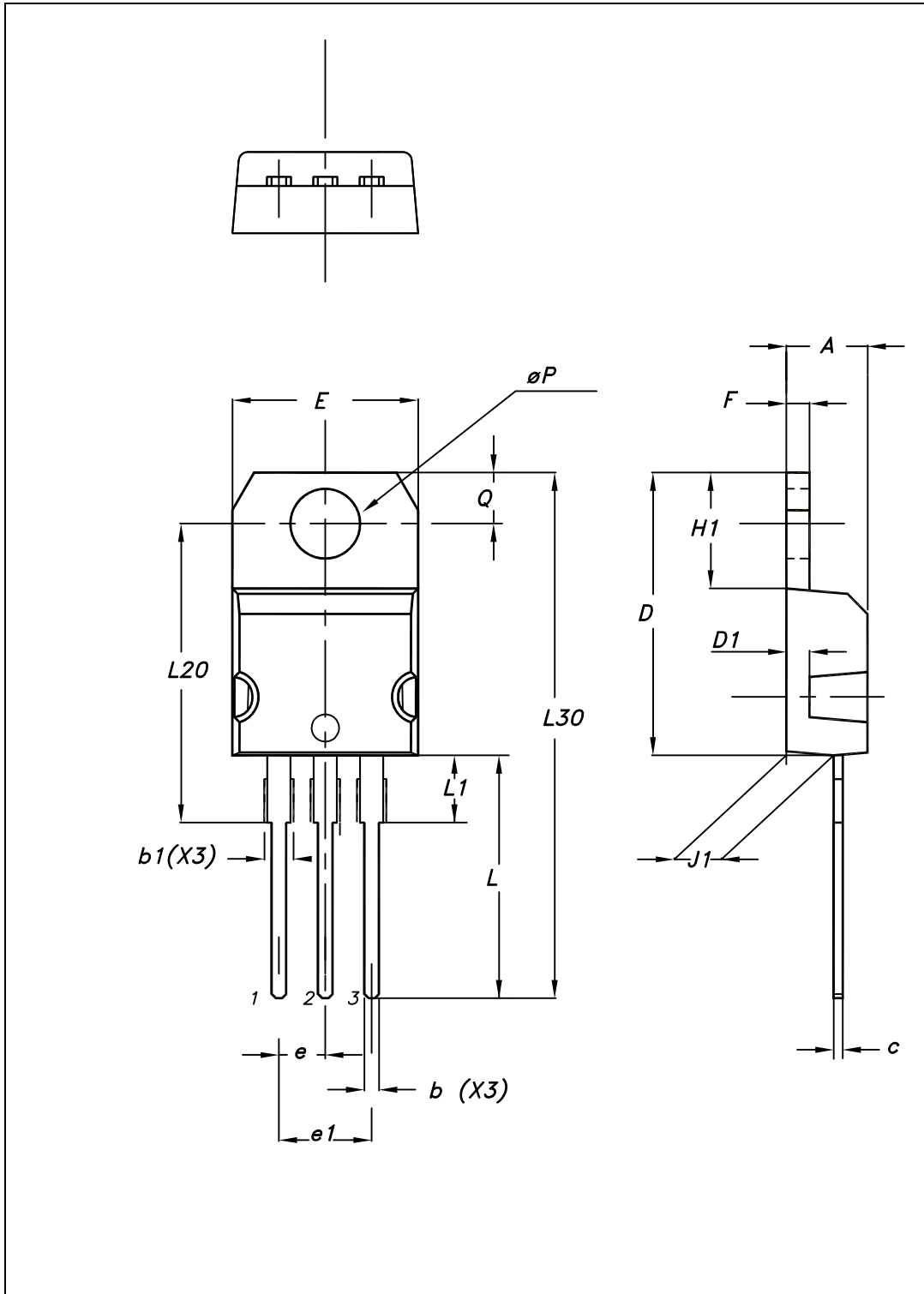
($V_i = -19V, I_o = 500mA, C_i = 2.2\mu F, C_o = 1\mu F$, unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Output Voltage	V_o	25°C	-11.5	-12	-12.5	V
		-14.5V ≤ V_i ≤ -27V, $I_o = 5mA-1A$ $P \leq 15W$	0-125°C	-11.4	-12	-12.6
Load Regulation	ΔV_o	$I_o = 5mA-1.2A$	25°C	15	200	mV
		$I_o = 250mA-750mA$	25°C	5	75	mV
Line Regulation	ΔV_o	-14.5V ≤ V_i ≤ -30V	25°C	5	80	mV
		-16V ≤ V_i ≤ -22V	25°C	3	30	mV
Quiescent Current	I_q	25°C		2	3	mA
Quiescent Current Change	ΔI_q	-14.5V ≤ V_i ≤ -30V	0-125°C		0.5	mA
	ΔI_q	5mA ≤ I_o ≤ 1A	0-125°C		0.5	mA
Output Noise Voltage	V_N	10Hz ≤ f ≤ 100KHz	25°C	300		μV
Output Voltage Drift	$\Delta V_o / \Delta T$	$I_o = 5mA$	0-125°C	-0.8		mV/°C
Ripple Rejection	RR	-15V ≤ V_i ≤ -25V, f = 120Hz	0-125°C	54	60	dB
Dropout Voltage	V_d	$I_o = 1A$	25°C	1.1		V
Peak Current	I_{pk}		25°C	2.0		A

TYPICAL APPLICATION



Package mechanical data



Package mechanical data

Dim.	mm		
	Min.	Typ.	Max.
A	4.40		4.60
b	0.61		0.88
b1	1.14		1.70
c	0.48		0.70
D	15.25		15.75
D1		1.27	
E	10		10.40
e	2.40		2.70
e1	4.95		5.15
F	1.23		1.32
H1	6.20		6.60
J1	2.40		2.72
L	13		14
L1	3.50		3.93
L20		16.40	
L30		28.90	
ØP	3.75		3.85
Q	2.65		2.95

REEL SPECIFICATION

P/N	PKG	QTY
L7912CV(MS)	TO-220	50/One tube 1000/a box of

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