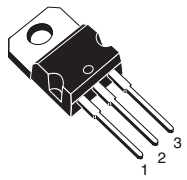
南京集正电子有限公司
NanJing JiZheng Electronics Co.,Ltd

TO-220 Plastic-Encapsulate Voltage Regulators

L7924CV Three-terminal negative voltage regulator

TO-220



FEATURES

Maximum Output current I_{OM}: 1.5 A
Output voltage V_o: - 15 V
Continuous total dissipation
P_D: 1.5 W (T_a= 25℃)
15 W (T_C= 25℃)

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

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

ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE (V_i=-23V, Io=500mA, C_i=2.2μF,Co=1μF, unless otherwise specified)

Parameter	Symbol	Test conditions		Min	Typ	Max	Unit
Output voltage	Vo		25℃	-23.5	-24	-24.5	V
		-26.5V≤V_i≤-35V, Io=5mA-1A, P≤ 15W	0-125℃	-23.40	-24	-24.6	V
Load regulation	ΔVo	Io=5mA-1.5A	25℃		15	200	mV
		Io=250mA-750mA	25℃		5	75	mV
Line regulation	ΔVo	-26.5V≤V_i≤-35V	25℃		5	100	mV
		-28V≤V_i≤-32V	25℃		3	50	mV
Quiescent current	Iq		25℃		2	3	mA
Quiescent current change	ΔIq	-26.5V≤V_i≤-35V	0-125℃			0.5	mA
	ΔIq	5mA≤I_O≤1A	0-125℃			0.5	mA
Output noise voltage	V_N	10Hz≤f≤100KHz	25℃		375		μV
Output voltage drift	△Vo/△T	I_O=5mA	0-125℃		-1		mV/℃
Ripple rejection	RR	-27.5V≤V_i≤-33.5V,f=120Hz	0-125℃	54	60		dB
Dropout voltage	Vd	Io=1A	25℃		1.1		V
Peak current	Ipk		25℃		2.1		A

TYPICAL APPLICATION