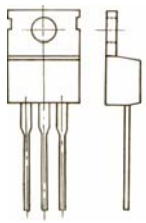
JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

TO-220 Plastic-Encapsulate Voltage Regulator

CJ7818 Three-terminal positive voltage regulator

TO-220

1. IN
2. GND
3. OUT



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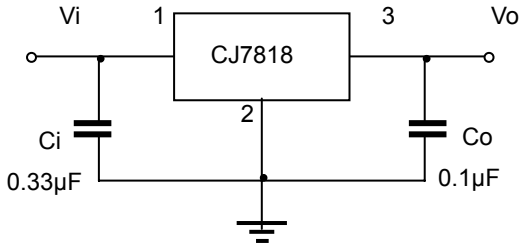
FEATURES

Maximum Output current I_{OM}: 1.5 A
Output voltage V_o: 18 V
Continuous total dissipation
P_D: 2 W (T_J = 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	RθJA	65	℃/W
Thermal resistance junction-cases	RθJC	5	℃/W
Operating Junction Temperature Range	T_{OPR}	0-150	℃
Storage Temperature Range	T_{STG}	-65-150	℃

ELECTRICAL CHARACTERISTICS(Vi=27V,Io=500mA,0℃<T_J<125℃,Ci=0.33μF,Co=0.1μF, unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Output voltage	Vo	T_J=25℃	17.3	18	18.7	V
		21V≤V_i≤33V, Io=5mA-1A Po≤ 15W	17.1	18	18.9	V
Load Regulation	ΔVo	Tj=25℃, Io=5mA-1.5A		12	360	mV
		T_J=25℃, Io=250mA-750mA		4	180	mV
Line regulation	ΔVo	21V≤V_i≤33V T_J=25℃		15	360	mV
		24V≤V_i≤30V T_J=25℃		5	180	mV
Quiescent Current	Iq	T_J=25℃		4.5	8	mA
Quiescent Current Change	ΔIq	21V≤V_i≤33V			1	mA
	ΔIq	5mA≤I_O≤1A			0.5	mA
Output voltage drift	△Vo/△T	I_O=5mA		-1		mV/℃
Output Noise Voltage	V_N	10Hz≤f≤100KHz		110		uV
Ripple Rejection	RR	22V≤V_i≤32V,f=120Hz, T_J=25℃	53	69		dB
Dropout Voltage	Vd	T_J=25℃, Io=1A		2		V
Output resistance	R_O	f=1KH_Z		22		mΩ
Short Circuit Current	Isc	Vi=35V, T_J=25℃		200		mA
Peak Current	Ipk	T_J=25℃		2.1		A

TYPICAL APPLICATION