



JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

TO-220 Plastic-Encapsulate Voltage Regulator

CJ7906 Three-terminal negative voltage regulator

FEATURES

Maximum Output current I_{OM} : 1.5 A

Output voltage V_o : - 6 V

Continuous total dissipation

P_D : 1.5 W ($T_a = 25^\circ\text{C}$)

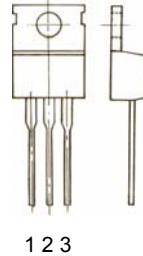
15 W ($T_c = 25^\circ\text{C}$)

TO-220

1 GND

2. IN

3. OUT



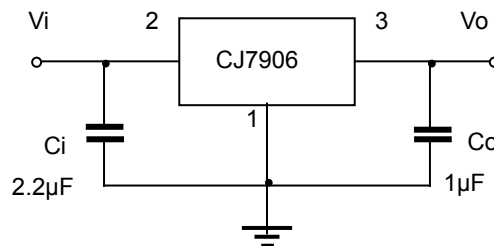
ABSOLUTE MAXIMUM RATINGS(Operating temperature range applies unless otherwise specified)

Parameter	Symbol	Value	Unit
Input Voltage	V_i	-35	V
Thermal resistance junction-air	$R_{\theta JA}$	65	$^\circ\text{C/W}$
Thermal resistance junction-cases	$R_{\theta JC}$	5	$^\circ\text{C/W}$
Operating Junction Temperature Range	T_{OPR}	0-125	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65-150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE ($V_i = -11\text{V}$, $I_o = 500\text{mA}$, $C_i = 2.2\mu\text{F}$, $C_o = 1\mu\text{F}$, unless otherwise specified)

Parameter	Symbol	Test conditions		MIN	TYP	MAX	UNIT
Output voltage	Vo		25°C	-5.75	-6	-6.25	V
		-8V≤V _i ≤-21V, I _o =5mA-1A P ≤15W	0-125°C	-5.7	-6	-6.3	V
Load Regulation	ΔVo	I _o =5mA-1.5A	25°C		15	120	mV
		I _o =250mA-750mA	25°C		5	60	mV
Line regulation	ΔVo	-8V≤V _i ≤-25V	25°C		12.5	120	mV
		-9V≤V _i ≤-13V	25°C		4	60	mV
Quiescent Current	Iq		25°C		1.5	2	mA
Quiescent Current Change	ΔIq	-8V≤V _i ≤-25V	0-125°C			1.3	mA
	ΔIq	5mA≤I _o ≤1A	0-125°C			0.5	mA
Output Noise Voltage	V _N	10Hz≤f≤100KHz	25°C		150		μV
Output voltage drift	ΔVo/ΔT	I _o =5mA	0-125°C		-0.4		mV/°C
Ripple Rejection	RR	-9V≤V _i ≤-19V,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		2.1		A

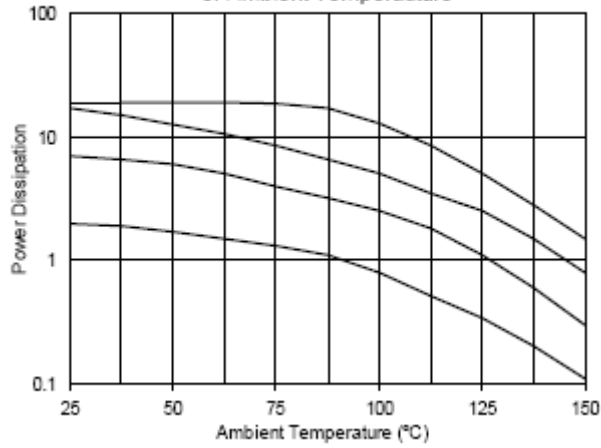
TYPICAL APPLICATION



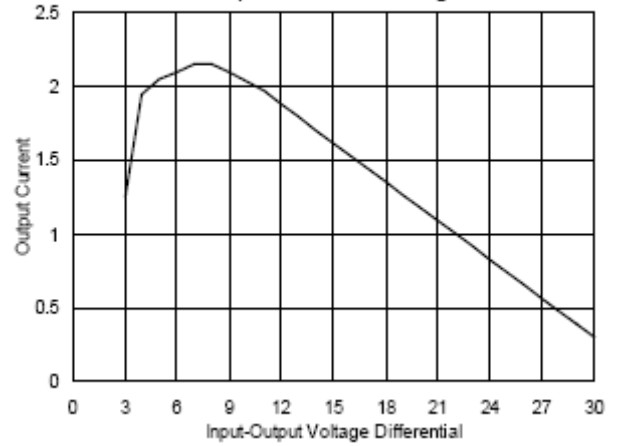
Typical Characteristics

CJ79XX

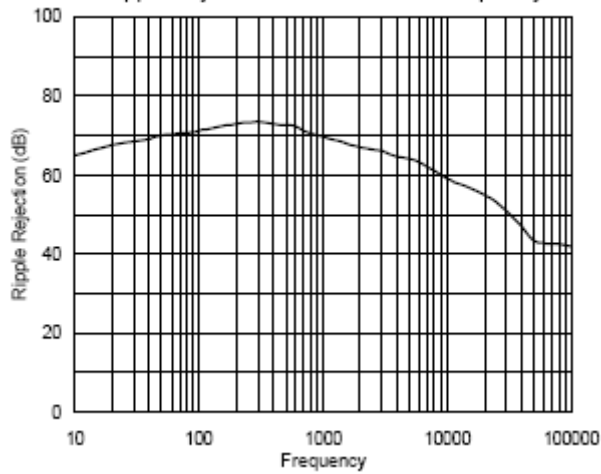
Average Case Power Dissipation as A Function of Ambient Temperature



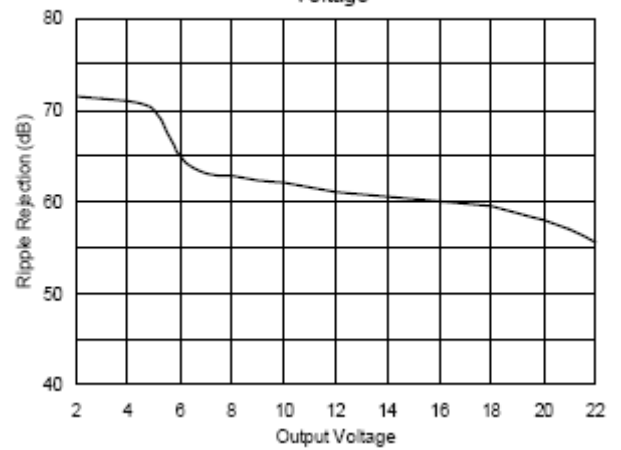
Peak Output Current as A Function of Input-Output Differential Voltage



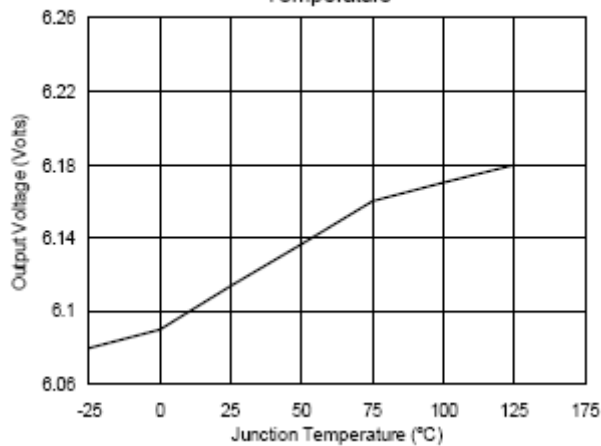
Ripple Rejection as A Function of Frequency



Ripple Rejection as A Function of Output Voltage



Output Voltage as A Function of Junction Temperature



PD-TA

