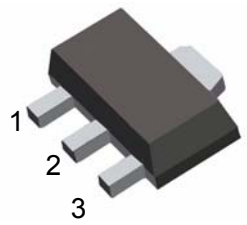
JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

SOT-89 Encapsulate Three-terminal Voltage Regulator

CJ78L18 Three-terminal positive voltage regulator

SOT-89



1. OUT
2. GND
3. IN

FEATURES

Maximum Output current

$I_{OM:}$ 0.1 A

Output voltage

V_o: 18 V

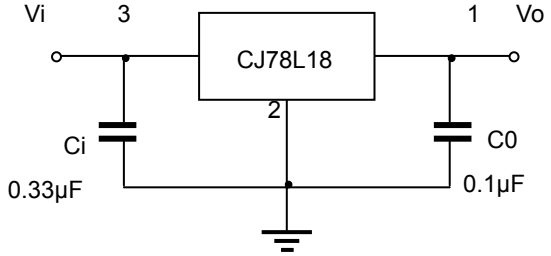
ABSOLUTE MAXIMUM RATINGS(Operating temperature range applies unless otherwise specified)

Parameter	Symbol	Value	Unlts
Input Voltage	V_i	35	V
Operating Junction Temperature Range	T_{OPR}	0—+125	℃
Storage Temperature Range	T_{STG}	-55—+150	℃

ELECTRICAL CHARACTERISTICS (VI=26V,Io=40mA,0℃<Tj<125℃,C1=0.33μF,Co=0.1μF, unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Output voltage	Vo	Tj=25℃	17.3	18	18.7	V
		21V≤V_I≤33V, Io=1mA-40mA	17.1	18	18.9	V
		21V≤V_I≤33V, Io=1mA-70mA	17.1	18	18.9	V (note)
Load Regulation	△Vo	Tj=25℃, Io=1mA-100mA		27	180	mV
		Tj=25℃, Io=1mA-40mA		19	90	mV
Line regulation	△Vo	20.5V≤V_I≤33V, Tj=25℃		70	360	mV
		22V≤V_I≤33V, Tj=25℃		60	300	mV
Quiescent Current	Iq	25℃		4.7	6.5	mA
Quiescent Current Change	△Iq	21V≤V_I≤33V			1.5	mA
	△Iq	1mA≤I_O≤40mA			0.1	mA
Output Noise Voltage	V_N	10Hz≤f≤100KHz		89		uV
Ripple Rejection	RR	23V≤V_I≤33V,f=120Hz,Tj=25℃	32	36		dB
Dropout Voltage	Vd	Tj=25℃		1.7		V

TYPICAL APPLICATION



Note: Bypass capacitors are recommended for optimum stability and transient response and should be located as close as Possible to the regulators.