



SOT-23-3L Encapsulate Three Terminal Voltage Regulator

CJ78L06 Three-terminal positive voltage regulator

FEATURES

Maximum Output current

I_{OM} : 0.1 A

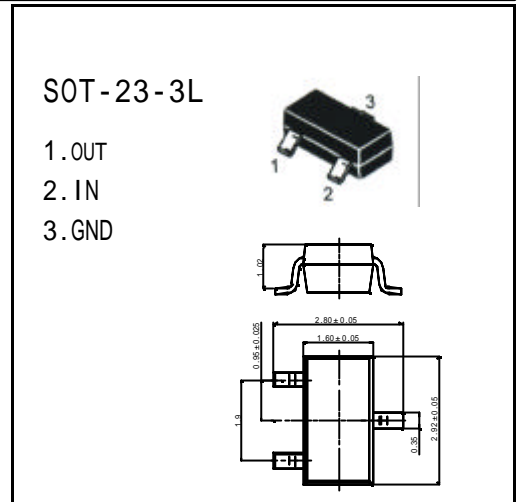
Output voltage

V_o : 6 V

Operating and storage junction temperature range

T_J, T_{stg} : -55 to +150

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

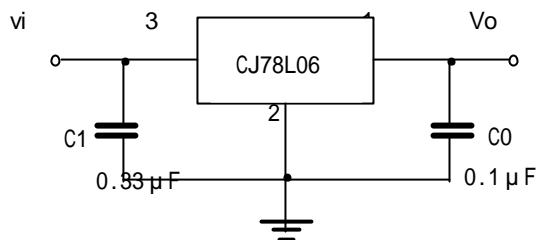


Parameter	Symbol	Value	Units
Input Voltage	V_I	30	V
Operating Junction Temperature Range	T_{OPR}	0—+125	
Storage Temperature Range	T_{STG}	-55—+150	

ELECTRICAL CHARACTERISTICS ($V_I=12V, I_o=40mA, 0 < T_j < 125$, $C_1=0.33 \mu F, C_o=0.1 \mu F$, unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Output voltage	V_o	$T_j=25$	5.75	6.0	6.25	V
		8V V_I , 20V, $I_o=1mA-40mA$	5.7	6.0	6.3	V
		8.5V V_I , V_{MAX} , $I_o=1mA-70mA$	5.7	6.0	6.3	V (note)
Load Regulation	V_o	$T_j=25$, $I_o=1mA-100mA$		16	80	mV
		$T_j=25$, $I_o=1mA-70mA$		9	40	mV
Line regulation	V_o	8V V_I , 20V, $T_j=25$		35	175	mV
		9V V_I , 20V, $T_j=25$		29	125	mV
Quiescent Current	I_q			3.9	6.0	mA
Quiescent Current Change	I_q	9V V_I , 20V			1.5	mA
	I_q	1mA V_I , 40mA			0.1	mA
Output Noise Voltage	V_n	10Hz f 100KHz		46		μV
Ripple Rejection	RR	8V V_I , 19V, f=120HZ, $T_j=25$	40	48		dB
Dropout Voltage	V_d	$T_j=25$		1.7		V

TYPICAL APPLICATION



Note 1: Bypass capacitors are recommended for optimum stability and transient response and should be located as close as possible to the regulators.