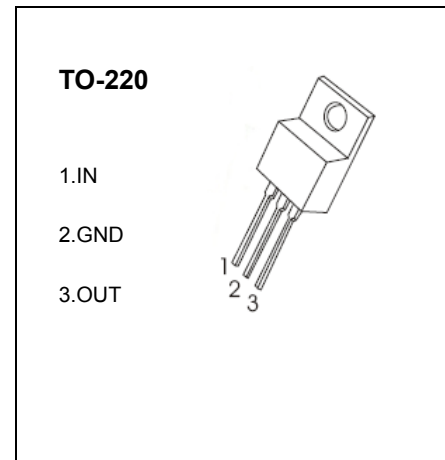


TO-220 Plastic-Encapsulate Regulators

CJ78M06 Three-terminal positive voltage regulator

FEATURES

- Maximum output current
 $I_{OM}: 0.5\text{ A}$
- Output voltage
 $V_O: 6\text{ V}$
- Continuous total dissipation
 $P_D: 1.5\text{ W (}T_a = 25\text{ }^\circ\text{C)}$
 $15\text{ W (}T_C = 25\text{ }^\circ\text{C)}$



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

Parameter	Symbol	Value	Unit
Input Voltage	V_i	25	V
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 ($V_i=11\text{V}, I_o=350\text{mA}, C_i=0.33\mu\text{F}, C_o=0.1\mu\text{F}$, unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit	
Output Voltage	V_o	25°C	5.75	6	6.25	V	
		$8\text{V} \leq V_i \leq 21\text{V}, I_o=5\text{mA}-350\text{mA}$ $P_o \leq 15\text{W}$	0-125 $^\circ\text{C}$	5.7	6	6.3	V
Load Regulation	ΔV_o	$I_o=5\text{mA}-0.5\text{A}$	25 $^\circ\text{C}$		18	120	mV
		$I_o=5\text{mA}-200\text{mA}$	25 $^\circ\text{C}$		10	60	mV
Line Regulation	ΔV_o	$8\text{V} \leq V_i \leq 25\text{V}, I_o=200\text{mA}$	25 $^\circ\text{C}$		5	100	mV
		$9\text{V} \leq V_i \leq 25\text{V}, I_o=200\text{mA}$	25 $^\circ\text{C}$		1.5	50	mV
Quiescent Current	I_q		25 $^\circ\text{C}$		4.3	6	mA
Quiescent Current Change	ΔI_q	$9\text{V} \leq V_i \leq 25\text{V}, I_o=200\text{mA}$	0-125 $^\circ\text{C}$			0.8	mA
		$5\text{mA} \leq I_o \leq 350\text{mA}$	0-125 $^\circ\text{C}$			0.5	mA
Output Noise Voltage	V_N	$10\text{Hz} \leq f \leq 100\text{KHz}$	25 $^\circ\text{C}$		45	μV	
Ripple Rejection	RR	$9\text{V} \leq V_i \leq 19\text{V}, f=120\text{Hz}, I_o=300\text{mA}$	0-125 $^\circ\text{C}$	59	80	dB	
Dropout Voltage	V_d	$I_o=350\text{mA}$	25 $^\circ\text{C}$		2	V	
Short Circuit Current	I_{sc}	$V_i=11\text{V}$	25 $^\circ\text{C}$		270	mA	
Peak Current	I_{pk}		25 $^\circ\text{C}$		0.5	A	

TYPICAL APPLICATION

