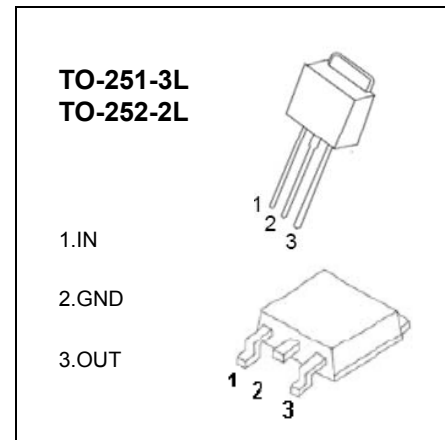


TO-251-3L/TO-252-2L Plastic-Encapsulate Regulators

CJ78M05 Three-terminal positive voltage regulator

FEATURES

- Maximum output current
 I_{OM} : 0.5 A
- Output voltage
 V_O : 5V
- Continuous total dissipation
 P_D : 1.25 W



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	°C
Storage Temperature Range	T_{STG}	-65-+150	°C

ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE ($V_i=10V, I_o=350mA, C_i=0.33\mu F, C_o=0.1\mu F$, unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Output Voltage	V_o	$25^\circ C$	4.8	5	5.2	V
		$7V \leq V_i \leq 20V, I_o=5mA-350mA$ $P_o \leq 15W$	0-125°C	4.75	5	5.25
Load Regulation	ΔV_o	$I_o=5mA-0.5A$ $25^\circ C$		15	100	mV
		$I_o=5mA-200mA$ $25^\circ C$		5	50	mV
Line Regulation	ΔV_o	$7V \leq V_i \leq 25V, I_o=200mA$ $25^\circ C$		3	100	mV
		$8V \leq V_i \leq 25V, I_o=200mA$ $25^\circ C$		1	50	mV
Quiescent Current	I_q	$25^\circ C$		4.2	6	mA
Quiescent Current Change	ΔI_q	$8V \leq V_i \leq 25V, I_o=200mA$ 0-125°C			0.8	mA
		$5mA \leq I_o \leq 350mA$ 0-125°C			0.5	mA
Output Noise Voltage	V_N	$10Hz \leq f \leq 100KHz$ $25^\circ C$		40	200	μV
Ripple Rejection	RR	$8V \leq V_i \leq 18V, f=120Hz, I_o=300mA$ 0-125°C	62	80		dB
Dropout Voltage	V_d	$I_o=350mA$ $25^\circ C$		2	2.5	V
Short Circuit Current	I_{sc}	$V_i=10V$ $25^\circ C$		300		mA
Peak Current	I_{pk}	$25^\circ C$		0.5		A

TYPICAL APPLICATION

