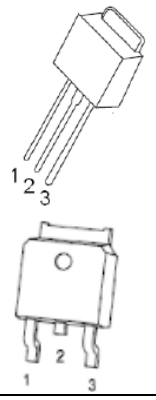
TO-251-3L/TO-252-2L Plastic-Encapsulate Regulators

CJ78M05H Three-terminal positive voltage regulator

TO-251-3L
TO-252-2L



1.IN
2.GND
3.OUT

FEATURES

- Maximum output current: I_{OM}: 0.5 A
- Output voltage: V_O: 5V
- Continuous total dissipation is internally limited

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

Parameter	Symbol	Value	Unit
Input Voltage	V_i	25	V
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	1 0 0	℃/W
Thermal Resistance from Junction to Case	$R_{\theta JC}$	10	℃/W
Operating Junction Temperature Range	T_{OPR}	0-+150	℃
Storage Temperature Range	T_{STG}	-55-+150	℃

ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JINCTION TEMPERATURE (Vi=10V,Io=350mA, Ci=0.33μF,Co=0.1μF,unless otherwise specified)

Parameter	Symbol	Test conditions		Min	Typ	Max	Unit
Output Voltage	Vo		25℃	4.8	5	5.2	V
	Vo*	7V≤V_i≤20V, Io=5mA-350mA Po≤ 15W	0-125℃	4.75	5	5.25	V
Load Regulation	ΔVo	Io=5mA-0.5A	25℃		1.3	100	mV
		Io=5mA-200mA	25℃		1.3	50	mV
Line Regulation	ΔVo	7V≤V_i≤25V, Io=200mA	25℃		6	100	mV
		8V≤V_i≤25V, Io=200mA	25℃		6	50	mV
Quiescent Current	Iq		25℃		4	6	mA
Quiescent Current Change	ΔIq	8V≤V_i≤25V, Io=200mA	0-125℃			0.8	mA
	ΔIq	5mA≤I_O≤350mA	0-125℃			0.5	mA
Output Noise Voltage	V_N	10Hz≤ f ≤100KHz	25℃		40	200	μV
Ripple Rejection	RR	8V≤V_i≤18V,f=120Hz,Io=300mA	0-125℃	62	80		dB
Dropout Voltage	Vd	Io=350mA	25℃		2	2.5	V
Short Circuit Current	Isc	Vi=10V	25℃		300		mA
Peak Current	Ipk		25℃		0.7		A

* Pulse test

TYPICAL APPLICATION