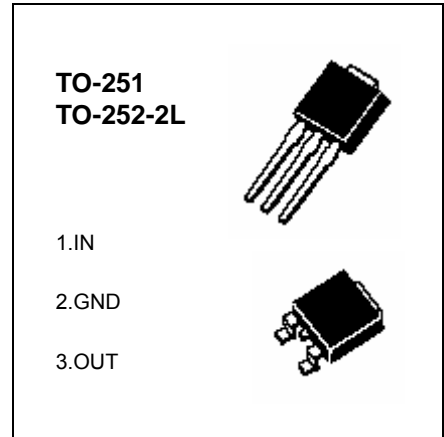


78M05

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



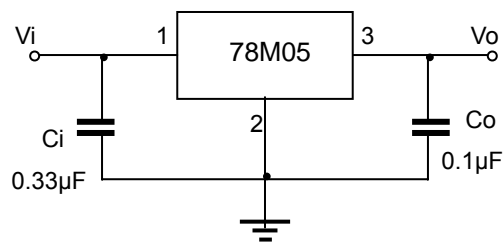
ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

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 (V_i=10V, I_o=350mA, C_i=0.33μF, C_o=0.1μF, unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Output voltage	V _o	25°C	4.8	5	5.2	V
		7V ≤ V _i ≤ 20V, I _o =5mA-350mA P _o ≤ 15W	0-125°C	4.75	5	5.25
Load Regulation	ΔV _o	I _o =5mA-0.5A 25°C		15	100	mV
		I _o =5mA-200mA 25°C		5	50	mV
Line regulation	ΔV _o	7V ≤ V _i ≤ 25V, I _o =200mA 25°C		3	100	mV
		8V ≤ V _i ≤ 25V, I _o =200mA 25°C		1	50	mV
Quiescent Current	I _q	25°C		4.2	6	mA
Quiescent Current Change	ΔI _q	8V ≤ V _i ≤ 25V, I _o =200mA 0-125°C			0.8	mA
		5mA ≤ I _o ≤ 350mA 0-125°C			0.5	mA
Output Noise Voltage	V _N	10Hz ≤ f ≤ 100KHz 25°C		40	200	uV
Ripple Rejection	RR	8V ≤ V _i ≤ 18V, f=120Hz, I _o =300mA 0-125°C	62	80		dB
Dropout Voltage	V _d	I _o =350mA 25°C		2	2.5	V
Short Circuit Current	I _{sc}	V _i =10V 25°C		300		mA
Peak Current	I _{pk}	25°C		0.5		A

TYPICAL APPLICATION



Typical Characteristics

