

## To-252 Plastic-Encapsulate Transistors

### 78M05 Three-terminal positive voltage regulator

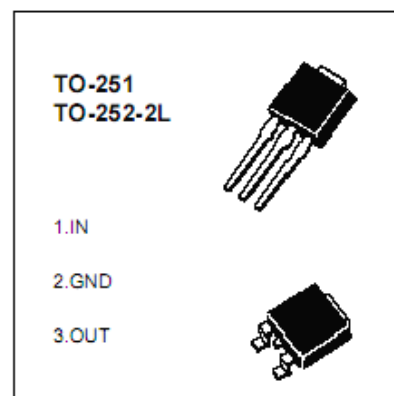
FEATURES:

Maximum Output current ICM: 0.5A

Output voltage VO: 5V

Continuous total dissipation

PD: 1.25 W(Ta=25°C)



### ABSOLUTE MAXIMUM RATINGS(Operating temperature unless otherwise specified)

Symbol (符号)	Parameter (参数名称)	Value (额定值)	Units (单位)
<b>Vi</b>	Input Voltage	35	V
<b>TOPR</b>	Operating junction Temperature Range	0~+125	°C
<b>TstG</b>	Storage Temperature Range	-55~+150	°C

### ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Output voltage	Vo	25°C	4.8	5.0	5.2	V
		7V ≤ Vi ≤ 20V, Io = 5mA ~ 350mA Po ≤ 15W	0-125°C	4.75	5.0	5.25
Load Regulation	ΔVo	Io = 1mA ~ 0.5A	25°C	15	100	mV
		Io = 5mA ~ 200mA	25°C	5	100	mV
Line regulation	ΔVo	7V ≤ Vi ≤ 25V Io = 200mA		3	100	mV
		8V ≤ Vi ≤ 25V Io = 200mA	25°C	1	50	mV
Quiescent Current	Iq	25°C		4.2	6	mA
Quiescent Current Change	ΔIq	8V ≤ Vi ≤ 25V Io = 200mA	0-125°C		0.8	mA
	ΔIq	5mA ≤ Io ≤ 350mA	0-125°C		0.5	mA
Output Noise Voltage	VN	10Hz ≤ f ≤ 100KHz	25°C	40	200	uV
Ripple Rejection	RR	8V ≤ Vi ≤ 18V, f = 120Hz Io = 300mA	0-125°C	62	80	dB
Dropout Voltage	Vd	Io = 350mA	25°C	2	2.5	V

### TYPICAL APPLICATION

