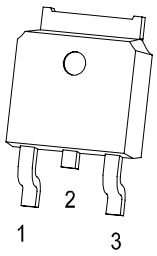
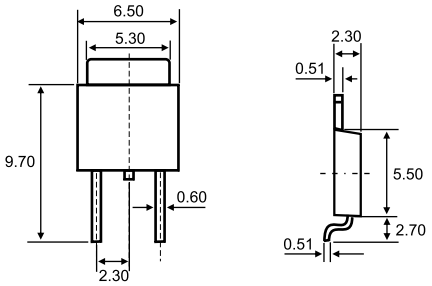
LGE78M05

Three-terminal positive voltage regulator



1. BASE
2. COLLECTOR
3 .EMITTER

TO-252



Dimensions in inches and (millimeters)

Features

- ✧ Maximum Output current
  I_{OM}: 1 A
- ✧ Output voltage
  V_o: 5V
- ✧ Continuous total dissipation
  P_D: 1.3 W (Ta = 25 ℃)
  13 W (T_C= 25 ℃)
- ✧ 0.05k/Tube,2k/box,10k/cartonss

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

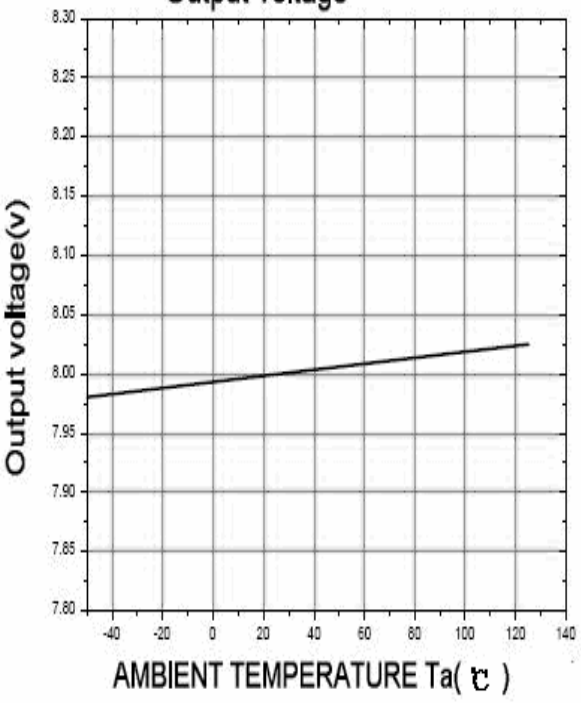
Parameter	Symbol	Value	Unit
Input Voltage	V_i	35	V
Operating Junction Temperature Range	T_{OPR}	-40-+85	℃
Storage Temperature Range	T_{STG}	-50-+150	℃

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

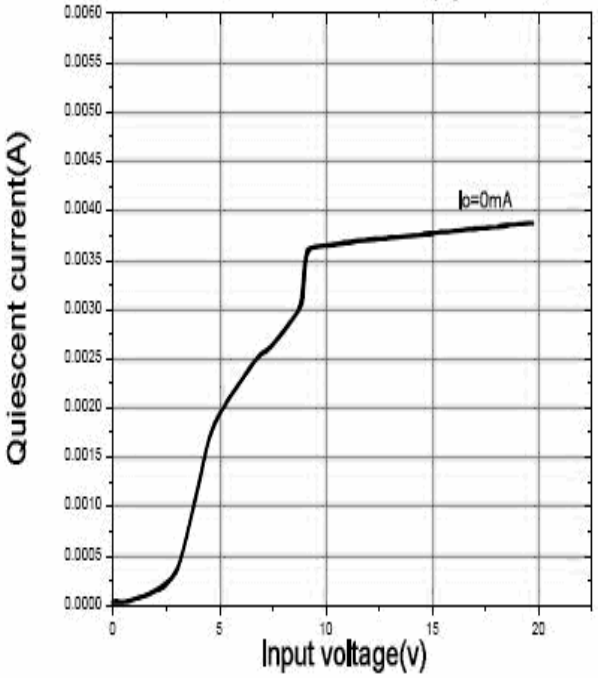
Parameter	Symbol	Test conditions		MIN	TYP	MAX	UNIT
Output voltage	Vo		25℃	4.88	5	5.12	V
		7V≤V_i≤20V, Io=5mA-350mA Po≤ 15W	0-125℃	4.75	5	5.25	V
Load Regulation	ΔVo	Io=5mA-0.5A	25℃		15	100	mV
		Io=5mA-200mA	25℃		5	50	mV
Line regulation	ΔVo	7V≤V_i≤25V, Io=200mA	25℃		3	100	mV
		8V≤V_i≤25V, Io=200mA	25℃		1	50	mV
Quiescent Current	Iq		25℃		4.2	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	uV
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

Typical Characteristics

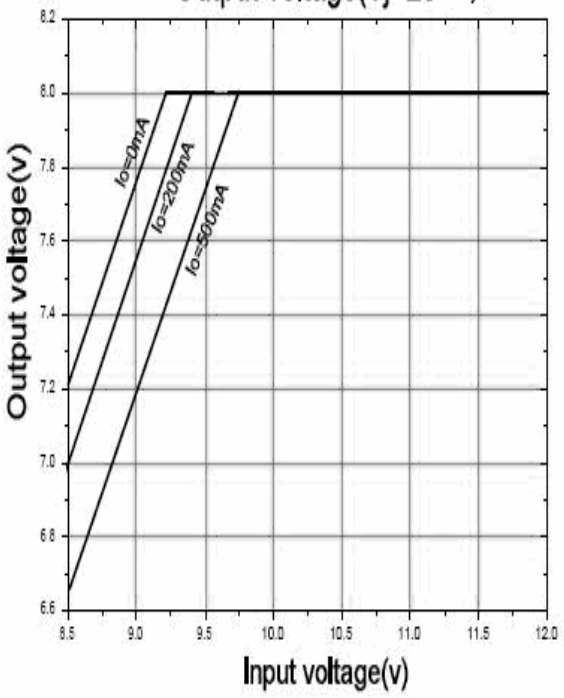
Ambient temperature VS
Output voltage



Input voltage VS
Quiescent current(Tj=25 ℃)



Input voltage VS
Output voltage(Tj=25 ℃)



Input voltage VS
Input current(Tj=25 ℃)