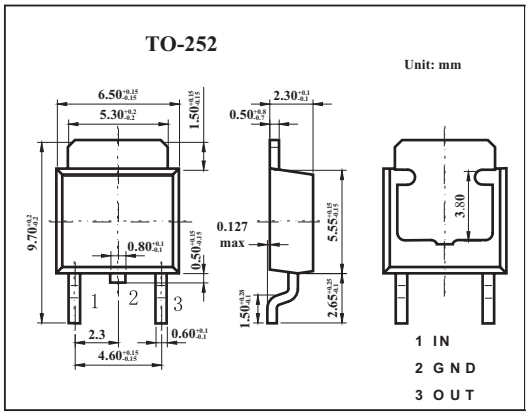
Three-terminal Positive Voltage Regulator
78M05



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 Ta = 25℃

Parameter	Symbol	Rating	Unit
Input voltage	V_I	35	V
Operating junction temperature range	T_{OPR}	-55 to +125	℃
Storage temperature range	T_{STG}	-65 to +150	℃

Electrical Characteristics (Vi=10V,Io=350mA,0℃<Tj<125℃,Ci=0.33μF,Co=0.1μF, unless otherwise specified)

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Output voltage	V_O	Tj=25℃	4.8	5.0	5.2	V
		7≤V_I≤20V, Io=5mA-350mA,Po≤15W	4.75	5.0	5.25	V
Load regulation	△V_O	Tj=25℃, Io=5mA-0.5A		15	100	mV
		Tj=25℃, Io=5mA-200mA		5	50	mV
Line regulation	△V_O	Tj=25℃,7≤V_I≤25V, Io=200mA		3	100	mV
		Tj=25℃,8≤V_I≤25V, Io=200mA		1	50	mV
Quiescent current	Iq	Tj=25℃		4.2	6	mA
Quiescent current change	△Iq	0℃<Tj<125℃,8V≤V_I≤25V, Io=200mA			0.8	mA
	△Iq	0℃<Tj<125℃,5mA≤Io≤350mA			0.5	mA
Output noise voltage	V_N	10Hz≤f≤100KHz		40	200	uV
Ripple rejection	RR	8V≤V_I≤18V,f=120Hz, Io=300mA	62	80		dB
Dropout voltage	Vd	Tj=25℃, Io=350mA		2	2.5	V
Short circuit current	I_{sc}	Vi=10V, Tj=25℃		300		mA
Peak current	I_{pk}	Tj=25℃		0.7		A

Typical Application