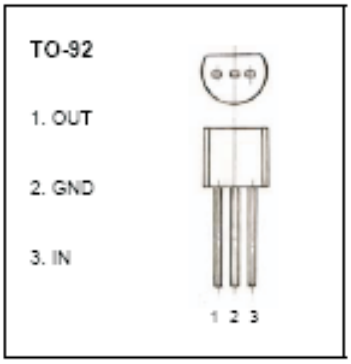
Three-Terminal Positive Voltage Regulator

78L06

■ Features

- Maximum output current:I_{OM}=0.1A.
- Output voltage:V_O=6V.
- Continuous total dissipation P_D:0.625W(Ta=25℃)



■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Input Voltage	V_I	30	V
Operating junction temperature range	T_{OPR}	-55 to +125	℃
Storage Temperature Range	T_{STG}	-55 to +150	℃

■ Electrical Characteristics (VI=12V,Io=40mA,0℃<Tj<125℃,C1=0.33μF,Co=0.1μF,unless otherwise specified)

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Output voltage	V_O	Tj=25℃	5.75	6.0	6.25	V
		8V≤V_I≤20V, Io=1mA-40mA	5.7	6.0	6.3	V
		8.5V≤V_I≤V_{MAX}, Io=1mA-70mA	5.7	6.0	6.3	V
Load regulation	△V_O	Tj=25℃, Io=1mA-100mA		16	80	mV
		Tj=25℃, Io=1mA-70mA		9	40	mV
Line regulation	△V_O	8V≤V_I≤20V, Tj=25℃		35	175	mV
		9V≤V_I≤20V, Tj=25℃		29	125	mV
Quiescent current	Iq	25℃		3.9	6.0	mA
Quiescent current change	△Iq	9V≤V_I≤20V			1.5	mA
	△Iq	1mA≤I_O≤40mA			0.1	mA
Output noise voltage	V_N	10Hz≤f≤100KHz		46		uV
Ripple rejection	RR	9V≤V_I≤19V,f=120Hz,Tj=25℃	40	48		dB
Dropout voltage	Vd	Tj=25℃		1.7		V

■ Typical application.