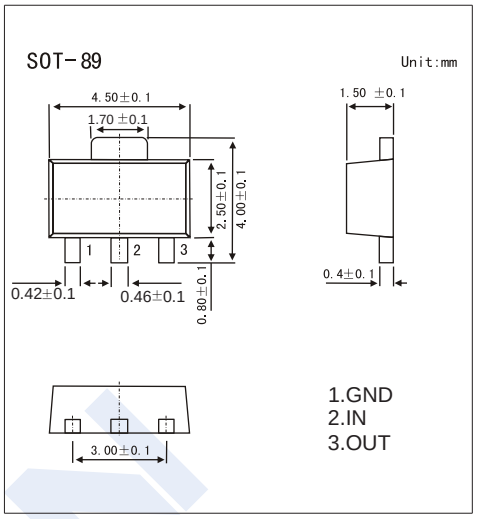
Three-Terminal Negative Voltage Regulator

KA190O06



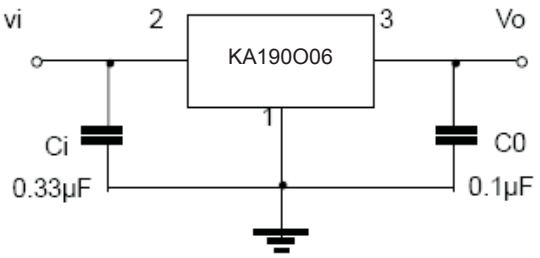
Features

- Maximum output current I_{OM}:0.1A.
- Output voltage V_O : -6V.
- Continuous total dissipation P_D: 0.5 W
- Marking Code: KN06

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 (V_I=-11V,Io=40mA,0℃<Tj<125℃, C_I=0.33μF,Co=0.1μF,unless otherwise specified)

Parameter	Symbol	Test conditions	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
		Io=1mA-70mA	-5.7	-6.0	-6.3	V
Load regulation	△V_O	Tj=25℃, Io=1mA-100mA		21	80	mV
		Tj=25℃, Io=1mA-40mA		11	40	mV
Line regulation	△V_O	-8V≤V_I≤-20V, Tj=25℃		20	175	mV
		-9V≤V_I≤-20V, Tj=25℃		15	125	mV
Quiescent current	Iq	25℃		3.9	6.0	mA
Quiescent current change	△Iq	0℃<Tj<125℃,-9V≤V_I≤-20V			1.5	mA
	△Iq	0℃<Tj<125℃,1mA≤Io≤40mA			0.1	mA
Output noise voltage	V_N	10Hz≤f≤100KHz,Tj=25℃		44		uV
Ripple rejection	RR	-9V≤V_I≤-19V,f=120Hz	40	48		dB
Dropout voltage	Vd	Tj=25℃		1.7		V

Typical Application