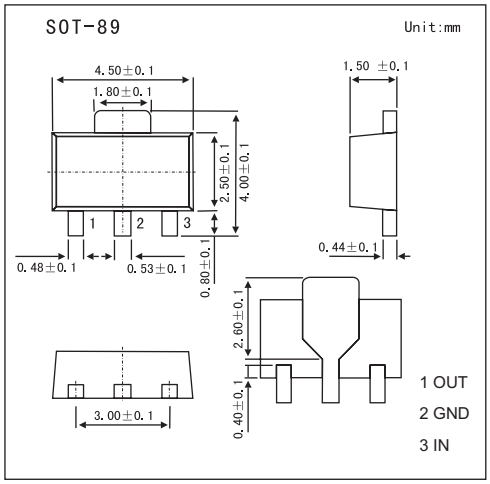
Three-Terminal Voltage Regulator
78L03



■ Features

- Output Voltage Range 3.3 V
- Output current up to 100mA
- No external components required
- Internal thermal overload protection
- Internal short-circuit current limiting

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Input Voltage	V_I	30	V
Operating junction temperature range	T_{OPR}	0 to +125	℃
Storage Temperature Range	T_{STG}	-55 to +150	℃

■ Electrical Characteristics (VI=8.3V,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℃	3.173	3.3	3.432	V
		5.8V≤V_I≤20V, Io=5mA-100mA	3.142	3.3	3.465	V
Load regulation	$\triangle V_O$	Tj=25℃, Io=5mA-100mA		15	60	mV
		Tj=25℃, Io=5mA-40mA		5	30	mV
Line regulation	$\triangle V_O$	5.8V≤V_I≤20V, Tj=25℃,Iout=40mA		50	150	mV
Quiescent current	I_q	Tj=25℃		3	6	mA
Quiescent current change	$\triangle I_q$	0℃<T_j<125℃5V≤V_I≤20V			1.5	mA
	$\triangle I_q$	0℃<T_j<125℃,5mA≤Io≤40mA			0.1	mA
Output noise voltage	V_N	10Hz≤f≤100KHz		40		uV
Ripple rejection	RR	5.8V≤V_I≤20V,f=120Hz,Tj=25℃	41	49		dB
Dropout voltage	V_d	Tj=25℃,Iout=100mA		2		V

■ Typical application.