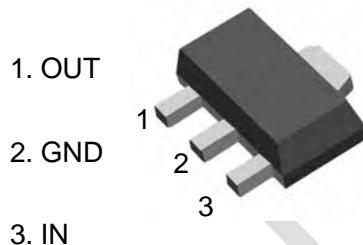


WEJ78L05 Three-terminal positive voltage regulator**FEATURES**

Maximum Output current

I_{OM}: 0.1 A

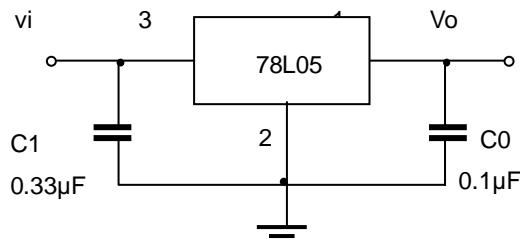
Output voltage

V_o: 5 V**SOT-89****ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)**

Parameter	Symbol	Value	Units
Input Voltage	V _I	30	V
Operating Junction Temperature Range	T _{OPR}	0~+125	°C
Storage Temperature Range	T _{STG}	-55~+150	°C

ELECTRICAL CHARACTERISTICS (V_I=10V, I_O=40mA, 0°C < T_j < 125°C, C₁=0.33μF, C₀=0.1μF, unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Output voltage	V _O	T _j =25°C	4.8	5.0	5.2	V
		7V≤V _I ≤20V, I _O =1mA~40mA	4.75	5.0	5.25	V
		7V≤V _I ≤V _{MAX} , I _O =1mA~70mA	4.75	5.0	5.25	V (note)
Load Regulation	ΔV _O	T _j =25°C, I _O =1mA~100mA		11	60	mV
		T _j =25°C, I _O =1mA~40mA		5.0	30	mV
Line regulation	ΔV _O	7V≤V _I ≤20V, T _j =25°C	32	150	150	mV
		8V≤V _I ≤20V, T _j =25°C	26	100	100	mV
Quiescent Current	I _Q	25°C	3.8	6	6	mA
Quiescent Current Change	ΔI _Q	8V≤V _I ≤20V			1.5	mA
	ΔI _Q	1mA≤I _O ≤40mA			0.1	mA
Output Noise Voltage	V _N	10Hz≤f≤100KHz		42		uV
Ripple Rejection	RR	8V≤V _I ≤18V, f=120Hz, T _j =25°C	41	80		dB
Dropout Voltage	V _d	T _j =25°C		1.7		V

TYPICAL APPLICATION

Note: Bypass capacitors are recommended for optimum stability and transient response and should be located as close as possible to the regulators.