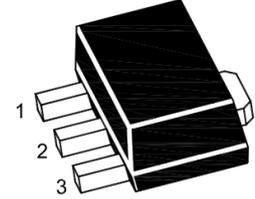


78L05-100mA

3 TERMINAL 0.1A POSITIVE VOLTAGE REGULATORS

FEATURES

- 1. Maximum output current of 100mA
- 2. Output voltage of 5V
- 3. Thermal overload protection
- 4. Short circuit current limiting



1. Output 2.Gnd 3. Input

Absolute Maximum Ratings (Operating temperature range applies unless otherwise specified, Tamb=25 °C)

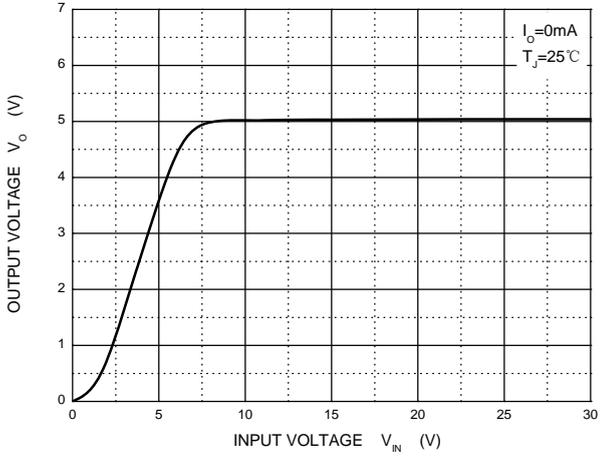
CHARACTERISTICS	SYMBOL	Value	UNITS
Input Voltage	V _{IN}	305	V
Output Current	I _{OUT}	1.5	A
Operating Temperature Range	T _{opr}	-40~125	°C
Storage Temperature Range	T _{stg}	-55~150	°C

ELECTRICAL CHARACTERISTICS (Vi=10V, Io=40mA, Ci=0.33μF, Co=0.1μF, 0°C<Tj<125°C Unless otherwise specified)

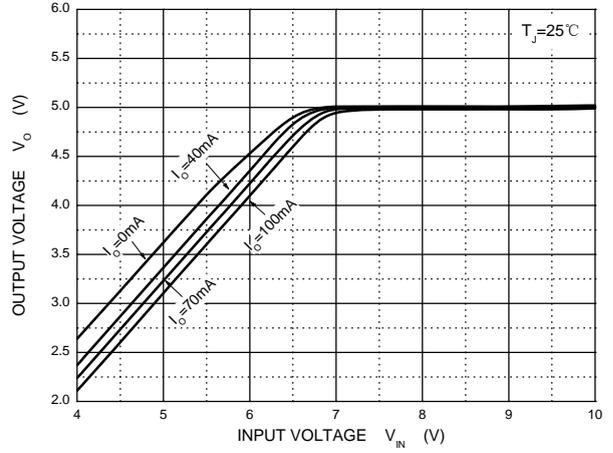
Parameter Name	Symbol	Test conditions	Min	Typ	Max	Unit
Output Voltage	Vo	Tj=25°C	4.80	5.00	5.20	V
		7V≤Vi≤20V, Io=1mA~40mA	4.75		5.25	V
Load Regulation	ΔVo	Tj=25°C; Io=1mA~100mA		15	60	mV
		Tj=25°C; Io=1mA~40mA		10	30	mV
Line Regulation	ΔVo	Tj=25°C; 7V≤Vi≤20V		10	150	mV
		Tj=25°C; 8V≤Vi≤20V		5	100	mV
Quiescent Current	Iq	Tj=25°C; Io=0mA		2	5.5	mA
Quiescent Current Change	ΔIq	8V≤Vi≤20V			1.5	mA
		1mA≤Io≤40mA			0.1	mA
Output Noise Voltage	VN	f=10Hz to 100kHz, Ta=25°C		40		μV
Temperature Coefficient of Output Voltage	ΔVo/ΔT	Io=5mA		0.65		mV/°C
Ripple Rejection Ratio	RR	8V≤Vi≤18V; f=120Hz; Tj=25°C	40	49		dB
Dropout Voltage	Vd	Io=1.0A, Tj=25°C		2		V

RATING AND CHARACTERISTIC CURVES (78L05)

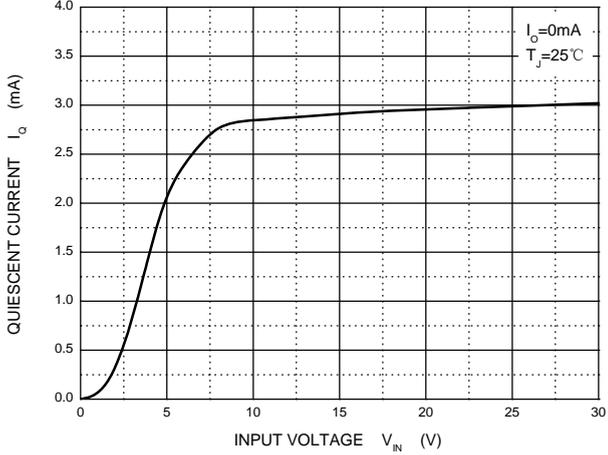
Output Characteristics



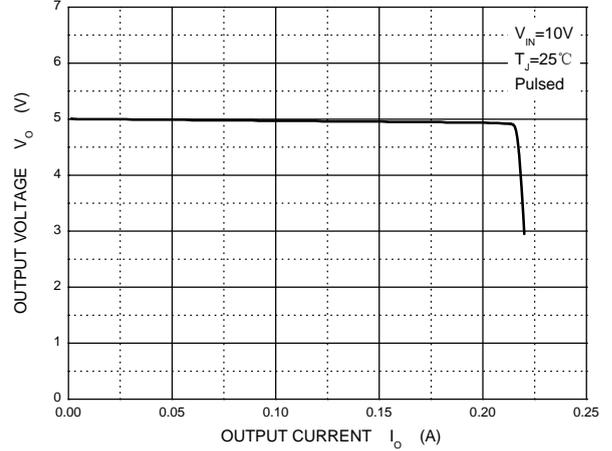
Dropout Characteristics



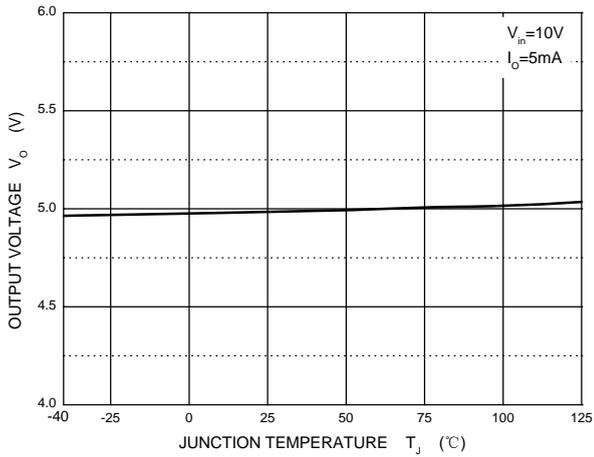
Quiescent Current vs Input Voltage



Current Cut-off Grid Voltage



Output Voltage vs Junction Temperature



Power Derating Curve

