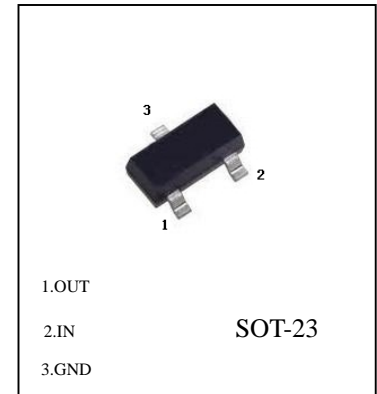


**FEATURES**

 Maximum Output current  $I_O$ : 0.1 A

 Output voltage  $V_O$ : 6 V

 Continuous total dissipation  $P_D$ : 0.35 W ( $T_a = 25^\circ\text{C}$ )

**78L06**

**ABSOLUTE MAXIMUM RATINGS** (Operating temperature range applies)

Parameter	Symbol	Value	Unit
Input Voltage	$V_I$	30	V
Operating Junction Temperature Range	TOPR	0-125	$^\circ\text{C}$
Storage Temperature Range	TSTG	-65-150	$^\circ\text{C}$

**ELECTRICAL CHARACTERISTICS** ( $V_i=10\text{V}, I_o=500\text{mA}, C_i=0.33\mu\text{F}, C_o=0.1\mu\text{F}$ , unless otherwise specified )

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit	
Output voltage	$V_O$	$25^\circ\text{C}$	5.75	6.0	6.25	V	
		0-125 $^\circ\text{C}$	8V $V_I$ 20V, $I_o=1\text{mA}-40\text{mA}$	5.7	6.0	6.3	V
			$I_o=1\text{mA}-70\text{mA}$	5.7	6.0	6.3	V
Load Regulation	$V_O$	$I_o=1\text{mA}-100\text{mA}$	$25^\circ\text{C}$	16	80	mV	
		$I_o=1\text{mA}-40\text{mA}$	$25^\circ\text{C}$	9	40	mV	
Line regulation	$V_O$	8V $V_I$ 20V	$25^\circ\text{C}$	35	175	mV	
		9V $V_I$ 20V	$25^\circ\text{C}$	29	125	mV	
Quiescent Current	$I_q$	$25^\circ\text{C}$		3.9	6.0	mA	
Quiescent Current Change	$I_q$	9V $V_I$ 20V	0-125 $^\circ\text{C}$		1.5	mA	
	$I_q$	1mA $I_O$ 40mA	0-125 $^\circ\text{C}$		0.1	mA	
Output Noise Voltage	$V_N$	10Hz f 100KHz	$25^\circ\text{C}$	46		uV	
Ripple Rejection	RR	9V $V_I$ 19V, f=120Hz	0-125 $^\circ\text{C}$	40	48	dB	
Dropout Voltage	$V_d$	$25^\circ\text{C}$		1.7		V	

**78L06** Typical Characteristics

