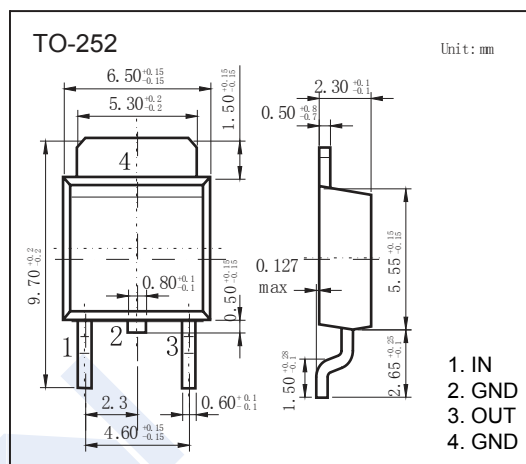


Three Terminal Positive Voltage Regulator

78M06

■ Features

- Maximum Output Current I_o : 500mA
- Output Voltage V_o : 6V
- Continuous Total Dissipation PD: 1.25 W ($T_a = 25\text{ }^{\circ}\text{C}$)



■ Absolute Maximum Ratings Over Operating Temperature Range(unless otherwise noted)

Parameter	Symbol	Rating	Unit
Input Voltage	V_I	35	V
Maximum Output Current	I_o	0.5	A
Thermal Resistance, Junction-to-Ambient	R_{thJA}	80	$^{\circ}\text{C}/\text{W}$
Operating Junction Temperature Range	T_{opr}	-25 to 125	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	-65 to 150	

Three Terminal Positive Voltage Regulator 78M06

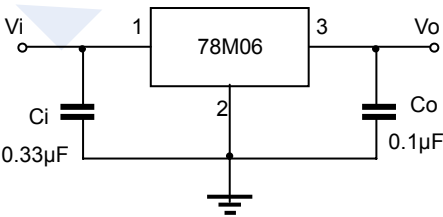
Electrical Characteristics at Specified Virtual Junction Temperature

(Vi=11V, Io=350mA, Ci=0.33μF, Co=0.1μF, unless otherwise noted)

Parameter	Symbol	Test Conditions		Min	Typ	Max	Unit
Output Voltage	Vo		25℃	5.75	6	6.25	V
		8V≤Vi≤21V, Io= 5.0mA~350mA	-25 to 125℃	5.7	6	6.3	
Load Regulation	ΔVo	Io= 5.0mA~500mA	25℃			120	mV
		Io= 5.0mA~200mA	25℃			60	
Line Regulation	ΔVo	8V≤Vi≤25V, Io=200mA	25℃			100	mV
		9V≤Vi≤25V, Io=200mA	25℃			50	
Quiescent Current	Iq		25℃			6	mA
Quiescent Current Change	ΔIq	9V≤Vi≤25V, Io=200mA	-25 to 125℃			0.8	
		5mA≤Io≤350mA	-25 to 125℃			0.5	
Output Noise Voltage	VN	10Hz≤F≤100kHz	25℃		45		μV/Vo
Ripple Rejection	RR	9V≤Vi≤19V, F=120Hz, Io=300mA	-25 to 125℃	59			dB
Dropout Voltage	Vd	Io=350mA	25℃		2		V
Short Circuit Current Limit	Isc	Vi=11V	25℃		270		mA
Peak Current	Ipk		25℃		0.5		A

* Pulse test.

Typical Application



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

Marking

Marking	78M06 K****
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Three Terminal Positive Voltage Regulator

78M06

■ Typical Characteristics

