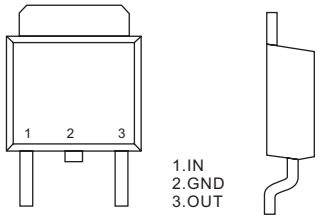
78M12(1A)

Three-Terminal Positive Voltage Regulator



Simplified outline(TO-252)

Features

- Maximum Output current I_{OM}: 0.5 A
- Output voltage V_O: 12V

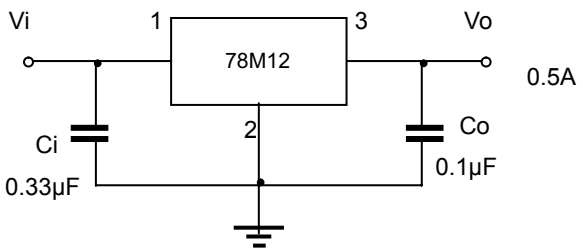
Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Input Voltage	V_i	35	V
Operating Junction Temperature Range	T_{OPR}	0 to +125	℃
Storage Temperature Range	T_{STG}	-65 to +150	℃

Electrical Characteristics (V_{IN}=19V,I_o=350mA,0℃<T_j<125℃,C_i=0.33μF,C_o=0.1μF, unless otherwise specified)

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Output voltage	V_O	Tj=25℃	11.5	12	12.5	V
		14.5≤V_I≤27V, Io=5mA～350mA	11.4	12	12.6	V
Load regulation	△V_O	Io=5mA～500mA,Tj=25℃		25	240	mV
		Io=5mA～200mA,Tj=25℃		10	120	mV
Line regulation	△V_O	14.5≤V_I≤30V, Io=200mA,Tj=25℃		10	100	mV
		16≤V_I≤30V, Io=200mA,Tj=25℃		3	50	mV
Quiescent current	Iq	Tj=25℃		4.6	6.0	mA
Quiescent current change	△Iq	14.5V≤V_I≤30V, Io=200mA			0.8	mA
		5mA≤Io≤350mA			0.5	mA
Output noise voltage	V_N	10Hz≤f≤100KHz,Tj=25℃		75		μV
Ripple rejection	RR	15V≤V_I≤25V,f=120Hz, I_{OUT}=300mA	55	80		dB
Dropout Voltage	Vd	I_o=1A,Tj=25℃		2.0		V
Short Circuit Current	I_{SC}	V_I=19V, Tj=25℃		240		mA
Peak Output Current	I_{pk}	Tj=25℃		0.7		A

Typical Application



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■ **TO-252**

● **Unit:mm**