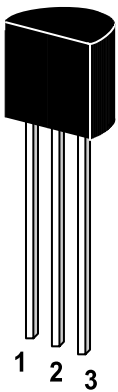


ST 78L12

3-Terminal positive voltage regulator

12V

- Suitable for TTL, DTL, HTL, C-MOS, Power Supply
- Internal Short-Circuit Current Limiting
- Internal Thermal Overload Protection
- Maximum Output Current of 150mA ($T_j=25^{\circ}\text{C}$)
- Available in the Plastic TO-92 Package

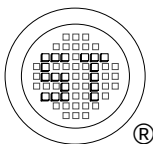


1. Output 2. Common 3. Input

TO-92 Plastic Package
Weight approx. 0.19g

Absolute Maximum Ratings ($T_a = 25^{\circ}\text{C}$)

	Symbol	Rating	Unit
Input Voltage	V_{IN}	35	V
Power Dissipation	P_{tot}	800	mW
Operating Temperature	T_{opr}	-30~75	$^{\circ}\text{C}$
Storage Temperature Range	T_s	-55~150	$^{\circ}\text{C}$



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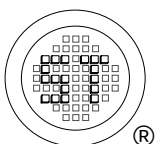
Dated : 07/12/2002

ST 78L12

Electrical Characteristics

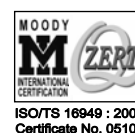
(Unless otherwise specified, $V_{IN}=19V$, $I_{OUT}=40mA$, $C_{IN}=0.33\mu F$, $C_{OUT}=0.1\mu F$, $T_J=25^\circ C$)

		Symbol	Test Condition	Min.	Typ.	Max.	Uunit
Output Voltage		V _{OUT}		11.5	12	12.5	V
Input Regulation		Reg. line	14.5V≤V _{IN} ≤27V	-	120	250	mV
			16V≤V _{IN} ≤27V	-	100	200	
Load Regulation		Reg. load	1.0mA≤I _{OUT} ≤100mA	-	20	100	mV
			1.0mA≤I _{OUT} ≤40mA	-	10	50	
Output Voltage		V _{OUT}	14.5V≤V _{IN} ≤27V 1.0mA≤I _{OUT} ≤40mA	11.4	-	12.6	V
		V _{OUT}	V _{IN} =19V 1.0mA≤I _{OUT} ≤70mA	11.4	-	12.6	V
Quiescent Current		I _B		-	3.2	6.5	mA
Quiescent Current Change	With line	ΔI _B	16V≤V _{IN} ≤27V	-	-	1.5	mA
	With load		1.0mA≤I _{OUT} ≤40mA	-	-	0.1	
Output Noise Voltage		V _{NO}	Ta=25°C, 10Hz≤f≤100KHz	-	80	-	μV
Ripple Rejection		RR	f=120Hz, 15V≤V _{IN} ≤25V,T _j =25°C	36	41	-	dB
Dropout Voltage		V _{IN} -V _{OUT}	T _j =25°C	-	1.7	-	V
Average Temperature Coefficient of Output Voltage		TC _{VO}	I _{OUT} =5mA	-	1	-	mV/°C



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