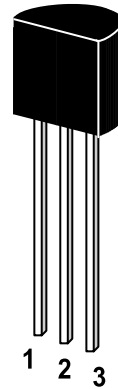


ST 78L07

3-Terminal positive voltage regulator

7V

- 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

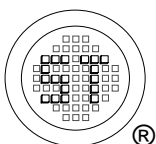


1. Output 2. Common 3. Input

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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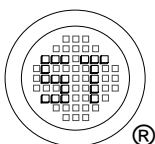
Dated : 07/12/2002

ST 78L07

Electrical Characteristics

(Unless otherwise specified, $V_{IN}=12V$, $I_{OUT}=40mA$, $C_{IN}=0.33\mu F$, $C_{OUT}=0.1\mu F$, $T_j=25^\circ C$)

		Symbol	Test Condition	Min.	Typ.	Max.	Unit
Output Voltage		V_{OUT}		6.72	7	7.28	V
Input Regulation	Reg. line		$9.2V \leq V_{IN} \leq 22V$	-	50	160	mV
			$10V \leq V_{IN} \leq 22V$	-	45	115	
Load Regulation	Reg. load		$1.0mA \leq I_{OUT} \leq 100mA$	-	13	75	mV
			$1.0mA \leq I_{OUT} \leq 40mA$	-	6.0	40	
Output Voltage	V_{OUT}		$9.2V \leq V_{IN} \leq 22V$ $1.0mA \leq I_{OUT} \leq 40mA$	6.65	-	7.35	V
	V_{OUT}		$V_{IN}=12V$ $1.0mA \leq I_{OUT} \leq 70mA$	6.65	-	7.35	V
Quiescent Current		I_B		-	3.1	6.5	mA
Quiescent Current Change	With line	ΔI_B	$10V \leq V_{IN} \leq 22V$	-	-	1.5	mA
	With load		$1.0mA \leq I_{OUT} \leq 40mA$	-	-	0.1	
Output Noise Voltage		V_{NO}	$T_a=25^\circ C$, $10Hz \leq f \leq 100KHz$	-	50	-	μV
Ripple Rejection		RR	$f=120Hz$, $10V \leq V_{IN} \leq 20V, T_j=25^\circ C$	37	46	-	dB
Dropout Voltage		$ V_{IN}-V_{OUT} $	$T_j=25^\circ C$	-	1.7	-	V
Average Temperature Coefficient of Output Voltage		TC_{VO}	$I_{OUT}=5mA$	-	-0.75	-	$mV/^\circ C$



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ISO/TS 16949 : 2002
Certificate No. 05103



ISO 14001:2004
Certificate No. 7116



ISO 9001:2000
Certificate No. 0506098

Dated : 07/12/2002