

Positive Voltage Regulator 3 Terminal

multicomp **PRO**

RoHS
Compliant



Features

- Maximum output current: $I_{OM}=0.1A$.
- Output voltage: $V_O=9V$
- Continuous total dissipation: $P_D=0.625W$

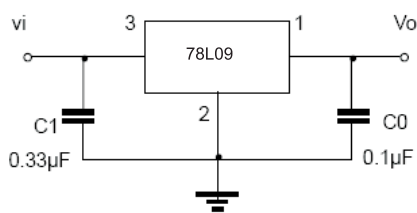
Absolute Maximum Ratings $T_a = 25^\circ C$

Parameter	Symbol	Rating
Input Voltage	V_I	30V
Operating Junction Temperature Range	T_{OPR}	-55°C to +125°C
Storage Temperature Range	T_{STG}	-55°C to +150°C

Electrical Characteristics ($V_I=10V$, $I_O=40mA$, $0^\circ C < T_J < 125^\circ C$, $C_1=0.33\mu F$, $C_O=0.1\mu F$, unless otherwise specified)

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Output voltage	V_O	$T_J=25^\circ C$	8.64	9	9.36	V
		$12V \leq V_I \leq 24V$, $I_O=1mA-40mA$	8.55		9.45	
		$I_O=1mA-70mA$				
Load regulation	ΔV_O	$T_J=25$, $I_O=1mA-100mA$		19	90	mV
		$T_J=25^\circ C$, $I_O=1mA-40mA$		11	40	
Line regulation	ΔV_O	$12V \leq V_I \leq 24V$, $T_J=25^\circ C$		45	175	mV
		$13V \leq V_I \leq 24V$, $T_J=25^\circ C$		40	125	
Quiescent current	I_q			4.1	6	mA
Quiescent current change	ΔI_q	$13V \leq V_I \leq 24V$			1.5	
		$1mA \leq I_O \leq 40mA$			0.1	
Output noise voltage	ΔI_q	$10Hz \leq f \leq 100KHz$		58		μV
Ripple rejection	V_N	$15V \leq V_I \leq 25V$, $f=120Hz$, $T_J=25^\circ C$	41	45		dB
Dropout voltage	V_d	$T_J=25^\circ C$		1.7		V

Typical Application

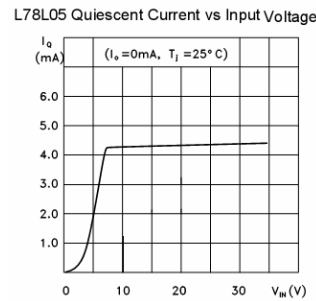
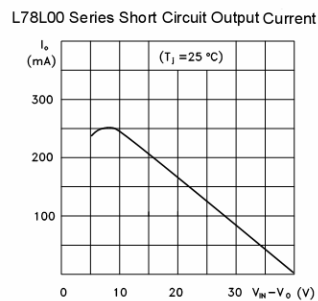
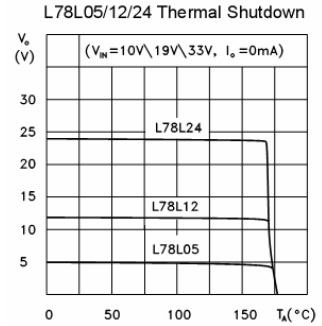
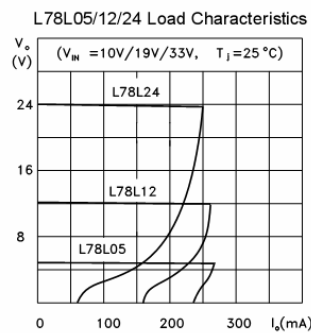
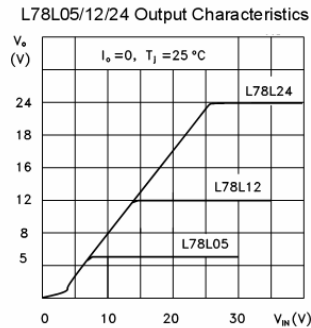


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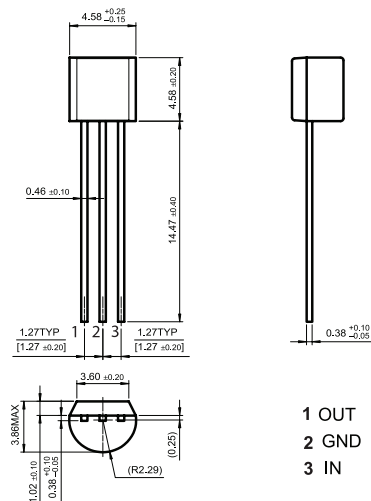
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Positive Voltage Regulator 3 Terminal

Typical Characteristics



Diagram



Dimensions : Millimetres

Part Number Table

Description	Part Number
Positive Voltage Regulator, Fixed, 9V, 0.1A	78L09

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