

Positive Voltage Regulator 3 Terminal

multicomp PRO



Features

- Maximum output current: $I_{OM}=0.1A$
- Output voltage: $V_O=3.3V$ Continuous
- Total dissipation: $P_D=0.625W$

RoHS
Compliant

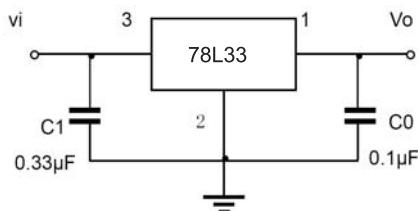
Absolute Maximum Ratings $T_a = 25^\circ C$

Parameter	Symbol	Rating
Input Voltage	V_I	30V
Operating Junction Temperature Range	T_{OPR}	-0°C to +125°C
Storage Temperature Range	T_{STG}	-55°C to +150°C

Electrical Characteristics ($V_I=8.3V$, $I_O=40mA$, $0^\circ C < T_j < 125^\circ C$, $C_1=0.33\mu F$, $C_0=0.1\mu F$, unless otherwise specified)

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Output voltage	V_O	$T_j=25^\circ C$	3.173	3.3	3.432	V
		$5.8V \leq V_I \leq 20V$, $I_O=5mA-100mA$	3.142		3.465	
Load regulation	ΔV_O	$T_j=25^\circ C$, $I_O=5mA-100mA$		15	60	mV
		$T_j=25^\circ C$, $I_O=5mA-40mA$		5	30	
Line regulation	ΔV_O	$5.8V \leq V_I \leq 20V$, $T_j=25^\circ C$, $I_{out} = 40mA$		50	150	
Quiescent current	I_Q	$T_j=25^\circ C$,		3	6	mA
Quiescent current change	ΔI_Q	$0^\circ C < T_j < 125^\circ C$ $5V \leq V_I \leq 20V$			1.5	
		$0^\circ C < T_j < 125^\circ C$ $5mA \leq I_O \leq 40V$			0.1	
Output noise voltage	V_N	$10Hz \leq f \leq 100KHz$		40		μV
Ripple rejection	R_R	$5.8V \leq V_I \leq 20V$, $f=120Hz$, $T_j=25^\circ C$	41	49		dB
Dropout voltage	V_d	$T_j=25^\circ C$, $I_{out}=100mA$		2		V

Typical Application

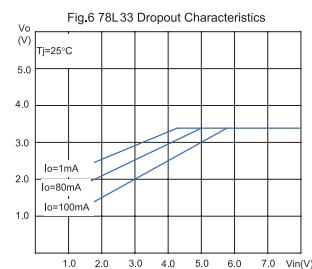
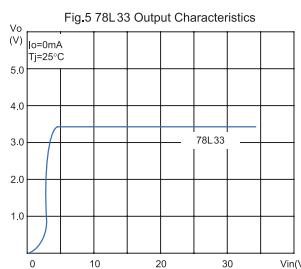
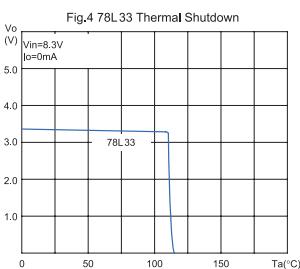
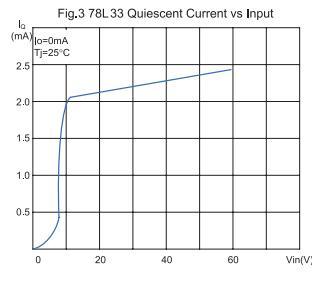
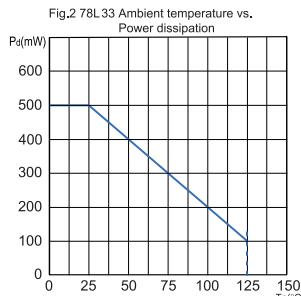
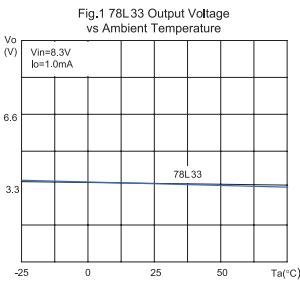


Positive Voltage Regulator

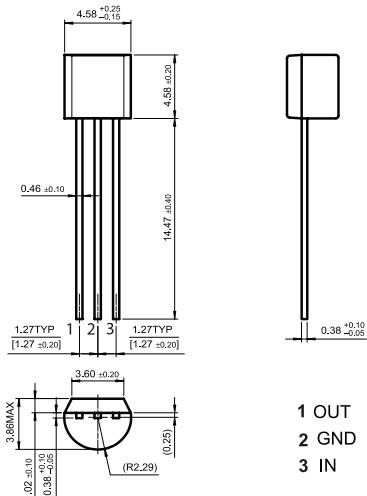
3 Terminal

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Typical Characteristics



Diagram



Part Number Table

Description	Part Number
Positive Voltage Regulator, Fixed, 3.3V, 0.1A	78L33

Dimensions : Millimetres

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