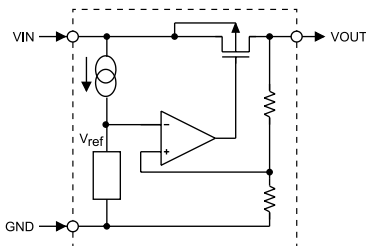


High Voltage LDO Regulator multicomp^{PRO}

RoHS
Compliant



Features

- Low power consumption
- Low voltage drop
- Low temperature coefficient
- High input voltage (up to 24V)

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

Parameter	Symbol	Rating
Supply Voltage		-0.3 to 28V
Power Consumption	P_c	200mW
Junction Temperature	T_J	125°C
Operating Temperature	T_{op}	0°C to 70°C
Storage Temperature range	T_{STG}	-50°C to 125°C

Electrical Characteristic $T_a = 25^\circ\text{C}$

HT7130, +3.0V output type

Parameter	Symbol	Test conditons		Min	Typ	Max	Unit
		V_{IN}	Conditions				
Output Voltage Tolerance	V_{OUT}	5V	$I_{OUT}=10\text{mA}$	2.85	3	3.15	V
Input Voltage	V_{IN}	--				24	
Load Regulation	ΔV_{OUT}	5V	$1\text{mA} \leq I_{OUT} \leq 20\text{mA}$		60	100	mV
Voltage Drop	V_{DIF}	--	$I_{OUT}=1\text{mA}$		100		
Output Current	I_{OUT}	5V		20	30		mA
Current Consumption	I_{SS}		No load		4	6	uA
Line Regulation	$\frac{\Delta V_{OUT}}{\Delta V_{IN} \times V_{OUT}}$	--	$4\text{V} \leq V_{IN} \leq 24\text{V}$ $I_{OUT}=1\text{mA}$		0.2		%/V
Temperature Coefficient	$\frac{\Delta V_{OUT}}{\Delta T_a}$	5V	$I_{OUT}=10\text{mA}$ $0^\circ\text{C} < T_a < 70^\circ\text{C}$		± 0.45		mV/°C

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HT7133, +3.3V output type

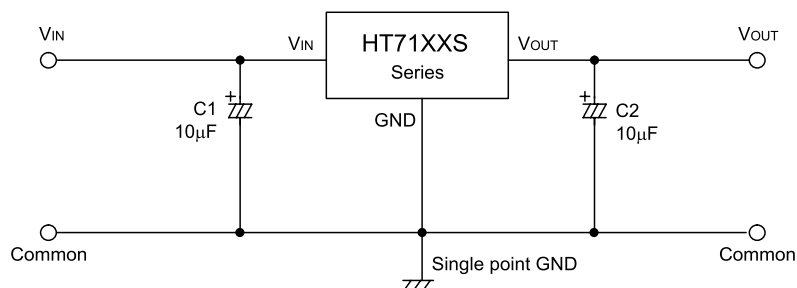
Parameter	Symbol	Test conditons		Min	Typ	Max	Unit
		V _{IN}	Conditions				
Output Voltage Tolerance	V _{OUT}	5.5V	I _{OUT} =10mA	3.135	3.3	3.465	V
Input Voltage	V _{IN}	--				24	
Load Regulation	ΔV _{OUT}	5.5V	1mA ≤ I _{OUT} ≤ 30mA		60	100	mV
Voltage Drop	V _{DIF}	--	I _{OUT} =1mA		100		
Output Current	I _{OUT}	5.5V		20	30		mA
Current Consumption	I _{SS}		No load		4	6	uA
Line Regulation	$\frac{\Delta V_{OUT}}{\Delta V_{IN} \times V_{OUT}}$	--	4.5V ≤ V _{IN} ≤ 24V I _{OUT} =1mA		0.2		%/V
Temperature Coefficient	$\frac{\Delta V_{OUT}}{\Delta T_a}$	5.5V	I _{OUT} =10mA 0°C < T _a < 70°C		±0.5		mV/°C

HT7150, +5.0V output type

Parameter	Symbol	Test conditons		Min	Typ	Max	Unit
		V _{IN}	Conditions				
Output Voltage Tolerance	V _{OUT}	7V	I _{OUT} =10mA	4.75	5	5.25	V
Input Voltage	V _{IN}	--				24	
Load Regulation	ΔV _{OUT}	7V	1mA ≤ I _{OUT} ≤ 30mA		60	100	mV
Voltage Drop	V _{DIF}	--	I _{OUT} =1mA		100		
Output Current	I _{OUT}	7V		20	30		mA
Current Consumption	I _{SS}		No load		5	9	uA
Line Regulation	$\frac{\Delta V_{OUT}}{\Delta V_{IN} \times V_{OUT}}$	--	6V ≤ V _{IN} ≤ 24V I _{OUT} =1mA		0.2		%/V
Temperature Coefficient	$\frac{\Delta V_{OUT}}{\Delta T_a}$	7V	I _{OUT} =10mA 0°C < T _a < 70°C		±0.75		mV/°C

Application Circuits

Basic circuits

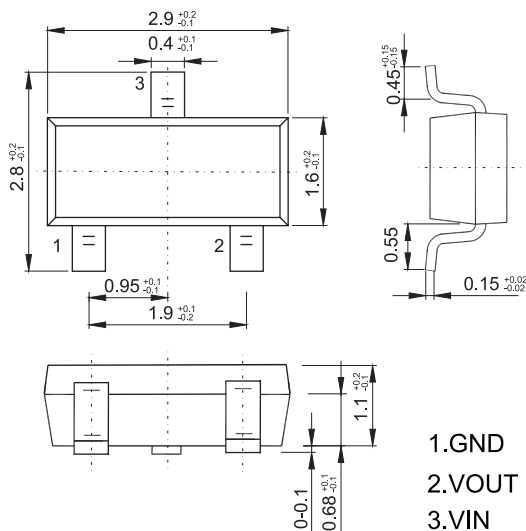


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High Voltage LDO Regulator multicomp^{PRO}

Diagram



Part Number Table

Description	Part Number
High Voltage LDO Regulator, 3V, $\pm 5\%$, SOT-23-3	HT7130S
High Voltage LDO Regulator, 3.3V, $\pm 5\%$, SOT-23-3	HT7133S
High Voltage LDO Regulator, 5V, $\pm 5\%$, SOT-23-3	HT7150S

Dimensions : Millimetres

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