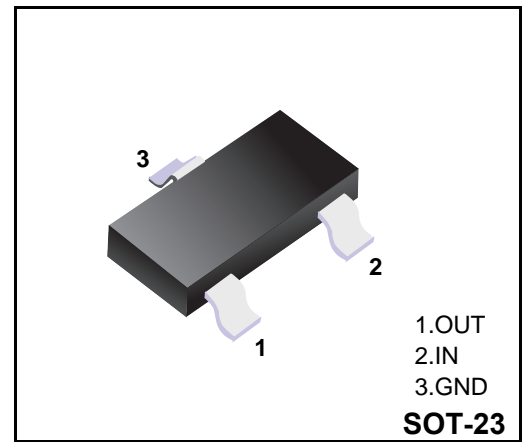


Three-Terminal Positive Voltage Regulator

Features

- ◆Maximum Output current IO: 0.1A
- ◆Output Voltage VO: 8V
- ◆Continuous Total Dissipation PD: 0.35W (Ta = 25 °C)



ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies)

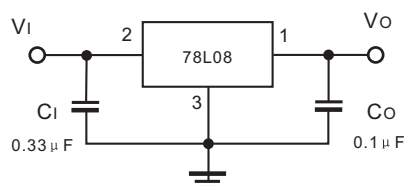
Parameter	Symbol	Rating	Unit
Input Voltage	V_I	30	V
Operating Junction Temperature Range	T_{OPR}	-55~+125	°C
Storage Temperature Range	T_{STG}	-55~+150	°C

ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE

(Vi=10V, Io=40mA, Ci=0.33μF, Co=0.1μF, unless otherwise specified)

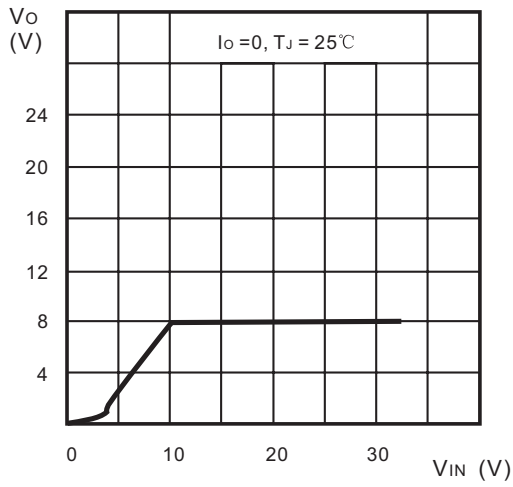
Parameter	Symbol	TestConditions	Min	Typ	Max	Unit
Output Voltage	V_o	TJ = 25°C	7.7	8.0	8.3	V
		TJ= 0~125°C, 10.5V≤V1≤23V, Io= 1mA- 40mA	7.6	8.0	8.4	V
		TJ= 0~125°C, Io=1mA~ 70mA	7.6	8.0	8.4	V
Load Regulation	ΔV_o	TJ= 25°C, Io=1mA~> 100mA	-	18	80	mV
		TJ= 25°C, Io=1mA~ 40mA	-	10	40	mV
Line Regulation	ΔV_o	TJ= 25°C, 10.5V≤V≤23V	-	42	175	mV
		TJ= 25°C, 11V≤V1≤23V	-	36	125	mV
Quiescent Current	I_q	TJ= 25°C	-	4	6	mA
Quiescent current Change	ΔI_q	TJ= 0~125°C, 11V≤V≤23V	-	-	1.5	mA
		TJ= 0~125°C, 1mA≤Io≤40mA	-	-	0.1	
Output Noise Voltage	V_N	TJ= 25°C, 10Hz≤f≤100KHz	-	54	-	μV
Ripple Rejection	RR	TJ= 0~125°C, 13V≤VI≤23V, f= 120Hz	37	46	-	dB
Dropout Voltage	V_D	TJ= 25°C	-	1.7	-	V

TYPICAL APPLICATION

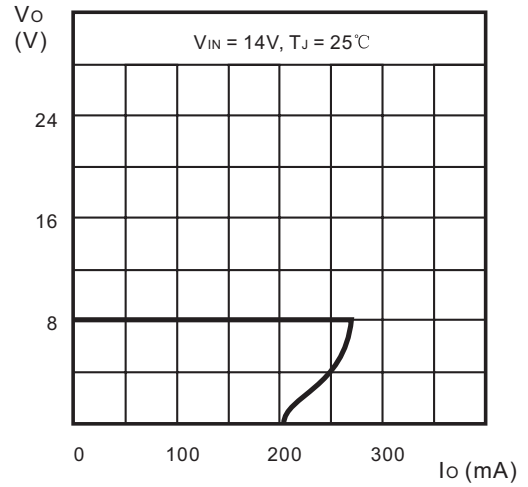


Note: Bypass capacitors are recommended for optimum stability and transient response and should be located as close as possible to the regulators.

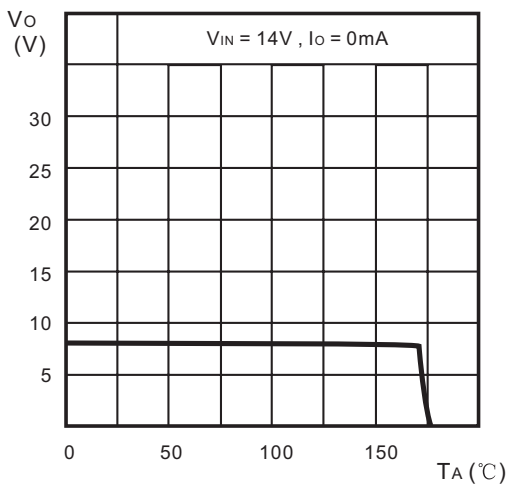
Typical Characteristics



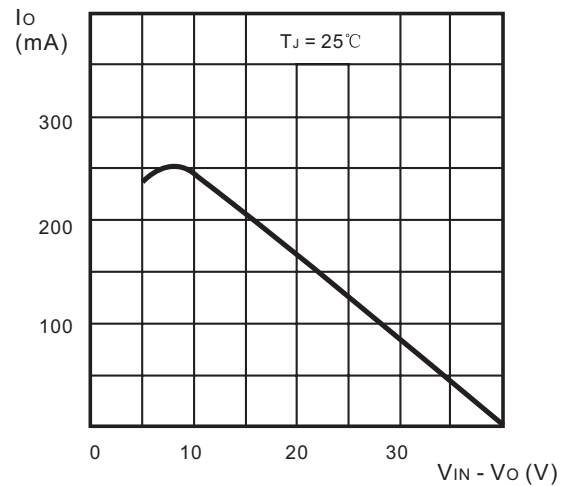
Output Characteristics



Load Characteristics



Thermal Shutdown



Short Circuit Output Current

Ordering information

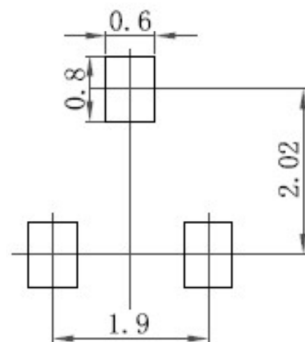
Package	Packing Description	Base Quantity	Packing Quantity
SOT-23	Tape/Reel, 7" reel	3000pcs/Reel	24000PCS/Box 120000PCS/Carton

Package Dimensions

SOT-23

Dim.	Millimeter (mm)		mil	
	Min.	Max.	Min.	Max.
A	0.9	1.15	35	45
A1	0.1		3.9	
bp	0.38	0.48	15	19
C	0.09	0.15	3.54	5.9
D	2.8	3.1	110	122
E	1.2	1.4	47	55
E	1.9		75	
E1	0.95		37	
HE	2.1	2.6	83	102
Lp	0.15	0.45	5.9	18
Q	0.45	0.55	18	22
v	0.2		7.9	
W	0.1		4	

The recommended mounting pad size



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