

Three-terminal positive voltage regulator



FEATURES

- Maximum output current I_{OM}: 1.5A
- Output voltage V_O: 5 V
- Continuous total dissipation PD: 1.25 W

ABSOLUTE MAXIMUM RATINGS

Operating temperature range applies unless otherwise specified

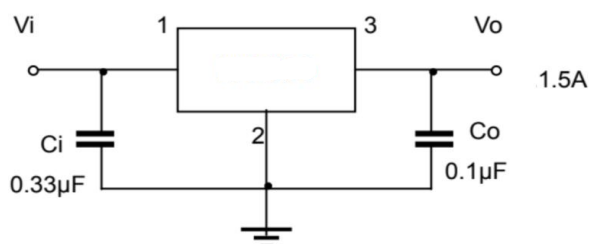
Parameter	Symbol	Value	Unit
Input Voltage	V	35	V
Operating Junction Temperature Range	TOPR	0~+125	°C
Storage Temperature Range	T	-65~+150	°C

ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE

(V_i=10V, I_o=350mA, C_i=0.33μF, C_o=0.1μF, unless otherwise specified)

Parameter	Symbol	Test conditions	Min.	Typ.	Max.	Unit	
Output Voltage	V _o	25°C	4.8	5	5.2	V	
		7V ≤ V _i ≤ 20V, I _o = 5mA-1A	0~125°C	4.75	5	5.25	V
Load Regulation	ΔV _o	I _o = 5mA-1.5A	25°C	9	100	mV	
		I _o = 250mA-750mA	25°C	4	50	mV	
Line Regulation	ΔV _o	7V ≤ V _i ≤ 25V	25°C	4	100	mV	
		8V ≤ V _i ≤ 12V	25°C	1.6	50	mV	
Quiescent Current	I _q	25°C		5	8	mA	
Quiescent Current Change	ΔI _q	7V ≤ V _i ≤ 25V	0~125°C		0.3	1.3	mA
		5mA ≤ I _o ≤ 1A	0~125°C		0.02	0.5	mA
Output Noise Voltage	V _N	10Hz ≤ f ≤ 100KHz	25°C	40		μV	
Ripple Rejection	RR	8V ≤ V _i ≤ 18V, f = 120Hz, I _o = 300mA	0~125°C	62	80	dB	
Dropout Voltage	V _D	I _o = 1mA	25°C	2		V	
Short Circuit Current	I _{SC}	V _i = 10V	25°C		230	mA	
Peak Current	I _{pk}		25°C		2.2	A	

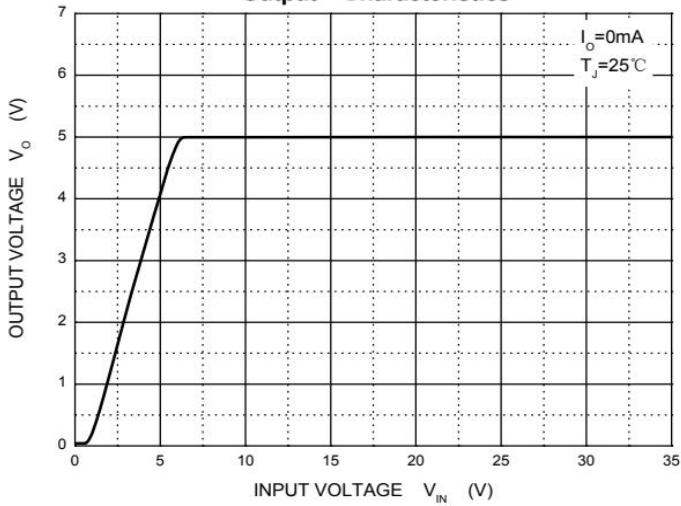
TYPICAL APPLICATION



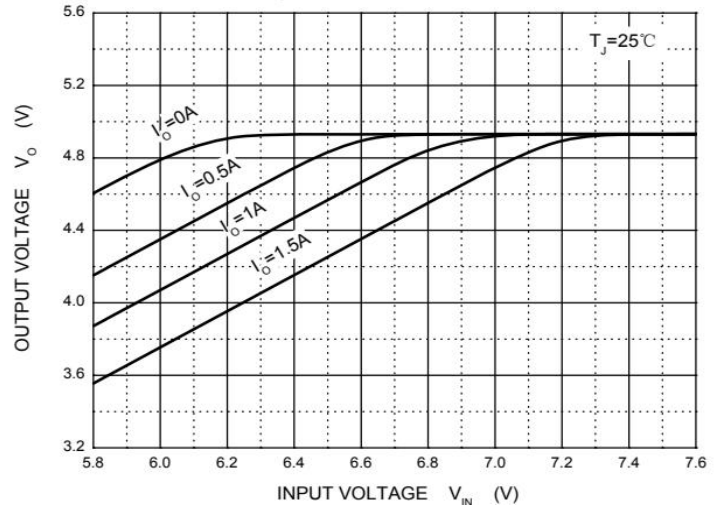
Note: Bypass capacitors are recommended for optimum stability and transient response and should be located as close as possible to the regulators.

RATINGS AND CHARACTERISTIC CURVES

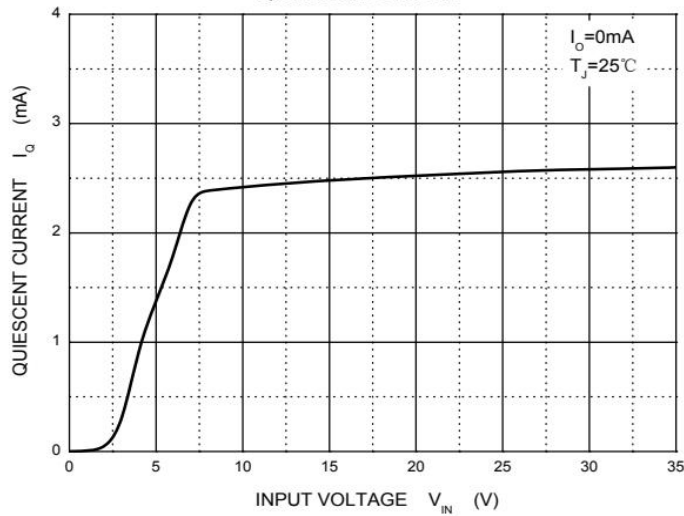
Output Characteristics



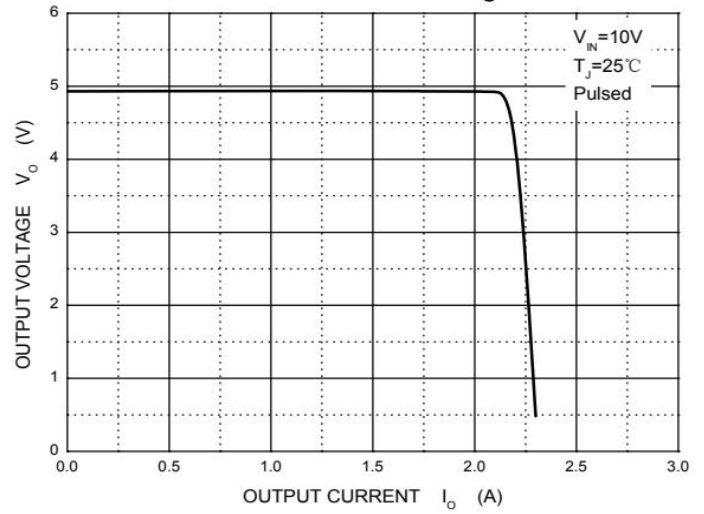
Dropout Characteristics



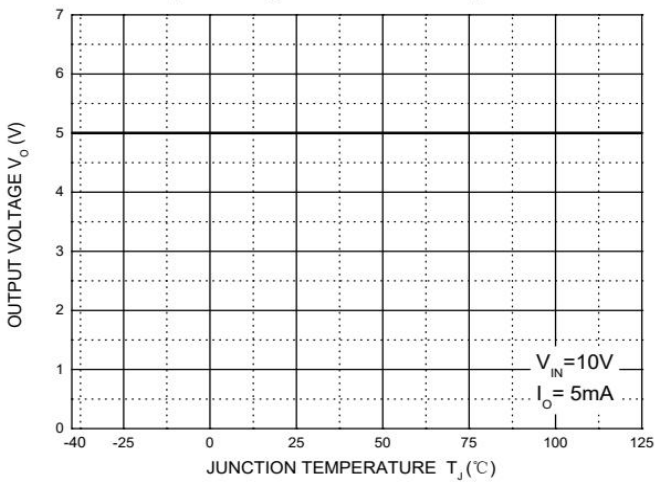
Quiescent Current



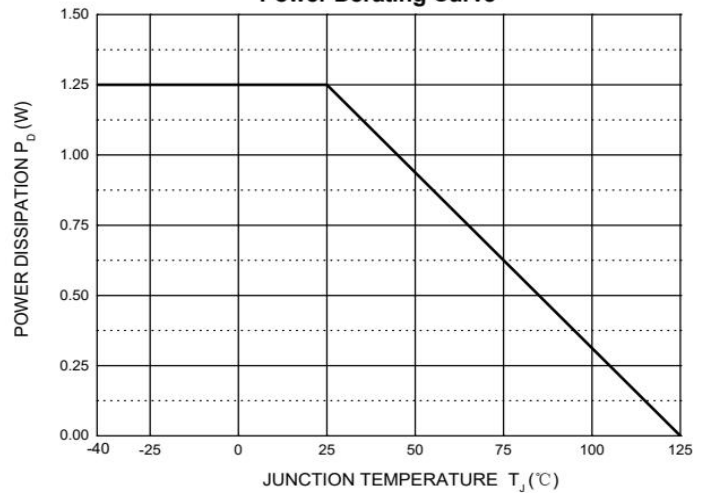
Current Cut-off Grid Voltage



Output Voltage vs Junction Temperature



Power Derating Curve



Package Outline Dimensions millimeters

TO-252

